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SPECIAL ISSUE

PROCEEDINGS OF THE

2nd Luso-Galician Congress on the History of Medicine

PORTO · 21-22 NOVEMBER 2025

LECTURES, COMMUNICATIONS AND POSTERS

JORNAL DA SOCIEDADE DAS CIÊNCIAS MÉDICAS DE LISBOA

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JORNAL DA SOCIEDADE DAS CIÊNCIAS MÉDICAS DE LISBOA

EDITORIAL

History of Medicine and the Mission of a Scientific Journal

Victor Oliveira [1]
EDITOR-IN-CHIEF

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The publication of this Special Issue dedicated to the 2nd Luso-Galician Congress on the History of Medicine reflects a deliberate editorial choice of the Jornal da Sociedade das Ciências Médicas de Lisboa (JSCMed). Founded in 1835 and linked to one of the oldest medical-scientific societies in Europe, the Journal has long embraced not only biomedical innovation but also the historical reflection that contextualises scientific progress. A scientific journal does more than disseminate new data; it helps shape the intellectual identity of a professional community. In this regard, opening our pages to the History of Medicine is not a nostalgic gesture but an affirmation of continuity. Historical inquiry reminds us that medicine is a cumulative, culturally embedded enterprise, built upon dialogue across generations, institutions, and territories.

The Society of Medical Sciences of Lisbon has, throughout its existence, served as a forum for debate, reform, and scientific exchange. By publishing the contributions presented at this Congress – lectures, communications, and posters – we reaffirm the Journal's commitment to fostering plural approaches to medical knowledge. The diversity of themes represented in this volume illustrates how historical scholarship intersects with clinical practice, public health, medical education, and professional identity.

In an era marked by rapid technological transformation and increasing subspecialisation, there is renewed value in cultivating spaces where medicine reflects upon its own trajectory. The historical perspective strengthens critical thinking, encourages methodological rigour, and situates contemporary challenges within a broader intellectual tradition. For younger generations of physicians and researchers, it reminds us that innovation and memory are complementary dimensions of scientific culture.

This Special Issue also demonstrates the role a journal can play in connecting academic communities. By providing a durable and citable record of the Congress proceedings, JSCMed extends the impact of the meeting beyond its temporal and geographical boundaries, transforming scientific encounter into scholarly continuity.

The Editorial Board welcomes this collaboration and reiterates its openness to high-quality historical contributions that illuminate the foundations of medical science, honouring both the legacy of the Society and the responsibilities of a contemporary biomedical journal.

Victor Oliveira
Editor-in-Chief, JSCMed

II CONGRESSO LUSO-GALAICO DE HISTÓRIA DA MEDICINA

21-22
November 2025

Hospital das Forças Armadas
Centro Clínico Universitário D. Pedro V

Porto, Portugal

Scientific Committee

Amélia Ricon Ferraz *(President)*
Ana Luísa Santos
Isabel Maria Amaral
Maria do Sameiro Barroso
Edgard Camarós Pérez
Fernando Ponte Hernando
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Victor Oliveira

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EXÉRCITO PORTUGAL
Real Academia de Medicina de Galicia
HOSPITAL FORÇAS ARMADAS
Direção de História e Cultura Militar
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Secção de História de Medicina Sociedade de Geografia de Lisboa
USC Universidade de Santiago de Compostela
Jornal da Sociedade das Ciências Médicas de Lisboa
IDIS Instituto de Desenvolvimento e Inclusão Social
MUSEU MEMÓRIAS DA SAÚDE Universidade da Beira Interior

Scientific Programme

21 November Friday

08:30 – Registration Opens

09:00 – Opening Session
Chair: Amélia Ricon Ferraz

Amélia Ricon Ferraz *(Congress President);* **Brigadier General Pinheiro Monge** *(Director of HFAR);* **Colonel Santos Moura** *(Deputy Director of the Porto Unit of HFAR);* **Fernando Ponte Hernando** *(Royal Academy of Medicine of Galicia, Spain):* **João Neto** *(Portuguese Association of Museology);* **Maria do Sameiro Barroso** *(Section of History of Medicine – Portuguese Medical Association);* **Rui Pires de Carvalho** *(Section of History of Medicine – Lisbon Geographical Society)*

09:30 – Inaugural Lecture
Chair: Amélia Ricon Ferraz

L1. **Fernando Ponte Hernando**
The Luso-Spanish Society of Neurosurgery (1949-1995): Life, Protagonists and Activities

10:00 – Welcome Exhibition
Chairs: Brigadeiro-General Médico Pinheiro Monge / Coronel Médico Santos Moura

L2. **Raquel Santos**
The History of the Military Hospital of Porto

10:30 – Coffee Break

11:00 – Session 1
Chair: Ana Luísa Santos

C1.1. **Maria José Leal**
Lara from Gallaecia, Alda of Poetry

C1.2. **Catarina Janeiro, José Paulo Andrade**
The Braganza Fibula: Medicine, Portugal and Galicia

C1.3. **Edgard Camarós, Ramón López-Gijón, Anxo Rubalcaba, David Suárez-Quintanilla**
New Perspectives on the Role of Paleopathology in Evolutionary Medicine: Past, Present and Future

C1.4. **Célia Lopes**
Collection of Identified Skeletons from Évora and Hospital Records: Contributions to the History of Medicine

C1.5. **Vítor M. J. Matos, Ana Margarida Dias da Silva**
Évora's Identified Skeletal Collection and Hospital Records: Contributions to Medical History

C1.6. **Beatriz Andrade, Lara Ganhão, Luís Carvalho**
Between Science and History: The IAP-PM Museum of the Faculty of Medicine of the University of Coimbra in Transformation

12:30 – Lunch Break

14:00 – Session 2
Chair: Edgard Camarós Pérez

C2.1. **Miguel Ángel Sánchez del Rio**
Beneficial Nutrition in Galicia at the End of the Nineteenth Century: The Case of Santiago de Compostela

C2.2. **Álvaro de Castro Palomares**
Forty Years of Basic Courses in Medical Hydrology in O Carballiño: Stories

C2.3. **Eurico José Gomes Dias**
The Scientific Construction in Portuguese Journalism of the Enlightenment (1749–1807)

C2.4. **Ferran Sabaté**
Extra-scientific Factors in the Awarding of the Nobel Prize in Physiology or Medicine: The Case of Jaume Ferrán

C2.5. **Aymoré de Castro Alvim**
Portugal's Contribution to Brazilian Medicine

C2.6. **João Rui Pita; Ana Leonor Pereira**
The History of Medicine and Health Presented and Published in GHSTC-CEIS20, University of Coimbra, and in SHIS

C2.7. **José Luiz Arranz Gil, José Martinez de Oliveira**
Aphorisms as an Educational Strategy in the Health Sciences: An Experimental Essay

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16:15 – Lecture
Chair: Maria do Sameiro Barroso

L3. **João Neto:**
The Representation of the Human Body in the Collections of the Pharmacy Museum

SOCIAL PROGRAMME

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20:00 – Social Dinner (*Hotel da Música*)

22 November Saturday

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Chair: Victor Oliveira

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Notes on the History of Neurology in Northern Portugal

C3.2. **Sónia Faria**
Santo António Hospital and the Modernization of Medicine in Porto (1900–1950)

C3.3. **Elena García Cruz**
Private Psychiatric Institutions and Economic Repression in Francoist Spain

C3.4. **Marta Jato Díaz, Ana Jato Díaz, Bruno Jato Díaz**
The Role of the Charity Board during the 1918 Influenza Pandemic in the City of Lugo

C3.5. **Isabel Amaral, Rui Júnior, Joana Oliveira, Helena Rebelo-de-Andrade**
Yellow Fever and Health Policies in 19th-Century Portugal: Revisiting the Epidemics of Lisbon and Luanda

C3.6. **Manuel Torres Fernández**
The Impact of the Atlantic Plague (1596–1602) on the City of Tui, according to the First Minute Book of the Municipal Council

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11:00 – Session 4
Chair: José Paulo Andrade

C4.1. **Carlos Miranda, André Santos Luís**
History of the Stomatology Service at Hospital de Santo António in Porto

C4.2. **Ana Jato Díaz, Marta Jato Díaz, Bruno Jato Díaz**
Medical Assistance to the Wounded of the Armoured Cruiser Roma at the Military Hospital of Isla del Rey (Mahón)

C4.3. **Fernando Reis Lima**
Traumas in the 1961–63 War in Angola

C4.4. **Arsénio Ferraces-Rodríguez**
Narcotics and Surgery in the Hispanic High Middle Ages: Isidore of Seville (7th Century) and the Globalisation of Medical Knowledge

C4.5. **Irene Palomo Rodríguez, Susana María Ramírez Martín**
Portuguese Student Files at the Royal College of Surgery of San Carlos in Madrid

C4.6. **Berta Torrado**
Manuel Rosado Fernandes Gião: The Physician and Surgeon of the Portuguese Army

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Chair: Rui Pires de Carvalho

C5.1. **Salomé Marques Moreira**
A Feminine Voice in Medical History and Deontology: The Legacy of Maria Olívia Rúber de Meneses

C5.2. **Ângela Ferreira**
Aureliano Baptista da Fonseca: Physician, Professor and Artist – A Legacy for Portuguese Dermatology

C5.3. **Mariana Bernardo Nascimento, Manuela Araújo, Amélia Ricon Ferraz**
Child and Adolescent Psychiatric Emergency Service in Oporto: Historical and Contemporary Perspectives

C5.4. **Alfredo Soares, Pedro Silva Pereira**
The Pioneers of Urology in Porto

C5.5. **Paulo Coutinho**
The Evolution of Spine Surgery

15:45 – Coffee Break

16:15 – Exposições / Ponencias
Chair: Isabel Maria Amaral

E1. **Ana Luísa Santos, Lidia Catarino, Ricardo Gomes**
Tracing Ancient Therapies: The Use of Silver and Mercury

E2. **Maria do Sameiro Barroso**
Early Background of Mermaids: From Myth to Science

E3. **Victor Oliveira**
Egas Moniz and his Time

E4. **Josep María Ustrell Torrent**
Evolution of Stomatology through the Museum of Dentistry of Catalonia

E5. **Rui Pires de Carvalho**
The Admission of Surgeons in the Line Regiments of the Portuguese Army: From 1763 to 1816

17:45 – Lecture
Chair: Fernando Ponte Hernando

L4. **Amélia Ricon Ferraz**
Manuel Gomes de Lima Bezerra at the Forefront of Medical Journalism, Medical Societies, and the History of Medicine in Portugal

18:15 – Poster Discussion

Chair: Josep Maria Ustrell

P1. Raquel Santos
125 Years Evolution of Portuguese Military Field Medical Equipment

P2. Edgard Camarós, Carolina Sobrado, Miguel Ángel Moreno-Ibáñez, Fernando Ponte, Carlos Tornero
Insights into Prehistoric Amputations: Surgical Procedures with Medical Purposes?

P3. Carolina Sobrado Bernárdez
The Evolution of the Concept of Trepanation from Prehistory to the Renaissance

P4. Rute Baptista, André Albuquerque
Medicine: A Milestone in the Military Press

P5. Alfredo Soares, Pedro Silva Pereira
Reynaldo dos Santos' Legacy in Portuguese Art: Interdisciplinarity

P6. Daniel Peñín Agra
The Financing of Charitable Hospitals in Spain during the Franco Dictatorship

P7. Ivone Duarte, Amélia Rico Ferraz
History of Palliative Care: From Charity to the Science of Care

P8. Miguel Ángel Sánchez del Río
The Pedagogy of Hygienism in Santiago de Compostela (1891–1923)

P9. Victor Oliveira, Susana Henriques
The XV International Congress of Medicine (Lisbon, 1906)

P10. Susana Oliveira Henriques, Victor Oliveira
The Old and Rare Books Collection: A Treasure of Medical History at the Faculty of Medicine, University of Lisbon

P11. José Luiz Arranz Gil, José Martinez de Oliveira
On the Use of Physical Therapies: The Holo-Electron Violet Radiation Device

19:00 – Closing Session
Amélia Ricon Ferraz, Fernando Ponte Hernando

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JORNAL DA SOCIEDADE DAS CIÊNCIAS MÉDICAS DE LISBOA

MESSAGE FROM THE ORGANIZING COMMITTEE

Amélia Ricon Ferraz [1]
On behalf of the Organizing Committee

[1] Member of the Bioethics Center of FMUP and CITCEM of FLUP; Portuguese Delegate and Consultant for the SIHM

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Celebrating Luso-Galician and Iberian Collaboration in the History of Medicine

It is with great satisfaction that we present this Special Issue of the Jornal da Sociedade das Ciências Médicas de Lisboa, dedicated to the 2nd Luso-Galician Congress on the History of Medicine, held in Porto in November 2025.

This congress brought together scholars, clinicians, historians, and students from Portugal and Galicia in a shared commitment to the study and dissemination of the History of Medicine. Beyond its scientific programme, the meeting reaffirmed the importance of sustained dialogue between neighbouring academic communities that share historical, cultural, and intellectual traditions. The Luso-Galician dimension of this initiative reflects not only geographical proximity but also a long-standing exchange of medical knowledge and humanistic thought.

At a time when medical science advances at an unprecedented pace, the historical perspective remains essential. Revisiting the works, debates, and achievements of past physicians allows us to better understand the foundations of contemporary practice and to cultivate critical judgement. As António Nunes Ribeiro Sanches emphasized in the eighteenth century, the education of physicians requires familiarity with the literature and history of their discipline, for only through such knowledge can they become truly learned professionals rather than mere technical practitioners. This conviction continues to guide initiatives such as the present congress.

The contributions gathered in this Special Issue – lectures, communications, and posters – reflect the diversity of approaches that characterize the field today, ranging from biographical and institutional studies to reflections on medical humanism and heritage. Together, they testify to the vitality of historical research in medicine and to its relevance within contemporary academic life.

On behalf of the Organizing Committee, I express my sincere gratitude to all speakers, authors, reviewers, and collaborators who made both the congress and this publication possible. May this volume contribute to strengthening scholarly ties and to fostering continued interest in the History of Medicine as a field that enriches our understanding of science, society, and the medical profession.

Amélia Ricon Ferraz
President of the Organizing Committee

2nd LUSO-GALICIAN CONGRESS ON THE HISTORY OF MEDICINE | **DOI:** https://doi.org/10.57849/ulisboa.fm.jscml.Supl.10003.2026

JORNAL DA SOCIEDADE DAS CIÊNCIAS MÉDICAS DE LISBOA

WELCOME ADDRESS

Fernando Ponte Hernando [1]

Honorary President of the 2nd Luso-Galician Congress on the History of Medicine

Académico correspondiente de la Real Academia de Medicina y Cirugía de Cádiz

Physician (since 1982); Doctor of Medicine (1992); Doctor in the History of Science (2011); Doctor of Veterinary Medicine (2019).

Professor of the History of Medicine at the Faculty of Medicine of the University of Santiago de Compostela (since 2017).

Full Member (Academician) holding the Chair in the History of Medicine at the Royal Academy of Medicine of Galicia, and Elected Corresponding Member of the Academy of Veterinary Sciences of Castilla y León.

Luso-Galician Scientific Exchange in Medicine

Distinguished military, academic, and civil authorities; esteemed professors and doctors; dear colleagues and friends:

It is a great honour and a profound pleasure for me to deliver the opening address of our Congress, now in its second edition, which I sincerely hope will continue for many years to come. It is also a particularly gratifying surprise, as a military physician and Ambassador of the Spanish Army Brand, who devotes a significant part of his research to the History of Spanish Military Health, that this Congress is being held here at the Hospital of the Armed Forces, home of our colleagues and brothers and sisters in Portuguese military health services.

As you will see in the accompanying exhibition, I bring a special greeting from our academic Chair of Military Medicine, mindful that ours is the only Royal Academy of Medicine in Spain to hold such a chair. He deeply regrets being unable to join us on this occasion.

With regard to the chosen topic, I shall be brief: it concerns the History of the Luso-Spanish Society of Neurosurgery (1949-1995) – its life, protagonists, and activities. It seemed particularly timely to revisit a period of joint scientific endeavour between our two countries, a subject that I proposed years ago to my first Portuguese student, now Dr. Ana Luísa Carneiro Martins, inspired by the same spirit of friendship and close relations that brings us together today.

All of this serves to commemorate the excellent relations that have long existed between the University of Porto, represented by the distinguished figure of Professor Hernâni Monteiro, and the University of Santiago de Compostela, with Professor Rodríguez Cadarso and his successors, dating back approximately one hundred years.

And how could we fail to remember other eminent Portuguese figures, friends of Spain, who attended the Galician Congress of 1929 and the subsequent Luso-Galician Congresses in Ourense and elsewhere: Professors and Doctors Almeida Garret, Armando Tavares, Sousa Pereira, Álvaro Rodríguez, and many others?

And when we speak of the University of Porto, we naturally also refer to those of Coimbra, Lisbon, Beira Interior, Évora, Aveiro, Minho, and others besides, for knowledge is universal—and it is precisely this universality that has brought us together for this act of transmission of knowledge and friendship among academics and scholars.

I shall conclude here, for an opening address, as its very name suggests, opens the doors to the intense work we shall undertake over the coming days of fraternal scientific collaboration, and I would not wish you to begin already fatigued.

Thank you very much.

LECTURES

2nd LUSO-GALICIAN CONGRESS ON THE HISTORY OF MEDICINE | DOI: https://doi.org/10.57849/ulisboa.fm.jscml.Supl.10004.2026

JORNAL DA SOCIEDADE DAS CIÊNCIAS MÉDICAS DE LISBOA

L1. LECTURE

The Luso-Spanish Society of Neurosurgery (1949-1995): Life, Protagonists and Activities

Fernando Julio Ponte Hernando [1]

[1] Full Academic Fellow of the History of Medicine, Royal Academy of Medicine of Galicia; Army Brand Ambassador; PhD in Medicine and Surgery (USC); PhD in the History of Science (UDC); PhD in Veterinary Science (UEx).

ABSTRACT: The Luso-Spanish Society of Neurosurgery (Sociedad Luso-Española de Neurocirugía, SLEN), founded in 1949 and dissolved in 1995, played a decisive role in the development and consolidation of neurosurgery in the Iberian Peninsula during the second half of the twentieth century. This work analyses the historical context that led to its creation, marked by the scientific influence of pioneers such as Harvey Cushing, Egas Moniz, and Santiago Ramón y Cajal, as well as the difficult post-war conditions in Spain and Portugal. The evolution of the Society is examined through three main phases: its formation and expansion (1947–1977), the gradual process of institutional separation (1978–1995), and the emergence of the independent national societies that followed its dissolution. Particular attention is given to the role of key protagonists, the scientific meetings, international collaborations, and the Society's contribution to the professional recognition of neurosurgery, including the creation of specialised services and training opportunities. The SLEN facilitated knowledge exchange between Portuguese and Spanish neurosurgeons and contributed to the integration of Iberian neurosurgery into European and global scientific networks, leaving a lasting legacy in both countries.

KEYWORDS: Neurosurgery history; Luso-Spanish Society of Neurosurgery; Iberian Peninsula; Medical societies; History of medicine

HISTORICAL CONTEXT

Interestingly, the first surgical procedure performed by Man on Iberian soil was cranial trepanation (5,000 to 2,000 BC). Therefore, it can be inferred that neurosurgery, in the Iberian Peninsula, is the oldest known medical specialty.[1]

The 18th and 19th centuries did not bring any significant new developments in neurosurgery, but in the last decades of the 19th century, there was a resurgence of biological and medical sciences, including general surgery. From this resurgence, modern neurosurgery was born.[2] The history of neurosurgery begins with **Harvey Cushing (1869-1939)**, who established and developed the surgical technique and is considered the father of the specialty worldwide. As early as 1905, Cushing was referring to the "Special field of Neurological Surgery."[3] All the pioneers of the specialty in Europe were, directly or indirectly, his students. While Cushing was giving a lecture on intracapsular and subtotal resection in neuroma surgery, **Walter Dandy (1886-1946)** was performing the complete excision of an acoustic neuroma in the United States.[4] In Canada, **Wilder Graves Penfield (1891-1976)** made the most notable contributions to neurosurgery,

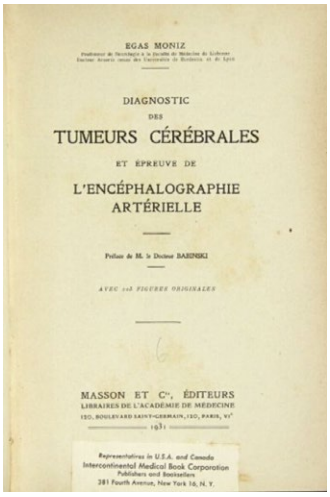
most notably the design of the **Penfield homunculus**. In Europe, cranial and brain surgery began to be practiced at the beginning of the 20th century. Penfield visited **Cajal** in Spain in 1924 and worked for a time, to his complete satisfaction, in the laboratory of the Residencia de Estudiantes (Student Residence) on the Colina de los Chopos (Hill of the Poplars), with **Pío del Río Hortega**. He maintained an intense correspondence with Ramón y Cajal. Professor Fernández Santarén documents **a total of 17 letters between the two scholars, from September 8, 1924, to January 20, 1933**[3].

In Spain, the origins of modern neurosurgery, as an autonomous specialty separate from general surgery, can be placed between 1890 and 1939, after the end of the Spanish Civil War (1936-1939). The leading figure in Spanish neuroscience was Santiago Ramón y Cajal, who is the cornerstone upon which all of current neurobiology rests. The period from 1868 to 1936 has been termed **"The Silver Age of Spanish Culture"** by **Laín Entralgo.**

In Portugal, in 1898, **Sabino Coelho** (1853-1938) made an incision in the temporal region of a patient with trigeminal neuralgia, thus performing the first neurosurgical intervention. During the first decades of the 20th century, the intervention of **Egas Moniz** was decisive; his technique, cerebral angiography, had a revolutionary impact on the diagnosis of surgical pathologies of the nervous system, providing the initial impetus for the development of the specialty in Portugal. The discovery of angiography led **Joseph Babinski (1857-1932)** to write, in the preface to the book *Diagnostic des tumeurs cérébrales et épreuve de l'encésphalographie artérielle by Egas Moniz (1931)* (Fig. 1)*: "Still convinced that he would overcome all obstacles and that his thought, if realized, would be beneficial to the sick, (Egas Moniz) resolves to put his project into action, and courageously launches himself into this enterprise, just as his compatriots Bartolomeu Dias and Vasco da Gama once launched themselves across the ocean in search of the route to India."*[5]

History is not simply a list of people who have lived, with varying degrees of success, throughout time. To understand it better, it is necessary to know the environment in which they lived, their hardships, and their efforts to overcome difficulties—in other words, their personal history.[6]

In 1947, the situation for neurosurgery was unfavorable, both in Spain and Portugal. Spain had suffered through the uninterrupted Civil War of the previous decade, followed by the critical postwar period, and further strained by World War II (1939-1945), which also affected Portugal. These were very difficult times for neurosurgery, not only on the Iberian Peninsula but throughout Europe. *"In post-war times, material misery and moral shipwreck created an atmosphere of precariousness; for this reason, even more merit is added to the pioneers who continued to progress in such difficult conditions."*[7]


EGAS MONIZ

DIAGNOSTIC
DES
TUMEURS CÉRÉBRALES
ET ÉPREUVE DE
L'ENCÉPHALOGRAPHIE
ARTÉRIELLE

MASSON ET Cie, ÉDITEURS
LIBRAIRES DE L'ACADÉMIE DE MÉDECINE

Fig 1. *Diagnostic des tumeurs cérébrales et épreuve de l'encéphalographie artérielle,* Egas Moniz, 1931.

The main characteristic of this period was not only the absence of well-established specialist services, but also the scarcity of auxiliary resources in hospitals. Neurosurgical services were gradually created over the years. Five years before the formation of the SLEN (Luso-Spanish Society of Neurology), neuroradiology did not exist as a specialty in Spain, and one of the major difficulties for the practice of neurosurgery was the lack of anesthesiologists trained in this field. EEG machines were very scarce, and the use of radioactive isotopes for diagnostic purposes in brain lesions began in 1979.

ORIGIN, DEVELOPMENT AND END OF THE SLEN

The Luso-Spanish Society of Neurosurgery (SLEN) was officially founded on February 25, 1949 and dissolved on June 3, 1995. For the purposes of historical clarity and chronological organization, the evolution of the Society can be divided into three periods.

The First Period: **Formation and Development of SLEN**, covers its origins in 1947 (two years before its

official establishment) up to the 1977 meeting in Alvor, where a new structure was proposed for the first time: the separation into two chapters, the Spanish Chapter and the Portuguese Chapter. This section examines the Society's first thirty years, with particular emphasis on the embryonic period, its challenges, and the Society's remarkable growth.

The Second Era: **Beginning of the Separation Process.** It begins with the 30th SLEN meeting in 1978 and ends with the 1995 assembly, where the definitive separation of the Chapters is finalized: *Spanish Chapter,* which becomes known as SENEC (Spanish Society of Neurosurgery) and *Portuguese Chapter,* which is renamed SPNC (Portuguese Society of Neurosurgery).

The Third Era began at the 1996 Meeting and continues to this day. We call it: **End of SLEN, origin of SENEC and SPNC** .

FIRST ERA: FORMATION AND DEVELOPMENT OF SLEN

World War II interrupted the medical congresses and meetings that had been held until then. In the immediate postwar period, Spain and Portugal extended their non-aggression pact, a milestone that would mark the course of history.

In April 1947, when these assemblies resumed, a meeting of the *British Society of Neurological Surgeons* (the only and oldest in Europe) took place in Lisbon. British and Iberian intellectual elites attended this meeting, and in conversations among colleagues, the idea of forming a Luso-Spanish Society to promote the development of neurosurgery on the Iberian Peninsula began to take shape. An exchange of ideas between **Pedro Almeida Lima, Antonio de Vasconcellos Marques, Adolfo Ley Gracia[1], and Sixto Obrador Alcalde** led them to consider the advisability of creating a society that would bring together neurosurgeons from the two peninsular nations. They all considered the creation of a second neurosurgical society in Europe to be highly beneficial and received encouragement and advice from the leading figures in British neurosurgery who were in Lisbon at that time.

Almeida Lima addressed a friendly letter to Juan José Barcia Goyanes[2], who had not been present in Lisbon, inviting him to join the planned society. A few days later, the first circular appeared, addressed to the interested scientific community. It was signed by Almeida Lima, Vasconcellos Marques, Sixto Obrador, Ley Gracia, and **Barcia Goyanes.**

Eduardo Tolosa[3], upset at having been excluded from the organizing committee, expressed his dissatisfaction in a letter to Barcia Goyanes: *"(...) regretting being excluded from the organizing committee. The rather long letter set out a series of reasons why he believed he should be included. All the signatories of the first circular acknowledged this. It was, evidently, an unintentional oversight, perhaps due to the haste in implementing the initial idea."*[9]

Thus, the embryo of the new Luso-Spanish Society of Neurosurgery was formed. The organizing committee – comprised of Barcia, Almeida, Ley Gracia, Obrador, Tolosa, and Vasconcellos – convened the first preliminary meeting, held on April 1, 1948, in Barcelona, under the organization of Ley Gracia and Tolosa. The six conveners considered themselves the founding group of the SLEN.

This first congress was attended by several European neurosurgeons, and the provisional statutes were discussed and approved. The minutes signed at this meeting state: *"On April 1, 1948, the first meeting of the Luso-Spanish Society of Neurosurgery took place in Barcelona, at the Casa del Médico (Doctor's House), with the attendance of the following specialists who had responded to the call of the organizing committee:*

1 Adolfo Ley Gracia (Las Palmas de Gran Canaria, 1908 - Barcelona, 1975) studied Medicine in Salamanca, where he met Antonio Trias Pujol, who influenced him to specialize in Neurosurgery before finishing his degree. He graduated in 1931 and traveled abroad, where he had the pleasure of meeting Dr. Cushing. During his trip, he visited several neurosurgical departments. He returned to Barcelona in 1934 and began working at the Hospital Clínico and the Red Cross Hospital. During the Spanish Civil War, he gained extensive experience treating head and spinal cord injuries, which were treated at the Red Cross Hospital. After the war, he continued working at this hospital, sharing the direction of the Neurosurgery Department with Eduardo Tolosa.

2 Juan José Barcia Goyanes (Santiago de Compostela, 1901 - Valencia, 2003). Professor of Anatomy at Valencia and Neurosurgeon who performed the first intracranial surgery in Spain, the evacuation of a chronic subdural hematoma using the Cushing technique in 1931. On Barcia Goyanes, see: Ponte Hernando, Fernando; Pascual Bueno, J.; González-Castroagudín, Sonia ([2014], "Juan José Barcia Goyanes ", in *Álbum da Ciencia. Culturagalega.org. Consello da Cultura Galega.* [last read: 09/01/2019] [URL: http://www.culturagalega.org/albumdaciencia/detalle.php?id=499 .

3 Eduardo Tolosa i Colomer (Barcelona, 1900-1981) studied Medicine at the University of Barcelona and graduated in 1921. He became interested in neurology, and later, in 1930, began his training in Neurosurgery at a hospital in Paris. He returned to Barcelona, where he began working with Dr. Corachan García. until his death. From 1944 to 1954, he worked as a neurosurgeon at the Hospital de la Santa Creu i Sant Pau, and until 1939 as a professor of neurology at the Autonomous University of Barcelona. In 1940, he was appointed director of the Neurosurgery Department at the Municipal Neurological Institute of Barcelona. In 1954, Tolosa published the first case of a patient with pain in the orbital region accompanied by ipsilateral ophthalmoplegia, which he named Tolosa-Hunt Syndrome. Tolosa was a pioneer in stereotactic surgery for the treatment of Parkinson's disease and became an expert in obtaining brain biopsies.

Professor P. Almeida Lima, Professor JJ Barcia Goyanes, Dr. M. Bordes Valls, Dr. E. Díaz Gómez, Dr. M. Gallego, Dr. J. Gama Imaginário, Dr. A. Ley Gracia, Dr. E. Ley Gracia, Dr. S. Obrador Alcalde, Dr. A. Pinto, Dr. J. Pons Tordera, Dr. A. Rodríguez Arias, Dr. P. Urquiza, and Dr. A. Vasconcellos Marques."[10]

The first Board of Directors was chaired by Almeida as the first president, Barcia as vice-president, Obrador[4] as secretary[5], Vasconcellos as deputy secretary, and Tolosa as member. The honorary presidency was granted to Egas Moniz.

Next, Professor Almeida Lima read a greeting message from Professor Egas Moniz, our Honorary President. **Dr. Egas** was quick to respond to this distinction: *"Neurology and neuro-surgery are only modalities of the same specialty. (...) the creation of the new Portuguese-Spanish Neuro-Surgical Society (...) we look forward to the development of the science we profess. I never know more Medical Societies of this nature especially in a phase of progress in which there are points to be right, techniques to be discussed, cases to be appreciated in their evolution and results."*

Specifically, the logo or emblem of the Luso-Spanish Society consists of Egas's angiography, Cajal's microscope and Andrés Alcázar's trepan (1490-1585). The *Spanish Journal of Oto-neuro-ophthalmology* was considered the official organ of the SLEN, which we will discuss in more detail later. The Congresses were held every year in May, and took place two years in Spain and one in Portugal.

On February 25, 1949, the Ministry of the Interior authorized the Statutes, and the SLEN (Luso-Spanish Society of Neurosurgery) was officially founded.

Professor Egas Moniz was awarded the Nobel Prize. On April 12, 1949, the founding members met in Valencia, and foreign neurosurgeons also attended. Obrador explained to those present the steps taken to obtain authorization of the statutes from the Ministry of the Interior. A month later, in May, scientific sessions were held, superbly organized by Barcia. The vast majority of the 20 full members attended. The Society's membership increased, and a group of young neurosurgeons joined. At this meeting, it was agreed to send greetings to Professor Egas Moniz, the recent Nobel laureate, and that the next meeting would be held in Lisbon.

A year later, in 1950, the third meeting was held in Lisbon (Fig 2.), at the Julio de Mattos and Capuchos Hospitals, where Professor Almeida and Dr. Vasconcellos gave surgical demonstrations. It was the first meeting held outside of Spain. Professor Egas Moniz attends the meeting and invites the Society to a party at his residence.

My memories of the meetings in Portugal, of which there were several, are inextricably linked to the difficulties I faced getting my car to the hotel upon arrival. These difficulties were mainly due to the considerable hills of Portuguese cities, so different from those I was used to in Valencia or A Coruña, and even Madrid and Barcelona. Climbing one of those steep slopes, following a tram that stopped every now and then, in a car as underpowered as my Peugeot 405 was in those years – a stark contrast to the American cars of my Portuguese colleagues – was a true ordeal. (...) And I mustn't fail to mention the party at the Cruz e

Fig 2. Meeting of the Luso-Spanish Society of Neurosurgery. Lisbon, 1950.

[4] Sixto Obrador Alcalde (Santander, 1911 – Madrid, 1978) graduated in Medicine from the University of Madrid in 1933. In 1934, he received a grant from the Junta de Ampliación de Estudios (Board for the Extension of Studies) to work at the Physiology Laboratory of the University of Oxford and at the *National Hospital for Nervous Diseases* in London. In 1936, he joined the Physiology Laboratory at Yale University. He completed his training at Johns Hopkins Hospital in Baltimore with Walter Dandy. He spent five years in Mexico at the Hospital Español (Spanish Hospital), the Instituto de Enfermedades Mentales (Institute of Mental Diseases), and the Instituto de Neuropsiquiatría de Lafora (Lafora Institute of Neuropsychiatry). In 1946, he returned to Spain and earned his doctorate with a thesis entitled *"Physiopathology of Epileptic Convulsions."* His Anglo-Saxon approach to neurosurgery had a significant impact when he introduced it to Spain, establishing a team-based organizational system. He argued that neurologists and neurosurgeons should work together, although this was not well received by many neurologists. In 1947, he was elected secretary of the SLEN, a position he held for many years. In total, he authored 387 papers, both individually and as part of a team, which have been published in various national and international scientific and medical journals.

[5] The document that can be read above was written by him. (Author's Note)

Silva family's country estate, a truly lavish affair, where Margarida, the matriarch, an obese but kindhearted woman, showered the congress attendees' wives with attention and gifts.[1]

Until then, the Society had few members and sought to hold joint meetings with other societies, such as the Society of Neuropsychiatry, to publicize their pioneering work. A commitment was made to continue these meetings with the Society of Neuropsychiatry every two years. From April 26 to 29, 1951, the first Joint Meeting with the *British Society of Neurological Surgeons, which had been instrumental in the formation of the SLEN,* was held in Madrid (Fig. 3). It was in this way that the SLEN began to gain recognition throughout Europe and its activities became appreciated.

During these clinical sessions, visits were made to the neurosurgical departments of the Provincial Hospital, the Red Cross Hospital, and the Olivos Institute of Neurosurgery. A visit was also made to the Cajal Institute.

Surgical sessions were also held at these first four meetings (Barcelona, Valencia, Lisbon, Madrid). The scarcity of neurosurgical services on the Iberian Peninsula sparked the interest of foreign neurosurgeons, who were eager to visit the modest facilities and observe their operation. The surgical sessions proved invaluable, especially for the visiting young surgeons, who were able to witness the procedures firsthand.

From 1952 to 1957 the activity of the SLEN suffered a certain collapse, as the meetings that were initially intended to be joint with the Neuropsychiatry and Neurology Societies began to be counterproductive, since they left little time for the discussion of neurosurgical work.

Fig 3. Joint Meeting of the Luso-Spanish and British Societies of Neurosurgery. Madrid, 1951

In 1956, the first neurosurgery positions within the Spanish Social Security system were created in Barcelona, Valencia, and Seville. This naturally led to a need for a degree of autonomy between Spaniards and Portuguese, and these were important years for certain administrative matters, such as the separation of the Portuguese and Spanish treasuries.

In the Society's first ten years, membership was limited to no more than 20 full members and 20 associate members. In 1957, at the Salamanca meeting, it was decided to modify the membership regulations. The number of members would be unlimited, but a Board of Directors would have to be created, composed of members who had served on previous Boards of Directors, that is, "the distinguished members." Its main responsibilities were reviewing the credentials of new applicants and selecting the papers that would represent the Society at International Meetings. The Law of Medical Specialties began to take shape, and all members who did not practice neurosurgery began to disperse , unfortunately not without some conflict. It was decided to expel two members who did not attend meetings. All these matters were discussed in the administrative meetings, which were always held in the late afternoon and lasted an hour. These meetings addressed numerous issues related to the statutes, which were amended many times: the Medical Specialties Act, the creation of postgraduate schools, the requirements for the admission of new members, the creation of new neurosurgery positions, sending petitions to social security, and so on. According to Dr. Obrador, *"...and some other more thorny personal or collective problems, which this is not the appropriate time to recall."* The Society also refined itself and stabilized during its growth and expansion phase, parallel to the development of neurosurgery worldwide.

In 1959, at the Lisbon meeting (Fig. 4), the project to found a European Federation of Neurosurgical Societies was born. *"The problem of organizing European Congresses of Neurosurgery is discussed, and it is decided to send a letter to Prof. Krayenbí, organizer of the first one in Zurich, as well as to the different European Societies."*

In 1960, in Seville, once again, the regulations were modified, becoming increasingly strict and demanding, and the requirement was approved that applicants for

active membership must possess a minimum of five years' training in a well-known neurosurgical clinic, and that they must have presented two or three papers at scientific sessions in order to be admitted to the SLEN. At the 1961 Meeting, it was proposed to publish an annual volume entitled *Luso-Spanish Neurosurgery,* as a supplement to the *Spanish Journal of Oto-Neuro-Ophthalmology* .

From 1962 to 1967, there are few newsworthy matters in the minutes of the meetings held during these dates; these were years of development, rather political and social, rules were approved regarding the development of the clinical sessions, and the order of the programs and the exposure times were adjusted.

Following the proposal to create a European Federation of Neurosurgery, the First European Congress of Neurosurgery was held in Zurich, organized by the French and German Societies. In 1963, the Second European Congress took place in Rome, organized by the British and Italian Societies. At the latter, it was decided that the Third Congress would be organized by the SLEN (Spanish Society of Neurosurgery), jointly with the Belgian and Dutch Societies, and would be held in Madrid.

Across all borders, the European spirit began to grow among neurosurgeons, and these international congresses would become the embryo of the *European Association of Neurosurgical Societies (EANS).*

In 1967, twenty years after the founding of the SLEN, the Third European Congress of Neurosurgery was held in Madrid. Attendance was massive, and the number of international SLEN members grew significantly. It was presided over by Dr. Obrador, at one of the most important moments of his professional life. A year later at the Coimbra meeting, Dr. Obrador donated 300,000 pesetas left over from the European Congress to SLEN.

After a two-year hiatus, in 1971, at the Joint Meeting with the *British Society of Neurological Surgeons,* which welcomed the members of SLEN In Newcastle, Dr. Obrador informs all members that a World Federation Meeting will be held in Prague, where the *European Association of Neurosurgery (EANS) was to be definitively established,* whose statutes had already begun to be drawn up years before, as mentioned earlier. In Prague, he Dr. Obrador was elected vice president, becoming part of the EANS executive committee. It was also established that the *Acta Neurochirurgica* would be the official organ of the EANS.

In 1972, a Joint Meeting was held in Bordeaux with the French-Speaking Neurosurgical Societyg (Fig. 5), and in 1973, the twenty-fifth anniversary of the SLEN was celebrated in Benalmádena. According to Dr. Obrador *"(...) the path traveled by our Society in its first twenty-five years has been firm and brilliant. In previous years, and immediately after the founding of our Society, a small group of pioneering neurosurgeons began developing the thankless specialty of Neurosurgery on our peninsula, in a difficult, harsh, and often hostile environment. These were heroic times, marked by scarce resources and enormous difficulties."*

The 1974 meeting was held in Utrecht, but the Portuguese colleagues were unable to attend. Due to the political events and changes that occurred

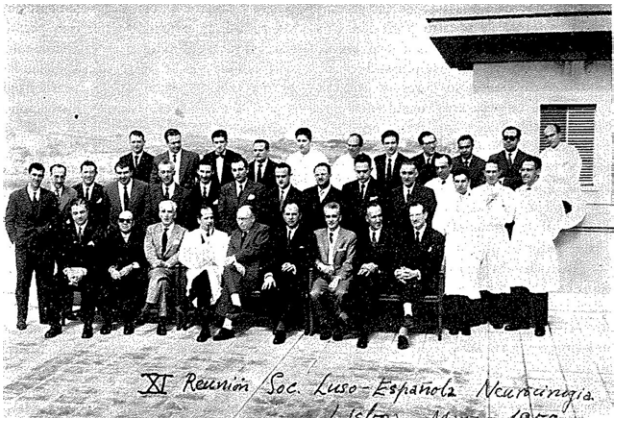


Fig 4. XI Meeting of the Luso-Spanish Society of Neurosurgery. Lisbon, 1959 .

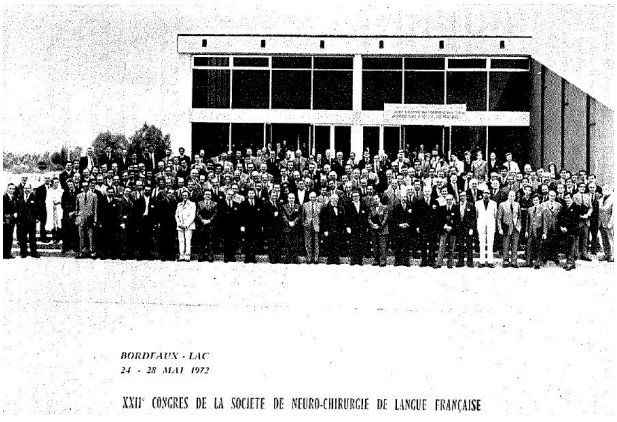


Fig 5. XXIV Meeting of the Luso-Spanish Society of Neurosurgery. Bordeaux, 1972.

in the neighboring country during those days, Dr. Vasconcellos[6] sent a telegram. In Portugal, the Carnation Revolution, or *Revolução dos Cravos*, also called the April 25 Revolution, was taking place.

Two more years of Joint Meetings, and it is 1977 at the Alvor Meeting, in the Algarve, in which Dr. Obrador *"announced that next year would mark the 30th Anniversary…noting that it was the second neurosurgical society founded in Europe, the first being the British Society. He proposed a new structure for the statutes, which, in general terms, would consist of a Portuguese Section or Chapter and a Spanish Chapter, with their respective Vice-Presidents, Secretary, and Treasurer, with both Chapters under the direction of a common executive body comprised of: the President of the Society, the General Secretary, and the Secretary for International Neurosurgical Relations…"*

The administrative meeting was very long and had to continue the next day. Isaac Papo, an Italian doctor, writes in his work *My Encounters with Spanish Surgery: "The transition had begun; different means had to be used. (…) The Alvor meeting in 1977, the last one I (Obrador) took part in, after a stormy administrative meeting from which I left early because I didn't like what was happening, especially the way it was being done, Obrador confessed to me, "They don't want me anymore, they've sent me to the Senate!"*

The modifications were approved. It was the last meeting attended by Dr. Obrador, who would pass away in 1977. The last minutes he signed were those of the Alvor Meeting.

Thus ends the first era of SLEN. This meeting marks the beginning of a new stage in its history, which would lead to its separation into two independent chapters. The organizing commission was made up of Juan José Barcia Goyanes, Almeida Lima[7], Adolfo Ley Gracia, Sixto Obrador mayor, Eduardo Tolosa and Antonio Vasconcellos Marques (Fig.s 7-12).

SECOND PERIOD: BEGINNING AND COMPLETION OF THE SEPARATION PROCESS

The second phase of the Luso-Spanish Neurosurgical Society spans from the 1978 meeting in La Manga del Mar Menor, Murcia, to the 1995 meeting in the Algarve, where the separation between the two Iberian chapters was definitively established. This process lasted more than seventeen years. While the administrative changes were being implemented, there were some joint meetings, such as those in 1987 and 1988, which we will discuss in more detail.

We began the second phase of SLEN's history with the Society's 30th Meeting in Murcia. At this meeting, the recently deceased Dr. Sixto Obrador Alcalde was unanimously named Honorary President of the Luso-Spanish Society of Neurosurgery. The creation of an annual award in his name was proposed. Dr. Alberto Lasierra was elected to succeed Dr. Obrador, who had been SLEN's Secretary General since its inception. Later, in 1987, the EANS Congress was held in Barcelona. *"…the members of the Portuguese Chapter of the SLEN express their desire to become a Portuguese Society of Neurosurgery."*

This topic arose at almost every subsequent administrative meeting until 1995. In 1988, a joint assembly was held with the German Society in Zaragoza. That year, separate administrative sessions began to be held with their respective chapters, and eventually all SLEN members came together. In 1992, at the León meeting, the minutes of the Spanish chapter were included for the first time in a book separate from the SLEN's official records.

[6] António Jacinto Nunes de Vasconcellos Marques (Lisbon, 1908-1996) graduated in medicine in Lisbon in 1933. After three years as *a resident physician in Internal Medicine*, he enrolled in a residency program in General Surgery, which he completed in 1940. From then on, he dedicated himself entirely to neurosurgery and was sought after by Professor Diogo Furtado, founder of the Neurology Department at the Hospital dos Capuchos. In 1943, he spent almost a year at Johns Hopkins Hospital with Professor Walter Dandy. In 1954, he competed for the position of neurosurgeon at the Lisbon Civil Hospitals, in the first competition for this specialty on the Iberian Peninsula. Vasconcellos Marques's most famous surgery was the operation performed on Professor Oliveira Salazar, President of the Council of Ministers, who suffered a traumatic brain injury in a fall from a terrace in 1968.

[7] Pedro Manuel de Almeida Lima (Lisbon, 1903-1985), a collaborator of Egas Moniz, was the founder of neurosurgery in Portugal. He began as an assistant to Professor Egas Moniz, performing the first angiographies and leucotomies when Professor Egas Moniz was unable to operate due to debilitating osteoarthritis. In 1935, Almeida performed his first leucotomy for the treatment of an organic psychiatric syndrome. In 1953, he was elected president of the Department of Neurology and Neurosurgery at the University of Lisbon. Juan José Barcia Goyanes said of him: *"His name, apart from other merits, is linked to two of the most important advances in neurosurgery: cerebral arteriography and leucotomy. And I think it was an injustice that he was not associated with Egas Moniz in the awarding of the Nobel Prize, with which the latter was deservedly honored." If the idea for both procedures came from the great Portuguese neurologist, their execution was the work of his compatriot. In carrying it out, he did not only employ his surgical skill. He had to accept the considerable responsibility of performing them for the first time on human beings, and had he failed, it is certain that he would have borne the brunt of the harshest criticism."* See *The Saga of the Barcias,* pp. 246-247.

Fig 7. Neurosurgeon Eduardo Tolosa checks his Seat 1500, in 1970.

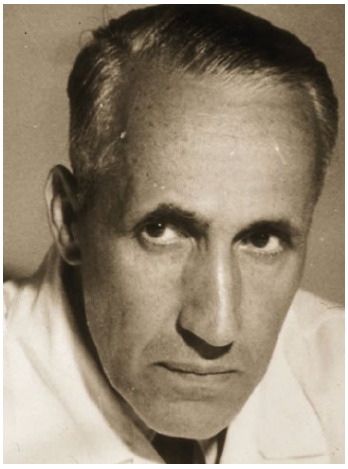


Fig 8. Doctor Sixto Obrador.

Fig 9. Doctor Juan José Barcia Goyanes (n.d.).

Fig 10. Drs. Adolfo Ley Gracia and Adolfo Ley Valle, father and son, at the professional congress in Coimbra, Portugal, 1965.

Fig 11. Doctor Pedro Almeida Lima (n.d.).

Fig 12. Doctor Vasconcellos Marques (n.d.).

In 1995, in Vilamoura, the new statutes were definitively approved, whereby *the Spanish Chapter* would be called *the Spanish Society of Neurosurgery (SENEC)*, and the *Portuguese Chapter, Portuguese Society of Neurosurgery (SPNC).* The process of separation between the two nations, which had begun in 1977 at the suggestion of Dr. Obrador, is concluded. The last page of the SLEN *Book of Minutes* is signed on June 3, 1995 by *"M. Poza, President of the Spanish Society of Neurosurgery"*.

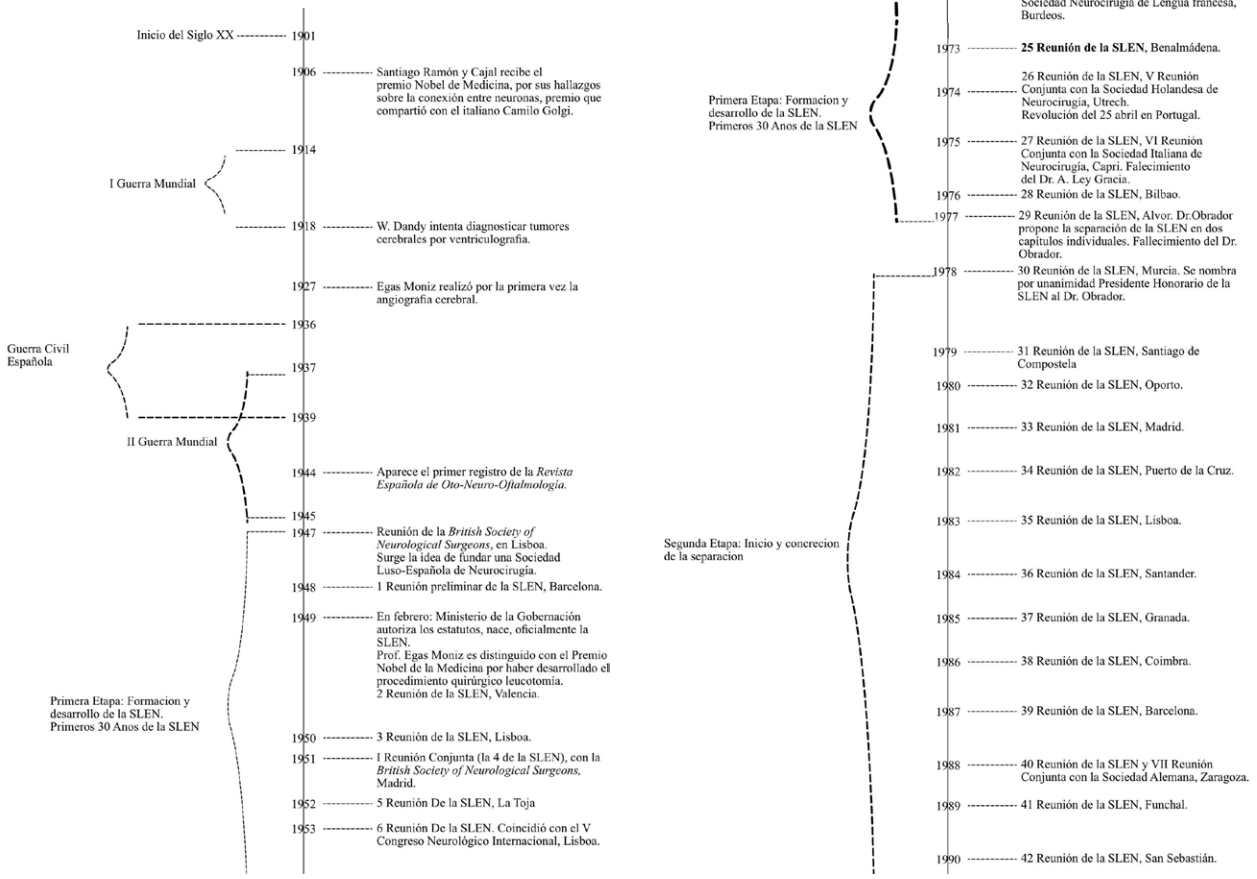
THIRD STAGE: END OF SLEN, ORIGIN OF SENEC AND SPNC:

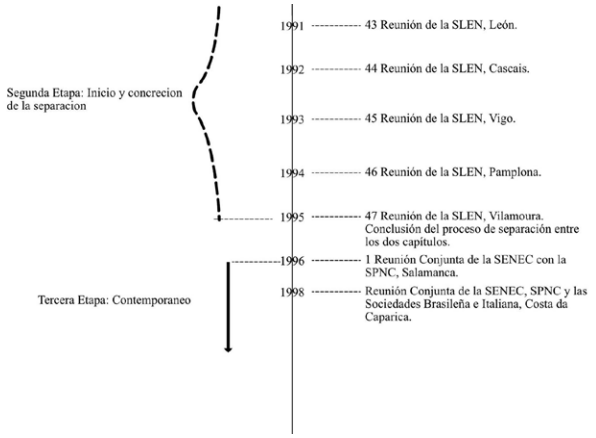
The SLEN had ended. The following year, in 1996, the First Meeting of the Spanish Society of Neurosurgery was held in Salamanca. However, relations with Portuguese neurosurgeons were a priority, and it was decided to invite the members of the Portuguese Society of Neurosurgery, who participated. Interestingly, the meeting program stated: *"Joint Meeting of the Spanish Society of Neurosurgery with the Portuguese Society of Neurosurgery."*

The Spanish Journal of Oto-Neuro-Ophthalmology and Neurosurgery

From the outset, the Society received support from Barcia Goyanes, who offered his *Spanish Journal of Oto-neuro-ophthalmology* to serve as the official, albeit provisional, publication of the SLEN. The title was later amended to include " *and Neurosurgery* ." It thus became known as *"The Spanish Journal of Oto-neuro-ophthalmology and Neurosurgery* ," where important articles and issues would be published. Espín Herrero, Barcia Goyanes' successor upon his retirement from the Neurology and Neurosurgery Department of the Provincial Hospital of Valencia, was a key contributor to the Spanish Journal in its early years. Later, beginning in 1961, a regular annual publication *(Luso-Spanish Neurosurgery) was established.* Finally, in 1988 in Zaragoza, the proposal put forward by Drs. Izquierdo Rojo and Reyes Oliveros to publish an independent journal for the SLEN was approved.

TIMELINE





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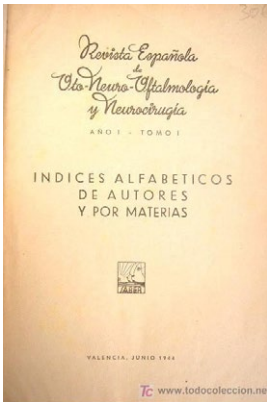
	Earl A. Walker (USA)

CONCLUSIONS

The creation of the SLEN was crucial for the growth of neurosurgery not only in the Iberian Peninsula but also throughout Europe. Thanks to the requests made by the Society to Social Security institutions, positions began to be created for the new specialty of neurosurgery. The fraternity and friendship between two neighbouring countries gave rise to a medical society that significantly influenced the course of medicine. The organisers' strong commitment and personal involvement in all activities allowed the Society to grow and survive during very difficult early stages.

The SLEN facilitated the exchange of knowledge among neurosurgeons and progressively contributed to the training of younger specialists. It also played an important role in integrating Luso-Spanish neurosurgery into international and European neurosurgical organisations. Numerous neurosurgical services were created throughout the Iberian Peninsula, providing new professional opportunities and improving clinical practice. Finally, many of the questions currently being addressed had already been raised decades earlier, with technological limitations being the main obstacle to obtaining answers that are available today.



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JORNAL DA SOCIEDADE DAS CIÊNCIAS MÉDICAS DE LISBOA

L2. LECTURE

The History of the Military Hospital of Porto

Raquel Santos[1]

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ABSTRACT: The Porto Military Hospital, currently designated the Portuguese Armed Forces Hospital – Porto Branch, represents one of the most significant military healthcare institutions in northern Portugal. Its origins date back to the initiative of King Pedro V in 1860, leading to the construction of the first purpose-built national military hospital, whose construction began in 1862. Throughout its history, the institution played an important role during major historical events, including the revolutionary movements of 1891 and 1927, the participation of Portuguese forces in the First World War, and later the Colonial War (1961–1974), during which it developed expertise in reconstructive surgery, orthopaedics, and prosthetic rehabilitation. The hospital also contributed to civilian healthcare, notably during the COVID-19 pandemic. Over more than 160 years, despite structural damage, institutional reclassifications, and political changes, the hospital maintained its commitment to medical care for both military personnel and civilians, remaining faithful to its longstanding humanitarian motto: *Hic non hostes nisi morbi*.

KEYWORDS: Military hospitals; History of medicine; Portuguese Armed Forces; Porto; Medical care in war.

This article aims to share a bit of the history of the beautiful old building located in the heart of Porto city, the Portuguese Armed Forces Hospital. It is believed that in 1860, during a visit by King Pedro V to the Military Hospital located in the Convent of São João o Novo, he made the decision to order the construction of a hospital that would ensure the best possible care for the military in the north of the country. The young king died in 1861. He was succeeded by his brother, Dom Luiz, who took the necessary steps to fulfill the wishes expressed by his predecessor.

On April 22 of 1862, in a ceremony of great solemnity, the cornerstone of the first national military hospital built from scratch was laid, a date that is still commemorated annually at this military unit. In 1869, while the building was still unfinished, the first patients were admitted. With the establishment of the Republic in Portugal, in 1910, the hospital ceased to be called Dom Pedro V and became the Porto Military Hospital. In 1918, a fire broke out, damaging the facade and adjacent buildings. Reconstruction began at that time and was completed in 1920.

During the revolutionary movements, of January 31, 1891, and mainly of February 3, 1927, violent battles between military forces were fought in the streets of Porto. Newspapers from the time described the important role the Military Hospital played in receiving victims, including civilians, and its extraordinary capacity to perform numerous surgeries of major trauma, during the days with the highest number of casualties.

Fig. 1 – Portrait of King Pedro V located in the main hall of the Hospital.

Fig. 2 – The unfinished building of the D. Pedro V Hospital (Historical Archive of the Oporto Military Hospital, 1865)

Fig. 3 and 4 – Ward and Operating Room of the Oporto Regional Military Hospital (Historical Archive of the Oporto Military Hospital, 1950s)

The military hospital's capability to respond to this mass casualty event was largely due to the experience its military doctors, especially surgeons, had gained during their participation in World War I. Ironically in that same year of 1927, it suffered a major setback and was reclassified as a Regional Military Hospital, with a less relevant role than the Military Hospital in Lisbon.

During the participation of Portuguese troops in the Colonial War in Africa, between 1961 - 1974, the Porto Military Hospital developed capabilities in the specialties of plastic and reconstructive surgery, orthopedics, and prosthetic rehabilitation for mutilated soldiers. Other interesting fact is that, the first Legionella patient described in Portugal was diagnosed in 1981 by Dr. Professor Levi Guerra, at the Porto Military Hospital.

Although until 2014 the hospital belonged to the Army branch, being the only one located in the north of the country, it was the first to serve as a common hospital for the three branches of the Portuguese Armed Forces and the Security/Police Forces. From that year onwards, it was called the Armed Forces Hospital - Porto Branch.

More recently, in the context of the COVID-19 pandemic, it also became involved in providing healthcare support to the Portuguese civilians, having received 86 elderly people during the first wave of the pandemic, in March and April 2020, mostly from care homes in the north of the country. And in the 2nd and 3rd waves of the pandemic, they opened 50 beds, in protocol with the Portuguese Regional Health Administration of the North, having received more than 320 COV-

Fig. 5 – Coat of arms of the Portuguese Armed Forces Hospital.

Fig. 6 – Stained glass window in the entrance hall staircase with the Oporto Military Hospital old motto.

Fig. 7 – Armed Forces Hospital, Oporto branch, today.

ID-positive patients between October 2020 and March 2021 in support of the Portuguese National Health Service hospitals.

We can conclude that throughout its more than 160 years of existence, the Porto Military Hospital was built from scratch, rebuilt after a fire, and underwent renovations during time. It provided health support to military personnel and civilians, with particular relevance during the revolutionary movements that occurred in Porto city and recently during the COVID-19 pandemic. Its name and classification have been altered according to the political will of the time. But throughout its history, it has always remained faithful to its old motto:

There are no enemies here, only sick people.
HIC NON HOSTES NISI MORBI

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21-22
November 2025

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Centro Clínico Universitário D. Pedro V

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JORNAL DA SOCIEDADE DAS CIÊNCIAS MÉDICAS DE LISBOA

L4. LECTURE

Manuel Gomes de Lima Bezerra at the Forefront of Medical Journalism, Medical Societies, and the History of Medicine in Portugal

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ABSTRACT: Manuel Gomes de Lima Bezerra is one of the most distinguished medical personalities of the 18th century in Portugal. Known for having been the founder of medical societies and medical journalism among us, his intervention and influence surpassed these domains, continually aroused the interest of his peers and countrymen, and he continues to be a source of inspiration today.

He was a faithful representative of the Age of Enlightenment and the European scientific elite, endowed with great scientific and medical-historical erudition, a reformer, and an agent of change. He bequeathed a vast body of scientific work published in periodicals and monographs, testimonies of his knowledge, his way of being, and his ability to move between various social circles, acting as a mediator between traditionalists and those who embraced a new paradigm. If, on the one hand, he holds a pioneering place in national medical historiography; on the other, he was, through the shift in mentalities, a promoter of the institutions, associations, and medical journals emerging in the following century. Knowledge about him and his work is clearly an unfinished task that urgently needs continuity.

KEYWORDS: medical biography, medical journalism, medical societies, History of Portuguese Medicine

INTRODUCTION

The face of the first Portuguese medical journal, the *Zodiaco Lusitanico Delphico* (1749) [1], organized in the image of the *Zodiacus Medicus Gallicus, Nouvelles decouvertes, sur toutes les parties de la Medicine* (1679) [2], edited by the Parisian surgeon Nicolas de Blegny, was the inspiration and served as the motto for the 2nd Luso-Galician Congress of the History of Medicine (Porto, 21-22 November 2025), materialized in the promotional graphic line edited. The *Zodiaco* was the official organ of the second surgical association founded in Portugal, the *Real Academia Medico-Portopolitana* (1749) [3], both initiatives authored by the then-surgeon Manuel Gomes de Lima Bezerra.

It was thus justified to recall his life and work through the reading of his writings and what has been written about him to date. Aiming to recall the value of this distinguished 18th-century Portuguese physician and present the most relevant facts of his life and his scientific, clinical, social, and cultural work, we succinctly listed his main positions, distinctions, and activities.

He was a Surgeon and Surgeon of the Royal House [4] and graduated in Medicine from the Portuguese University (1767) [5]; Professor of Anatomy and Surgery in Porto [6]; Judge Commissioner of Surgery in Porto (1751-1791), for 40 years [7]; Founder of medical journalism and the Academies of Surgery and Medicine in Portugal (1748) [8]; Collegian of the Royal College of St.

Ferdinand, of the Surgeons of the Royal House of Castile, in the court of Madrid [9]; Member of the Royal Society of Physicians of Madrid (since 3-12-1750) [10]; Member of the Royal Society of Sciences of Seville (since 30-6-1752) [11]; Honorary Member of the Economic Society of Good Compatriots Friends of the Public Good of Ponte de Lima (since 1779) [12]; Corresponding Member of the Royal Academy of Sciences of Lisbon (since 1779) [13]; Numerical Physician of the Royal House (20-3-1797) [14]; distinguished with the Habit of Christ (17-5-1804) [15]; and author of Monographs and Periodicals of the specialty where the medical-historical content is a constant, often alongside the Portuguese and European economic and social reality.

He was affiliated with the politics of the Marquis of Pombal [16] and had the protection and credit of the Catholic Church [17], as demonstrated in the Dedications of his works and in various citations throughout his writings. He was a man with vast scientific, historical, economic, social, and cultural literacy, both national and European, well-traveled (Spain, France, and England), with an enormous capacity for work, possessing encyclopedic knowledge and authoring a vast literary body of work.

Various epistolary documents attest to his vast network of contacts and confirm his commitment to promoting medical and surgical training and practice in Portugal [18], aiming for the common good, the dignification of his profession, and national prestige. He was a Collegian of Academies of Surgery, Medicine, and Sciences (Madrid and Seville), long before his graduation in Medicine, a fact that highlights the recognition of his value by members of these scientific associations.

He defended a renovating teaching method, grounded in observation and experience [19]. He evidenced strong pedagogical skills, expressed in the creation and implementation of the academies and journals of which he was a pioneer, in the formal presentation of his writings, namely in the alphabetical ordering and dialogue structure, and in the presentation of contents using fiction [20 to 22]. His clinical practice reflected the accumulation of knowledge based on experience and the exchange of knowledge among his national and European peers. From reading his writings, several references stand out regarding his personal Library, full of specialty works, foreign, original, and rare [23, 24]. He demonstrated strong dedication to his homeland and to Portugal [25, 26] and a high sense of public duty [27, 28].

RESULTS

Let us chronologically follow his life and work, which will constitute a source of inspiration for readers in the present and indisputably for future societies, as happened in the past with researchers such as A. Garcia Vazquez (1748), M. José Leitão (1788), Inocêncio da Silva (1858), José Esteves Pereira and Guilherme Rodrigues (1872), C. Pinho Leal (1876), Figueiredo da Guerra (1877, 1898, 1900, 1910), Maximiano Lemos (1882, 1899, 1900-1909), J. Augusto Vieira (1886), Albano Belino (1895), Leite de Vasconcelos (1905), Cunha Brandão (1911), Pinto Osório (1915), José Caldas (1919), F. Barras de Aragón (1921), Hernâni Monteiro (1926), J. Arias Sanjurjo (1928), Marcelo Macias (1929), J.A. Pires de Lima (1929), António Ferreira (1933-35), Reys Lemos (1938), Baptista de Lima (1938), Conde da Aurora (1939), Veiga Pires (1947), Júlio de Lemos (1948), Luís de Pina (1949), Hélène Piwnik (1982), Pedro Vilas Boas Tavares (1988, 2008), Filipe Vasconcelos dos Santos (2001), Maria Luísa Malato and Hélder Baião (2017), Laurinda Abreu (2021), among the main ones.

Manuel Gomes de Lima Bezerra was born in Sta. Marinha de Arcozelo, Ponte de Lima, Portugal, on January 4, 1727, in a house on the "street beyond the bridge" [29, 30]. (Fig. 1) His parents were João Gomes de Lima, a rural landowner, descendant of an abbot of the parish of Santa Cruz do Lima, and Rosa da Silva Bezerra, daughter of Manuel Bezerra da Mesquita, Lord of the Tower of S. Gil de Perre, Viana do Castelo. He thus possessed noble ancestry, although without a personal noble title.

He was baptized on the 12th of the same month, as stated in the entry in the Book of Baptisms of Santa Marinha de Arcozelo: *"Manoel, legitimate son of João Gomes and his wife Rosa da Silva, of the Suburb beyond the Bridge of this parish of St. Marinha de Arcozelo: He was born on the fourth day of the month of January of the year one thousand seven hundred and twenty-seven. He was baptized in this Church by me, Father Pedro Barbosa, curate thereof, on the twelfth day of the said month and year. Godparents were Miguel de Mattos and Felicia de Abreu (...)"* [31].

After preparatory studies in Latin and Philosophy in his homeland, he obtained surgical training in Viana with two Portuguese surgeons, Manuel de Amorim Dantas, surgeon of the Misericórdia of Viana, and José Custódio da Costa, Surgeon Major of the Regiments of the Province of Minho, of the Royal Hospital and of the Misericórdia of Viana, and Judge Commissioner of the Surgeon Major (*Cirurgião-Mor*) of the Kingdom. With the first, he studied for two years the *Luz Verdadeira e*

Fig 1. Gravura representando a vista da rua dalem da ponte e freguesia de S. Marinha de Arcozelo fronteira a Ponte de Lima (1780). Gomes de Lima M. *Os Estrangeiros no Lima. Coimbra:* Real Officina da Universidade.1785. Tomo I. Universidade de Coimbra, Arquivo Digital.

Recopilado Exame de Toda a Cirurgia (1693) by António Ferreira, a work that *"(...) he knew like the Lord's Prayer"* [32] and, with the second, he learned to doubt António Ferreira [33].

He established himself, from 1743, at the age of sixteen, in Porto where he found *"The Art [was] in the most calamitous decadence (...). The practitioners learned by Ferreira"* [34], *"The amputation of a leg or an arm was an impracticable thing, and horrifying to the majority of our Surgeons"* [35] and the surgeons *"(...) did not achieve a manual cure here"* [36].

The decadence of teaching and surgical practice motivated him to acquire monographs by foreign authors, stating, *"I began to enjoy good literature, provided myself with books from other nations, and sought foreign masters; and I became undeceived [realized] that there was more world than Portugal, and that in matters of Surgery, Portugal was not the most learned Kingdom in the World"* [37]. He had a short stint at the Royal Hospital of All Saints in Lisbon, in the time of the anatomist Bernardo Santucci, and established himself in Porto where he completed his training at the English Hospital, a private assistance institution maintained by the British factory for the local English community. This institution also trained Portuguese surgeons under the guidance of foreign professionals residing in Porto, such as surgeons Henry Nicols and Werton, and where he maintained clinical practice. About the first of these masters, he expresses his gratitude and affection in this way: *"Of Mr. Henry Nicols, one of the men most loved by me, and in another time my dearest Father and Master (...)"* [38]. At the same time, he participated in Porto's cultural life, being a member of informal literary and scientific associations.

He may have collaborated in the founding of the Congregation of Good Men of the Parish of Our Lady of Lapa (1751) and maintained an open dialogue with enlightened figures of Porto, such as the orator and politician Diogo de Mendonça Corte-Real, to whom he would later dedicate one of his books. Very early on, he became acquainted with European personalities and professional organizations that ensured his constant updating and valorisation, as expressed on the title page of several of his works when he identifies himself as a Collegian of the Royal College of St. Ferdinand, of the Surgeons of the Royal House of Castile, in the court of Madrid, Member of the Royal Society of Physicians of Madrid, and Member of the Royal Society of Sciences of Seville [39-41].

The founding of the first European scientific societies in the 17th century greatly contributed to the renovating movement of medical knowledge (Table 1):

While a member of the Spanish associations, he witnessed and participated in this scientific exchange and made felt through his writings the need to establish a congenital academy in Portugal, aiming at the valorization of national surgical training and practice.

TABLE 1. 1st european scientific academies

1603	*Accademia Nazionale dei Lincei (Rome)*
1622	*Societas Ereunetica (Hamburg)*
1652	*Accademia Naturae Curiosorum (Schweinfurt)*
1657	*Accademia del Cimento (Florence)*
1662	*Royal Society (London)*
1666	*Académie Royal des Sciences (Paris)*
1672	*Collegium Curiosum sive Experimentale (Altdorf)*
1696	*Veneranda Tertulia Hispalense Médico-Química, Anatómica y Matemática (Seville)*
1700	*Societas Regia Scientiarum (Berlin)*
1710	*Collegium Curiosum (Uppsala)*
1714	*Accademia delle Scienze dell' Istituto di Bologna (Bologna)*
1724	*Academy of Sciences of Saint Petersburg (St. Petersburg)*
1734	*Academia Medica Matritense (Madrid)*
(...) 1744	*Academia Cirúrgica Ulissiponense (Lisbon) - ATTEMPT*

He became even more motivated when he encountered severe criticisms from internationally renowned scientists such as Marcello Malpighi, Pedro de Regis, Carl Linnaeus, and Andre Goclick, who disregarded nations destitute of such institutions. Marcello Malpighi even stated that *"(...) all nations where experimental Academies were not founded were barbarous"* [42].

Thus, in 1748, at 21 years of age, he founded the *Academia Cirúrgica Prototypo-Lusitanica Portuense*, following the models of Paris and Madrid. He was Founder, Secretary, Numerical Academician, and Author of the statutes (9-1748) approved by D. João V, with the exception of No. 14/19, which granted its members preference in Surgery Positions in the Provinces of Minho, Beira, and Trás-os-Montes (published in the *Jornal Encyclopedico*). The Academy included Numerical Academicians (founders, 14), practicing, and honorary members. The admission of members presupposed admission exams. It was established to organize two solemn annual meetings, weekly sessions, consultations for the Poor, private surgeries, discussion of the appropriate method for treating surgical diseases, drafting of medico-legal opinions, and support in epidemics, among the main initiatives.

Internal disputes for leadership positions, scientific dissidences, and the exclusion of the aforementioned article in the statutes may justify the short existence of this academy [43, 44]. In the following year, he founded with João Carvalho Salazar, Manuel Freire da Paz, and Father João Saraiva Valente the *Real Academia Medico-Portopolitana*, which they titled the *Academia dos Escondidinhos* (Academy of the Hidden Ones) of the city of Porto because they desired discretion, under the protection of the Archbishop of Braga, D. José de Bragança. They defended experimentalism, philosophical eclecticism, and Newton's system, and promoted an international network among members, principally with the Spanish. He was its Secretary, author of the statutes (4-1749) and their remodeling (1751).

According to the Statutes, the creation of this Academy aimed at the *"Cultivation of Experimental Medicine, and luster of the Portuguese Monarchy (...)"* [45], *"(...) to clarify the dark points of Medicine by way of Observation, and for this, it will seek to bring to public light each year a Work with the title of Zodiaco Lusitanico Delphico, divided into twelve months, each month consisting of a certain number of Observations or Discourses"* [46] and the construction of a botanical garden and an anatomical theater.

In the first of the thirty statutes, it was stated: *"The principal care of the Academia Medico-Portopolitana will be the service and honor of God Triune and One; the veneration of His precepts, the benefit of neighbors, the increase of the Medical Faculties and their ministers, following the maxims of Nature, Practical Experiments, and the rational experimental method, abandoning Physical ideas that contradict experience and the phenomena of the Macrocosm and Microcosm"* [47].

In the statutes, the nature of the four classes of academicians is defined—Illustrious, Collectors, Erudite, Experimental (Stats. II-VI); the headquarters of the academy and admission requirements for academicians (Stat. IX); the competencies and attributions required of the president, deputies, secretary, collectors, prosecutor, and the Erudite academician (respectively Stats. X-XV); the periodicity and venue of the meetings of the Governing Board and the academicians (Stat. XVII); the constitution of the 12 circles—Bracarense, Ulyssiponense, Evorense, Placentino, Salmanticense, Matritense, Hispalense, Valentino, Cesar Augustano, Tarraconense, Rousilonense, and Cantabriense—and the 6 half circles—Maderiense, Africano, Brasilico, Oriental, Occidental, and Marítimo (Stat. XVIII); the rules for publication of the academy's works (Stats XIX-XXVII), its end (Stat. XXVIII); and its logo (Stat. XXX) [48].

The Academicians and Ministers appointed for political and economic governance were Dr. Manoel

Freyre da Paz, 1st Physician of the Hospital of Roque Amador and of the Relationship (President); João Sarayva Valente, Theologian (Erudite Academician); Dr. António Pereyra Cortés and Dr. Euzebio da Novoa Sarmento, Physicians (Deputies); Dr. João de Carvalho Salazar and Dr. Manoel Jose de Almeida, Physicians (Collectors); Licentiate Manoel Gomes de Lima, Collegian of the Royal College of Surgery-Madrid (Secretary); and Licentiate Jeronimo da Costa Pessoa, Pharmacist (Fiscal) [49].

Through Statute XII, we learn what was required of Gomes de Lima as Secretary of the Academy: *"The Secretary (...). Not only will be a subject intelligent in his faculty, but who has notice of Academic styles, principal Idioms of Europe, and a good comprehension of belle letters. He will have in his charge the entire Archive of the Academy, and the obligation to correspond with the Collectors, and Academicians of the Circles, and even with others who may be of utility to the Academy. He will assist in all Boards, both general and particular, with a Vote, like the Deputies and Prosecutor, and will give in them an account of everything that is worthy of notice. He will take the secret Votes, will write succinctly those given by voice; will administer the oath to the Academicians; will read at the beginning of the Boards what was agreed in the past ones; will write the Decrees, Provisions, Letters of supplication to the Prince, and everything else that belongs to his ministry; also he will seal all papers, for which he must have the seals of the Academy"* [50].

Statute XXX describes its Logo: *"The Academy will have for its emblem the Planet Apollo, traversing the Signs of the Zodiac, and below the figure of Medicine, placed over the word EXPERIENTIA, and from its mouth will come the phrase AD ASTRA; implying that by way of experience and observation, one must observe from the concavities of the earth up to the Stars everything that is notable and useful to Medicine"* [51] (Fig. 2).

The *Zodiaco Lusitanico-Delphico* was the first Portuguese medical periodical. This number edited in January 1749 includes a Prologue, a Catalog of the Academicians responsible for the edition, identified with names from Greek mythology—the "hidden ones" (*escondidinhos*)—an inaugural oration by the president, and six clinical observations, one written in Latin and the rest in Portuguese.

In the Prologue, information appears regarding the non-existence in Portugal of this type of scientific association: *"(...) only Portugal fluctuates without remedy, and not without notice; there are in it, and there were, singular Academies, Anonymous Academies, discreet Conferences, and Historical Museums, however never Medical Societies"* [52]. The expressed will is also made known that *"all the Learned of Portugal remit their most notable observations"* [53]. It is also in the Prologue that the designation attributed to this scientific society is explained, the *Academia dos Escondidos* (Academy of the Hidden) of the city of Porto, by indication of its secretary *Podalirio*, pseudonym of Gomes de Lima, because the names of the Porto physicians, surgeons, and pharmacists who contributed to its edition did not appear.

Still in the Prologue, of this first and only number, the choice of the title is explained: *ZODIACO*, *"for being one year what the Sun spends in running the houses of its signs, and one year what the Academy will take in completing the twelve months"*; *LUSITANICO*, *"(...) not for the whole work being in the Lusitanian idiom (...) but to distinguish itself from another French Zodiac (...)"*; and, *DELPHICO*, *"(...) for belonging to Medicine, and Apollo being its patron"*, symbol of revealed wisdom [54]. They intended it to be a document with illuminated knowledge as if it were a scientific oracle. Its cultivators, although heirs of the classical spirit, grounded themselves in reason and science.

In the Inaugural Oration, the president with the pseudonym *Apollo* clarifies the scope of the *Zodiaco* already indicated on the title page of the work: *"We will make this Zodiac Anatomical, discussing Anatomy; Botanical in knowing and giving virtue to Herbs; Surgical in curing Wounds, extirpating Tumors, reducing Fractures and Dislocations; Chemical in reducing natural bodies into artificial ones by impulses of fire; Dendrological describing Trees; Ichthyological anatomizing fish; Lithological speaking on stones; Medical curing diseases; Meteorological making visible and palpable the sphere, referring to mists, meteors, &c; Ornithological reasoning on Birds; Optical exposing the fabric of the eyes, visual potency, microscopes, &c; Pharmaceutical treating remedies and their compositions; and ultimately Zoological knowing and discussing animals"* [55].

Regarding the Observations, the first presents a case of jaundice, the second a violent extraction of afterbirth (secundines), the third a recurrence of breast cancer (Boaventura Duran, Surgeon of Placencia), the fourth a postmortem cesarean with extraction of a live and viable fetus, the fifth the crying (*vagitus*) of the fetus (Robert Bets, physician of Bristol), and the sixth a traumatic wound of the chest (Teotónio da Cunha

Abranches, Surgeon Major of the city and hospital of Viseu). The detailed particulars of the anamnesis, of the medical and/or surgical treatments indicated, and of the bibliographic references offer the reader orientations for clinical practice with the maximum objective of serving the common good and, as they expressed it, *"(...) for our glory, the utility of the Kingdom, and the apogee of the Apollonian Faculty"* [56]. Regrettably, it was a unique copy. However, it was representative of a promising new vehicle for the transmission of knowledge and the exchange of information among peers.

Still in 1749, he publishes the first of three volumes of the *Receptuario Lusitano*, an alphabetical Vade-mecum of diseases in which the young surgeon seeks to uniformize and "Lusitanize" medical terms for the benefit of practitioners and the public good. In this volume, he presents pathologies from A to C (Abortion to Convulsion), in a total of 216 pages, grounding himself mainly in the Pharmacopoeias of London and Edinburgh, in the formulas of respected authors like Johann Jungken, Adrian van Mynsicht, and Nicolas Lémery, and in the *"(...) remedies he observed in France, England, and Spain"* [57]. It includes Epigrams from family and friends like Saraiva Valente, Carvalho Salazar, Eduardo Filgueiras, Freire da Paz, Silva Coimbra, and his master José Custódio e Costa, and, among other documents, the license of the *Real Collegio Chirurgico-Matritense* and the censorship of the Physician of the Royal Chamber. All documents annexed to the text, in particular the last two cited, gave credibility to the work and protected the young author. It was dedicated to D. Friar Carlos Alvo, Bishop of Porto, a fact that suggests ecclesiastical patronage. He drafted the second volume which he did not manage to publish. (Fig. 3).

In 1752, at 25 years old, he edits the *Reflexoens Criticas sobre os Escritores Chirurgicos em Portugal* (Critical Reflections on Surgical Writers in Portugal), where he weaves serious criticisms of the *Luz Verdadeira e Recopilado Exame de toda a Cirurgia* authored by the prestigious 17th-century Portuguese surgeon António Ferreira, and where he evidences a wide anatomical and surgical erudition. He considered that this surgeon could not continue to be a reference in the 18th century, given the vastness of the existing surgical arsenal and the authors of anatomical and surgical texts, naturally unknown in his time, and the falsity of his doctrines. Thus, Gomes de Lima states *"That Surgery in Portugal lacks reform. That to know this art perfectly, it is neces-*

Fig 2. Logotipo da Real Academia Medico-Portopolitana segundo o seu ESTATUTO XXX por AI.

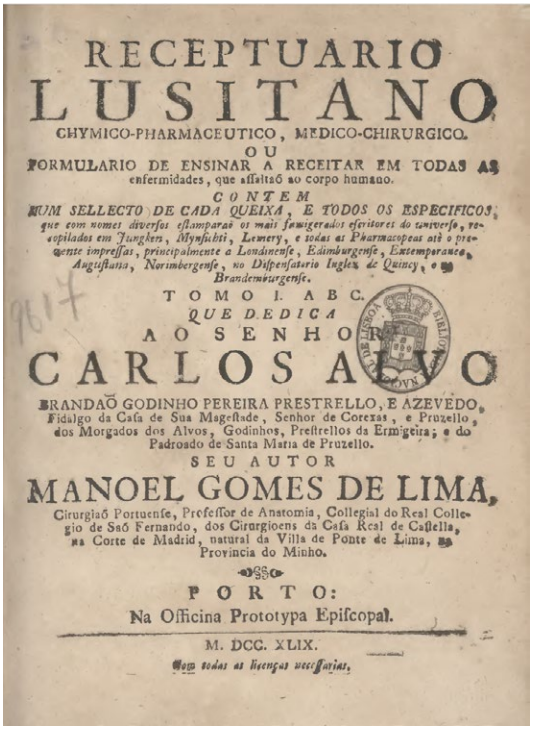
RECEPTUARIO
LUSITANO
CHYMICO-PHARMACEUTICO, MEDICO-CHIRURGICO.
OU
FORMULARIO DE ENSINAR A RECEITAR EM TODAS AS enfermidades, que assaltaõ ao corpo humano.
CONTEM
HUM SELLECTO DE CADA QUEIXA, E TODOS OS ESPECIFICOS, que com nomes diversos estamparaõ os mais famigerados escritores do universo, recopiladas em Jungken, Mynsichti, Lemery, e todas as Pharmacopeas até o presente impressas, principalmente a Londinense, Edimburgense, Extemporanea, Angustana, Norimbergense, no Dispensatorio Inglez de Quincy, e Brandemburgense.
TOMO I. A B C.
QUE DEDICA
AO SENHOR
CARLOS ALVO
BRANDAÕ GODINHO PEREIRA PRESTRELLO, E AZEVEDO, Fidalgo da Casa de Sua Magestade, Senhor de Corezas, e Pruzello, dos Morgados dos Alvos, Godinhos, Prestrellos da Ermigeira; e do Padroado de Santa Maria de Pruzello.
SEU AUTOR
MANOEL GOMES DE LIMA,
Cirurgiaõ Portuense, Professor de Anatomia, Collegial do Real Collegio de Saõ Fernando, dos Cirurgioens da Casa Real de Castella, na Corte de Madrid, natural da Villa de Ponte de Lima, na Provincia do Minho.
PORTO:
Na Officina Prototypa Episcopal.
M. DCC. XLIX.
Com todas as licenças necessarias.

Fig 3. Rosto do *Receptuario Lusitano* (1749). Biblioteca Nacional de Lisboa, Arquivo Digital

sary to be more than a 'Ferreirista' [a blind follower of Ferreira]" [58]. He considered himself *"a writer, desirous of resuscitating good Surgery in Portugal"* [59]. The work was published in Salamanca in the Shop of Eugénio Garcia Honorato and is dedicated to Doctor José Pedro Emaus, Knight professed in the Order of Christ, Noble of the Royal House, of its Dispatch, his Judge, Chancellor, and Governor of Justices in the Relationship of Porto and its district.

Gomes de Lima intended to reflect on other Portuguese surgical authors; however, he explains that he did not continue the *Reflexoens Criticas* because with the edition of that number he had achieved his objective: to make students and practitioners of Surgery aware of the need to know more updated foreign works, to attend conferences given by the Academy, and to practice the most delicate operations. The severe criticism of Ferreira's work implied indicating another author who would serve as a reference and a new method of study. He proposed the *Theoria* of Hermann Boerhaave, prestigious physician and professor at the University of Leiden, and to facilitate its knowledge and learning, he wrote and published *O Praticante do Hospital Convencido* (The Convinced Hospital Practitioner).

Dialogo Chirurgico sobre a Inflammação, fundamentado nas Doutrinas do Incomparável Boerhaave (1756), a work with royal and ecclesiastical approval, in dialogue—similar to that of Ferreira—between the author, an experienced surgeon, and a practitioner, a young defender of classical knowledge—included the exposition of the doctrines of that master and the personal observations of Gomes de Lima, giving notice of scientific and technological advances advantageous to Medicine, namely clinical thermometry and optical microscopy. This work of his is considered his work of greatest scientific and practical value and, at the time, was distributed to libraries such as the National Library of Portugal, the Joanina Library of Coimbra, the Royal of Porto, and that of the College of Surgeons of Madrid, among others. The diffusion of his ideas extended beyond the Lusophone world and, among us, was valued although occasionally contested inconsequentially by some cultivators of traditional doctrines. It was printed in the Episcopal Shop of Manuel Pedroso Coimbra, in Porto, with all licenses and the royal privilege and with a dedication to Diogo de Mendonça Corte-Real, Secretary of State, an enlightened personality, member of the Royal Academy of History [60].

In 1759, at 32 years of age, he founds the *Real Academia Cirúrgica Portuense* with the objective of perfecting the theory and practice of Surgery in Portugal, creating a course of anatomy and surgery, producing a compendium of Anatomy and another of Surgery, advertising the memoirs of the academies, inaugurating classes of Anatomy, Surgery, and Obstetric Art, constructing an Anatomical Theater, a Botanical Garden, and the House of Classes, and intervening in case of Plague. He was its founder, director, consultant of Theoretical Anatomy, co-author of the statutes (elaborated 1757, submission 1-1759), and the author of the Orations delivered annually in the solemn sessions from 1760 to 1765 [61]. Within this academy, the second national medical periodical, the *Diario Universal* (1764), appeared. (Fig. 4) It had a monthly edition from January to April which included the Discourses and Observations of the Academicians of the Medical and Surgical Academies of Porto, the news and presentation of discoveries and New Books on the Art of Healing published in Europe, clinical Observations, and an alphabetical Catalog of Plants of the Kingdom of Portugal, for *"all other persons in general, and especially those who live in the countryside"* [62] and with medical, agricultural, and industrial utilities, fundamentally following the model of the *Flora Hispanica* by Joseph Quer, surgeon of the Royal Chamber and Royal Armies and Royal Professor of Botany at the Royal Garden of Madrid. Gomes de Lima favored the construction and definition of the profession of Surgeon in Portugal and the monopoly of teaching and the labor market in the three provinces (Minho, Trás-os-Montes, Beira).

In the comments on the clinical observations, he makes a constant apology for truth, anatomical studies, and surgical and obstetric practices according to European dictates, making countless references to his personal experience.

Transversal to all his writings, one notes the author's particular attention to and proofs of knowledge about the History of National and International Medicine, especially the History of Surgery. At the beginning of his career, he had committed to writing a History of Surgery, considering it undeniable formative knowledge for practitioners as he expressed: *"The great Surgeons, and the great cures, will serve them as an example for a glorious imitation"* [63]. Reasons of a professional and personal nature made this project unfeasible; however, Gomes de Lima found a solution: *"To at least have some excuse, I converted the History into Memoirs, because recognizing myself without strength, and with-*

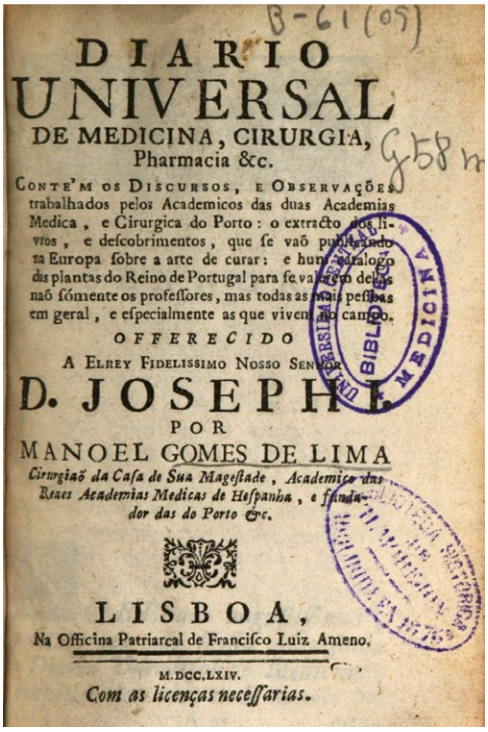
DIARIO
UNIVERSAL
DE MEDICINA, CIRURGIA,
Pharmacia &c.
CONTE'M OS DISCURSOS, E OBSERVAÇÕES trabalhados pelos Academicos das duas Academias Medica, e Cirurgica do Porto: o extracto dos livros, e descobrimentos, que se vaõ publicando na Europa sobre a arte de curar: e hum catalogo das plantas do Reino de Portugal para se valerem delas naõ sómente os professores, mas todas as mais pessoas em geral, e especialmente as que vivem no campo.
OFFERECIDO
A ELREY FIDELISSIMO NOSSO SENHOR
D. JOSEPH I.
POR
MANOEL GOMES DE LIMA
Cirurgiaõ da Casa de Sua Magestade, Academico das Reaes Academias Medicas de Hespanha, e fundador das do Porto &c.
LISBOA,
Na Officina Patriarcal de Francisco Luiz Ameno.
M.DCC.LXIV.
Com as licenças necessarias.

Fig 4. Rosto do *Diario Universal de Medicina,Cirurgia e Pharmacia* (1764). Universidade Complutense de Madrid, Arquivo Digital.

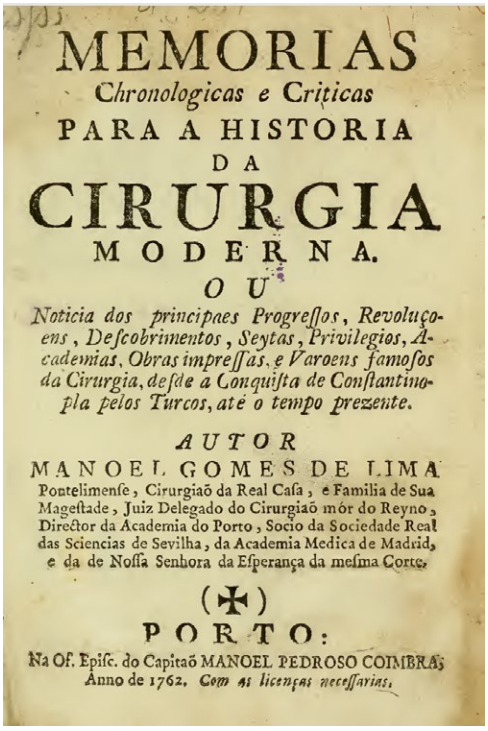
MEMORIAS
Chronologicas e Criticas
PARA A HISTORIA
DA
CIRURGIA
MODERNA.
OU
Noticia dos principaes Progressos, Revoluçoens, Descobrimentos, Seytas, Privilegios, Academias, Obras impressas, e Varoens famosos da Cirurgia, desde a Conquista de Constantinopla pelos Turcos, até o tempo prezente.
AUTOR
MANOEL GOMES DE LIMA
Pontelimense, Cirurgiaõ da Real Casa, e Familia de Sua Magestade, Juiz Delegado do Cirurgiaõ mòr do Reyno, Director da Academia do Porto, Socio da Sociedade Real das Sciencias de Sevilha, da Academia Medica de Madrid, e da de Nossa Senhora da Esperança da mesma Corte.
PORTO:
Na Of. Episc. do Capitaõ MANOEL PEDROSO COIMBRA; Anno de 1762. Com as licenças necessarias.

Fig 5. Rosto das *Memorias Chronologicas e Criticas para a Historia da Cirurgia Moderna* (1762). Boston Medical Library, Arquivo Digital.

out time, to write the former, I understood that I would not fail to do service to my country, and principally to my art, in bringing the latter to light" [64]. He planned to publish the *History of Modern Surgery* (from the taking of Constantinople by the Turks in 1453 to 1758, the date of the election of the Surgeon-Major of the Kingdom M. Soares Brandão) in eight Periods, two per year. He published the first two up to the time of Fabricius of Aquapendente. He titled this work *Memorias Chronologicas e Criticas para a Historia da Cirurgia Moderna* (1762) (Fig. 5). The main themes addressed were: the Regulation of the Surgeon-Major of the Kingdom; the discord between Physicians and Surgeons of Paris; the presentation of published Surgery Works (Individual works and joint editions of general Surgery works; Works on Pathologies: abscesses, sores, sweating sickness, syphilis, plague, skull fractures, pleurisy; Works on Surgical Techniques and Instruments, general and specific such as for lithotomy and bloodletting); and a general surgical Antidotary and on particular remedies, such as guaiacum (*pau santo*), quicksilver, mercurials, and opium. He indicates and comments on an extensive international bibliography of diverse nationalities, which evidences his vast scientific and surgical literacy, and cites the opinion of reference personalities in the specialty, many of his time with whom he maintained regular epistolary correspondence [65].

Gomes de Lima attributed the decadence of Medicine in Portugal to six main causes: the Methodology adopted in teaching at the Portuguese university; useless Medical Books; incompetent Professionals; the abundance of empirics and charlatans, a cause of harm; the incompetence and fraud of Apothecaries; and the impunity of those who pass themselves off as professionals [66].

In 1764, at the age of 37, he decides to matriculate in Medicine at the Portuguese University. On June 15, 1765, he performs the Acts of Bachelor of Arts in the Room of Private Exams and, the following day, receives the degree in the university chapel [67]. In the Historical Archive of the University, there are two matriculations in Medicine (1-10-1765 and 1-10-1766) [68, 69], the request for a certificate of years (22-2-1767), the proof of the realization of the 1st and 2nd Attempts, of the Graduation (13-5-1767), and of the approval in Medicine (18-5-1767) [70]. He concluded his medical training at 40 years of age. He benefited from a royal provision (7-1-1765) granting 3 years for the conclusion of the acts. He was aware that

only this graduation would provide him the right to a complete professional practice (Fig. 6 to 9). Upon returning to Porto, he practiced clinical medicine in the city until 1797 at the English Hospital. There is evidence of him having practiced in parallel and episodically at the Hospital dos Clérigos. Among his patients were many with resources, such as the lords of commerce and the nobility of the North and religious figures (consultant to the Convent of Santa Clara of Porto and other monastic houses).

For forty years he was Judge Commissioner of Surgery in Porto (1751-1791). It should be recalled that until 1678, it was the sole and exclusive responsibility of the Surgeon-Major of the Kingdom to evaluate and attribute the status of surgeon in Portugal. From that date, for the convenience of the persons involved and superior determination, commissioners of the Surgeon-Major and the Physician-Major (*Físico-Mor*) and examiners began to be appointed. In the time that Gomes de Lima was judge commissioner of Surgery, a preference for this latter situation is clearly evidenced [71].

Seventeen years after the publication of the *Memorias Chronologicas e Criticas para a Historia da Cirurgia Moderna* (1762), Gomes de Lima resumes this project with the work *Memorias Chronologicas e Criticas para a Historia da Cirurgia* (1779), this time consigning the History of Ancient Surgery which he planned to develop in eight periods. He only edited the first two, from the beginning of the world up to the time of Hippocrates of Kos. He dedicates the text to D. Thomas Xavier Telles da Silva, Minister and Secretary of State, born in Ponte de Lima in the same year as his birth. Once again, he explains the formative relevance he attributes to these historical works: *"The History of Surgery (...) is one of the most important matters, and necessary to our Surgeons. (...) And as from such a substantial lack results considerable damage to the people, and discredit to the Surgery of the Kingdom, I undertook the composition of these Memoirs (...)"* [72]. The first Period comprises the origin of the art of healing, the Ancient Civilizations, and Greco-Roman Antiquity. The second Period describes the Art of healing by the Asclepiads and the Philosophical Schools.

About the Medicine practiced within these Schools, Gomes de Lima states: *"The ancient Philosophers, arrogating to themselves the name of wise men, judged that as such they were permitted the exercise of all arts and sciences concerning Philosophy and natural things. As Medicine is the daughter of experience, of faithful observation, and of the long practice of curing, and these Philosophers treated few patients and totally dedicated themselves to devising systems, to controversy, and to impugning one another, it is easily gathered that they would not be great Physicians"* [73].

Since 1779, Gomes de Lima was an Honorary Member of the *Sociedade Económica dos Bons Compatriotas Amigos do Bem Público* (Economic Society of Good Compatriots Friends of the Public Good) of Ponte de Lima, an association directed at the promotion of instruction and the stimulation of regional development (Agriculture, Education and Popular Industry, Commerce). Within it, Gomes de Lima also issued Public Health opinions.

In parallel, from the same year, he was a Corresponding Member of the Royal Academy of Sciences of Lisbon. Both societies defended common principles and aspired to stimulate the Portuguese nobility and clergy to combat economic and intellectual lethargy. The epistolary documents authored by Gomes de Lima (since 1780) directed to the latter society are memoirs of the Limiana Society.

It is to the Royal Academy of Sciences of Lisbon that Gomes de Lima dedicates the work *Os Estrangeiros no Lima* (The Foreigners in Lima) (Volume I, 1785; Volume II, 1791), a work in which he starts from the economic and social context of his homeland and confronts it with other European realities [74, 75]. It is a work where he evidences his profound regional historical and genealogical knowledge, and the will to serve his homeland with his knowledge. He knew how to analyze and name archives and include some oral traditions, today nonexistent or forgotten, despite the methodological limitations at the time and the lack of personal availability.

With the intent of promoting the work and avoiding censorship, he organized the information in an appealing and didactic way, associating more attractive themes with those of lesser interest, introducing engravings, and resorting to the use of fiction with the creation of a virtual academy composed of four foreign members and one Portuguese who interacted in dialogue form: *Raulin*, a French philosopher; *Júlio*, an Italian traveler; *Clarck*, an English merchant; *D. Hugo*, a Castilian scholar in History and Genealogy; and *Lami*—a Gallicism of *Lamy*, anagram of *Lima*—a Portuguese physician. (Fig. 10) Gomes de Lima makes an apology for Experimental Science, Nature, and Natural Philosophy; he articulates the economic and social questions of Ponte de Lima with general Portuguese

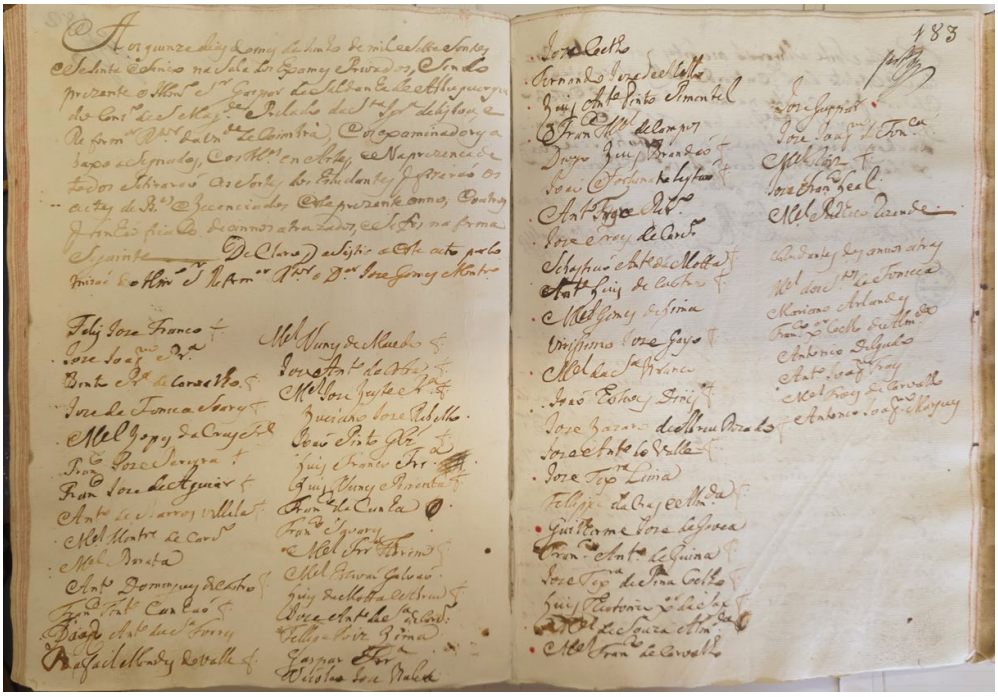

Fig 6. Arquivo da Universidade de Coimbra. Obtenção do grau de Bacharel em Artes por Manuel Gomes de Lima (15.06.1765) (DS). Actos e Graus (SR), livro: 1764 –1765, n.º 99 (UI), fl. 183. IV-1a D-1-2-43.Autorizada a cedência da Imagem pelo Arquivo da Universidade de Coimbra.

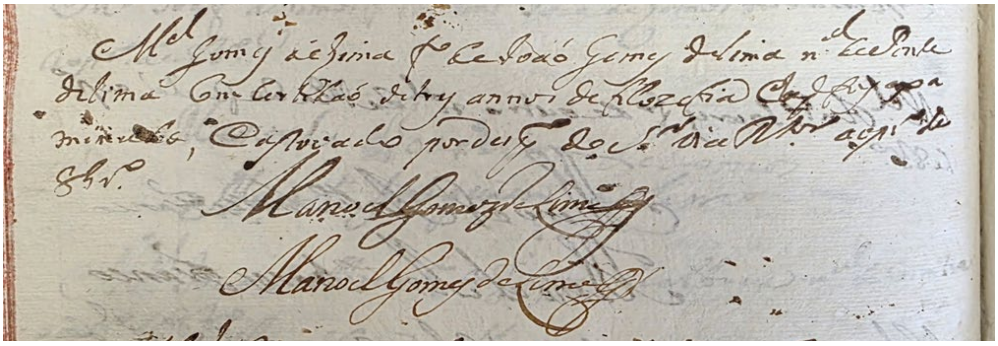

Fig 7. Arquivo da Universidade de Coimbra. Matrícula em Medicina de Manuel Gomes de Lima (01.10.1765) (DS). Matrículas (SR), Livro de matrículas 1764–1765, n.º 82 (UI), fl. 396v. IV-1a D-1-4-35. Autorizada a cedência da Imagem pelo Arquivo da Universidade de Coimbra.

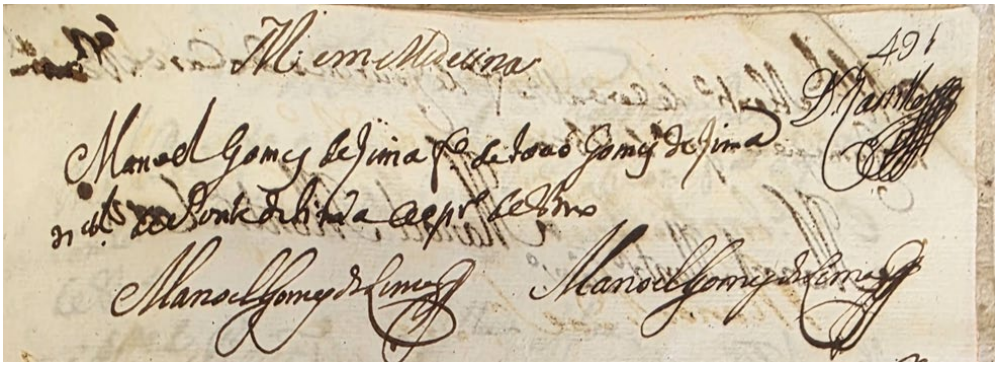

Fig 8. Arquivo da Universidade de Coimbra. Matrícula em Medicina de Manuel Gomes de Lima (01.10.1766) (DS). Matrículas (SR), livro 1765 –1766, nº 83 (UI), fl. 491. IV-1a D-1-4-36. Autorizada a cedência da Imagem pelo Arquivo da Universidade de Coimbra.

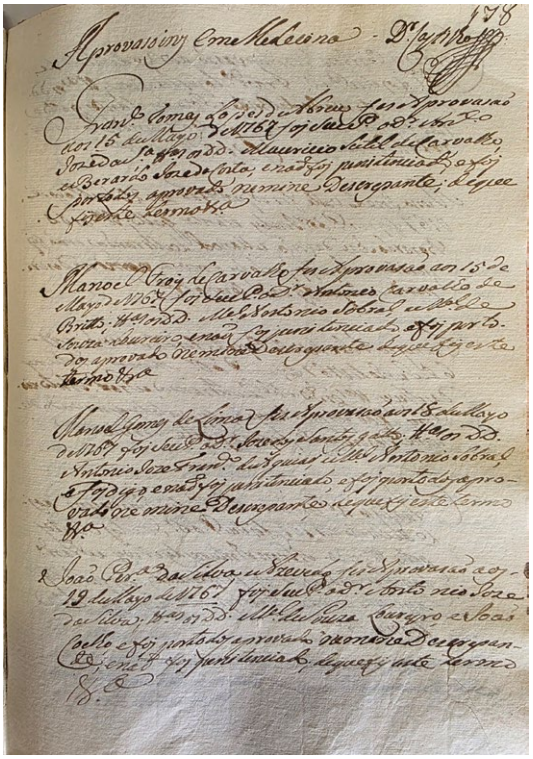

Fig 9. Arquivo da Universidade de Coimbra. Termo de aprovação em Medicina de Manuel Gomes de Lima (18.05.1767) (DS). Actos e Graus (SR), livro 1766–1767, n.º 101 (UI), fl. 178.IV-1a D-1-2-45. Autorizada a cedência da Imagem pelo Arquivo da Universidade de Coimbra.

Fig 10. Gravura representativa da Academia Virtual de *Os Estrangeiros no Lima.* Gomes de Lima M. *Os Estrangeiros no Lima.* Coimbra: Real Officina da Universidade.1785. Tomo I. Universidade de Coimbra, Arquivo Digital.

and European questions, conveying reforming ideas; he defends Physiocracy (Agriculture as the sole source of wealth), the Mercantilization of the nobility and the magistracy (financing of the State and social mobility), and the idea of merit, recognized by the State, underlying the development of the "useful arts" (arts associated with material progress and not just aesthetic) [76, 77].

DISCUSSION

From reading the cited writings of Gomes de Lima, we deduce the main objectives underlying his production and publication: the need to publicly evidence the imperfection of the work of António Ferreira, a model surgeon in teaching and assistance during the 17th and 18th centuries, and the need to stimulate self-reflection among his peers; the imperative to adopt a new paradigm, the work of Hermann Boerhaave, already instituted in the Portuguese university; the convenience of showing that Surgery is worthy of being honored and equaled to other parts of the Art of Healing, and of its inseparability from Medicine; and the obligation to show to other Kingdoms that in Portugal there were already experimental academic congresses and Medicine diaries [78]. This genesis of the first medical-surgical academies preceded and prepared the future organization of Surgical Schools in Portugal, just as the first medical journals authored by him promoted the institutionalization and more consistent affirmation of others. The medical journals were for him a vehicle for the internationalization of Portuguese Medicine, representing a unique personal effort that found continuity only in the following century.

His literary production was varied, ranging from practical manuals to theoretical criticisms, pedagogical syntheses, and historical records within the scope of health and economic, social, and cultural knowledge in the regional and European context. Transversal to the entire work stands out the will to inform, educate, and sensitize regarding the need for constant updating of medical knowledge and practice. The fact that his work was written and utilized medical terminology in Portuguese contributed to the dissemination of knowledge

among those who did not master classical languages.

His writings are the result of having been able to move through various social circles (aristocratic, technical-scientific, and enlightened intellectual), being a mediator between traditional elites and the elite that embraced the new paradigm.

The *Memorias* constitute the first national attempt at writing a history of Surgery, translating a new capacity for reflection on the past by attributing relevance to it for the present and the future, fulfilling the Enlightenment ideology. He did so with recourse to constructive criticism, always with a pedagogical objective. In this context, in 1762, in the first memoirs, he recalls a phrase by Hermann Boerhaave: *"(...) no Professor can acquire the knowledge of the art of healing without being fully instructed in the works of his predecessors, (...) in our arts there is nothing more useful nor more interesting"* [79].

He was a reformist through the transmission of knowledge conveyed by the academies and medical periodicals he founded and by the original and pedagogical works of which he was the author and, surely, by his practice which aligned with the new paradigm of treatment of surgical diseases that would be cultivated in the following century, exemplified in the contestation of the formation of pus as necessary to the healing process, defending its systematic drainage, and the parsimonious use of bloodletting. He was also a precursor of Ethnopharmacology by studying the therapeutic properties of some natural products.

For the region in which he lived, he is a historical, scientific, and cultural reference. His works evidence his commitment to national and regional progress. The monograph *"Os Estrangeiros no Lima"* continues to be a fundamental research source for knowledge of the collective memory and genealogies of the Lima valley.

At the turn of the 18th to the 19th century, national surgical documentation attests to Gomes de Lima being a reference among his peers. Later, with scientific advancement, his work continued to be an unavoidable historical reference, appearing at the end of the 19th century in works of medical historiography and stimulating others to write about the History of Medicine [80, 81]. Today it continues to arouse national interest, fundamentally regional and academic. Júlio de Lemos in the article *O Limianista Doutor Lima Bezerra* (1948) indicates other cited works of Gomes de Lima of lesser relevance [82].

By decision of the successive Surgeons-Major of the Kingdom, he was for forty years Delegate Judge in Porto (1751-1791) with the power to examine and certify candidates for surgeon in that district, constituting the highest surgical authority of the Northern region [83]. Possibly between 1758 and 1760, he was appointed honorary surgeon of the Royal House, a title conferred by royal letter of D. José I, a sign of recognition of value and a factor of social promotion. A decree of March 20, 1797, signed by Queen D. Maria I conferred upon him the title of Numerical Physician of the Royal House, a rare distinction for professionals outside the capital, a sign of a reputation that surpassed regional barriers. Lima Bezerra was also honorary physician of the *Relação do Porto* and the *Casa do Porto*, assuming health care for personalities linked to these institutions.

In 1797, he leaves the city of Porto towards his homeland Ponte de Lima, specifically towards the *Quinta do Outeiro*, in Oliveira, Fornelos, a property acquired by him in 1790 and where he spent his last years of life. It possessed a manor house with a chapel and agricultural lands. In 1804, at 77 years of age, already retired, he was graced with the Habit of the Order of Christ, a decoration granted by the Prince Regent D. João (future D. João VI), for services to science and the monarchy.

He was married to D. Isabel Caetana da Divina Providência, and as offspring or remaining family, two sons and possibly daughters or nieces are cited. He had three sisters who died single and three brothers: Domingos Gomes, the judge João Gomes de Lima, and Doctor João António Bezerra de Lima, Royal Professor of Grammar and Latin and Examiner of Students of the University of Coimbra [84]. Gomes de Lima speaks extensively about the latter in *"Os Estrangeiros no Lima"*, in Dialogue V, when he speaks of the street beyond the Bridge, where he was born and lived his childhood, to remember a prominent personality associated with the location. He was a brother of the Brotherhood of the Rosary and of N. S. da Luz. He passed away on March 6, 1806 [85]. He is buried in the Chapel of N. S. da Luz, Arcozelo, in Ponte de Lima.

Two of the cities that saw him born and grow decided to attribute his name to one of their arteries, the Rua Manuel Lima Bezerra, formerly Rua Além da Ponte in Ponte de Lima (1904), and another in the neighborhood of the Captains of April in Viana do Castelo (1992). Professor Luís de Pina, while President of the Municipal Council of Porto, introduced the name Manuel Gomes de Lima into the city's toponymy (12-4-1945) [86]. Episodically, he was remembered by the regional press and,

in 1927, on the bicentennial of his birth, the Northern press, like *Comércio do Porto*, remembered his inestimable contribution. In 1992, the facsimile edition of the work *Os Estrangeiros no Lima* is sent to press, an initiative of the Municipal Council of Ponte de Lima, printed by Barbosa and Xavier-Artes Gráficas. On the occasion of the 200 years of his passing, in 2006, the same municipality organized an exhibition and edited a catalog entitled "*Manuel Lima Bezerra – um precursor limiano*". On the occasion of the 2nd Luso-Galician Congress of the History of Medicine, Gomes de Lima was again remembered in the congress logo, in the opening session, and in the conference then delivered, translated in this writing. Regarding his multifaceted life, dispersed information is expected to exist in the archives of the cities where he lived and the Portuguese and Spanish associations to which he belonged, in the periodicals of the time, and even in European and transatlantic congener institutions that urgently need to be found.

CONCLUSIONS

Manuel Gomes de Lima Bezerra personifies the ideology of the Age of Enlightenment through critical reasoning, encyclopedic knowledge, eclecticism of interests, and dedication to the public cause. Within national conservatism, he developed criticisms, grounded in observation and experience, which promoted reforms, not so much of the technical aspect, but above all through the attitudes and institutional and cultural initiatives he promoted. He fits into the Peninsular Scientific Elite. He was a pioneer and promoter of experimental Medical Academies and Medical Journalism in Portugal.

The training he acquired and the activities he dedicated himself to as a surgeon, physician, professor, writer, genealogist, and historian of Medicine, profoundly associated with his roots and a network of national and international scientific contacts, created a multifaceted figure who was a reformer and a nonconformist agent of change. He is also a reference in national medical historiography. In 1911, the dichotomy between physicians and surgeons in Portugal would come to an end. Gomes de Lima, two centuries earlier, demonstrated with his surgical and medical training that importance and feasibility, and gave a notable contribution for national surgery to approach European scientific standards and to elevate the social status of the surgeon.

His Legacy is his vast scientific work published on national and international Surgery and Medicine, which he grounded in the past because he had knowledge that allowed him to perceive progress. His intangible Legacy, more than the genesis of a more qualified and updated class of professionals, was the change of mentalities not only in Health and Science but also in the political, economic, social, and cultural sphere of Portugal, preparing the advent of institutions and associations progressively more consolidated and adjusted to national requirements.

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COMMUNICATIONS

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JORNAL DA SOCIEDADE DAS CIÊNCIAS MÉDICAS DE LISBOA

C 1.1. COMMUNICATION – ABSTRACT

Lara from Gallaecia, Alda of Poetry

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ABSTRACT: Lara is an ancient Iberian lineage, mentioned since the eleventh century, lords of Lara, a place in the province of Burgos, kingdom of Castile. Due to services rendered to the kingdom, their possessions spread throughout Galicia, León, and notably northern Portugal. Lara is a parish in the municipality of Monção where D. Álvaro Nunes de Lara established a "new manor house" after 1212. The different branches of the Lara family spread across five continents, including famous figures in arms, literature, politics, the arts, poetry, music...

Alda Lara was born in 1930 in Benguela and died in 1962 in Cambambe. Her family comes from Minho, her father and uncles settled in Angola, working in agriculture and in the sisal industry. In 1947 she came to the metropolis to study Medicine. At the University of Coimbra she met Orlando de Albuquerque, a Mozambican doctor, writer and poet, whom she married in 1953.

One single desire motivated me, a unique wish – to take a university course that could make me useful in Angola.

Her topic for thesis degree was: Psychological deficiencies caused by lack of family care.

Alda Lara, during her short life, was a socially and politically engaged author, mother of four children, and died from complications during her fifth childbirth. She left behind a vast body of work, collected and published posthumously by her husband. Her poetry appears in several anthologies, and her name is cited as a reference point for intercultural engagement.

KEYWORDS: Alda Lara; Portuguese literature; Medicine; Angola; Biography.

SPECIAL ISSUE

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JORNAL DA SOCIEDADE DAS CIÊNCIAS MÉDICAS DE LISBOA

C 1.2. COMMUNICATION – FULL ARTICLE

The Braganza Fibula: Medicine, Portugal and Galicia

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ABSTRACT: Inspired by Alejandro Rodríguez Cardaso's legacy in promoting Galician-Portuguese heritage, this study presents the Braganza Fibula—a late Iron Age masterpiece largely unknown outside specialist circles. The objective is to explore novel medical interpretations of its symbolic and functional role in ancient healing practices, situating it within a network of similar artifacts that embody the cultural and medical identity of Galicia and northern Portugal, bridging art, medicine, and Atlantic Northwest heritage. Methods involved contextual and comparative interpretive analysis with similar artifacts. Results show that the fibula as a cultural emblem highlighting intertwined artistic excellence and early medical knowledge in ancient Iberian societies.

KEYWORDS: Iberian Culture; Atlantic Art; Celtic Medicine; Iron Age; Archaeology

BACKGROUND AND AIM

The Braganza Brooch (Fibula de Bragança) is a gold long-footed fibula depicting a naked warrior with Celtic helmet, sword and scabbard, and a hound, probably made on the Iberian Peninsula in the third–second centuries BCE. Originally part of the jewellery collection of the Portuguese royal house of Braganza, it was later acquired by the British Museum and has since been read both as a masterpiece of La Tène-period craftsmanship and as a complex cosmological image. In its initial studies, the brooch was frequently interpreted as a Greek product due to its technical refinement and classical nudity. Hitherto unknown to the Portuguese academic public despite its Braganza royal provenance, this article proposes a new reading, combining a 2023 British Museum visit to the Department of Britain, Europe and Prehistory collections, observation of comparable pieces in Portuguese private collections, and comparisons with Iron Age hoards from Galicia and northern Portugal, to demonstrate its specific regional links while interpreting it as more than adornment: possessing medical, telluric and chthonic powers tied to the sacred and the world of the dead.

MATERIAL AND METHODS

The analysis draws on direct observation of the Braganza Brooch during a 2023 visit to the British Museum's Department of Britain, Europe and Prehistory collections, with particular attention to its morphology, manufacturing techniques, and iconographic programme; examination of comparable Late Iron Age fibulae, weapons and zoomorphic artefacts from private collections in Portugal; and review of published Iron Age hoards from the Galicia–northern Portugal region, focusing on La Tène-type fibulae, Celtic-influenced metalwork, and warrior equipment.

RESULTS

Direct examination during the 2023 British Museum visit confirmed the fibula's exceptional La Tène craftsmanship. The Montefortino helmet features a distinctive crest and cheek guards. A finely engraved

dagger hangs at the warrior's hip. The dynamic hound completes the scene. All mark peninsular Iberian Celtic military tradition, not Greek production.

Artefacts from Portuguese private collections show striking typological matches. So do hoards from Galicia and northern Portugal. Shared goldwork, animal motifs and weapon details emerge. These firmly situate the brooch in a northwest Iberian workshop milieu. It most probably belonged to an elite of this region.

The piece mimetically reproduces the region's military art. Montefortino helmets recur often. Daggers appear recurrently in local warrior graves. Chimeric hybrid creatures encode tripartite world order here.

Iconographically, the intricately entwined rear serpent evokes the encircling Ocean as cosmic boundary. Its sinuous interwoven form mirrors the fibula's elaborate filigree structure. As patron animal of medicine, this reptile links intimately to healing practices since at least the Archaic period. The central warrior with hunting dog confronts the two-headed wolf chimera. This marks earthly liminality and martial ordeal. The boar connects to the wolf by an *umbilical cord*. Explicitly recognised as an underworld animal, it signals chthonic regeneration, fertility and mediation with the dead. All motifs root deeply in Galaico-Portuguese ritual landscapes.

These layered elements recur across Indo-European traditions. Yet they calibrate distinctly to northwest Iberian contexts. Early Greek attributions fail. The brooch functions as a multifunctional talisman: not mere adornment, but a vessel of telluric power, medical protection and controlled passage between worlds crafted for elites of this region.

CONCLUSIONS

The Braganza Brooch stands as distinctly Iberian, rooted in Galicia-northern Portugal. Early Greek readings betray a classicising bias that overlooked its Celtic-La Tène essence. The 2023 British Museum visit, private collection studies and regional hoard evidence unveil it. Now introduced to Portuguese academia despite its Braganza royal past, the brooch fuses martial prestige, cosmological mapping and chthonic healing into one portable artefact. Beyond elite adornment, it opens a window onto the religious world and imaginary of the peoples who inhabited this territory, revealing prehistoric medicine's deep entanglement of sacred powers, underworld forces and warrior identity.

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JORNAL DA SOCIEDADE DAS CIÊNCIAS MÉDICAS DE LISBOA

C 1.4. COMMUNICATION – ABSTRACT

Évora's Identified Skeletal Collection and Hospital Records: Contributions to Medical History

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ABSTRACT: Identified osteological collections and hospital archives are crucial resources for the study of the History of Medicine, as they allow for an understanding of the evolution of diseases, medical practices, and living conditions over time. While clinical records document diagnoses, treatments, and causes of death, identified skeletal collections make it possible to correlate this information with skeletal changes, thereby enriching paleopathological and historical interpretation.

The Évora Identified Skeletal Collection comprises 208 individuals (105 females and 103 males) who died between 1870 and 1993, most of whom were born and resided in the Alentejo region. Analysis of the records from the Hospital do Espírito Santo de Évora identified 97 individuals with at least one hospitalization episode, and to date, 27 complete medical records are currently under study.

The systematic integration of osteological and clinical data provides insights into disease patterns, therapeutic developments, and mortality, highlighting how identified skeletal collections contribute to the History of Medicine not only as sources of biological data, but also as testimonies of medical practices and everyday life in specific historical contexts.

KEYWORDS: Paleopathology; Identified Collections; Hospital Archives; Human Skeletons; History of Disease

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JORNAL DA SOCIEDADE DAS CIÊNCIAS MÉDICAS DE LISBOA

C 1.5. COMMUNICATION – ABSTRACT

From Archive to Algorithm: Leprosy, Paleopathology and Digital Paleography at the Hospital of São Lázaro, Coimbra

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ABSTRACT: The Hospital of São Lázaro of Coimbra, incorporated into the Hospitals of the University of Coimbra in the eighteenth century, was one of the main institutions for the treatment of leprosy patients in Portugal. This study focuses on the historical and paleopathological characterization of leprosy patients' admissions between 1870–1900, based on the analysis of 57 books, which contains admission registers and clinical records, preserved in the Archive of the University of Coimbra. A total of 239 individuals diagnosed with leprosy were identified among 71,484 admissions (0.33%), enabling the reconstruction of the biodemographic and clinical profile of patients, patterns of hospitalization, average length of stay, and associated comorbidities and mortality. The research further distinguishes between "institutionalized lepers" and "occasional lepers," shedding light on relevant aspects of hospital management and nineteenth-century medical practices. The application of statistical methods combined with the cross-referencing of diagnoses and comorbidities, provides significant insights into the clinical course of leprosy and its paleopathological contextualization. In addition, this study presents the ongoing project to transcribe the historical records of the Hospital of São Lázaro (1684–1772), using the Transkribus platform and Handwritten Text Recognition (HTR) models. This innovative approach enables the conversion of difficult-to-read manuscripts into searchable and standardized text, fostering the creation of open-access databases relevant to paleography, the history of medicine, and paleopathology. The integration of AI, written historical sources, and methods from biological anthropology represents a significant advance in the interdisciplinary study of infectious diseases and the historical and social trajectory of leprosy in Portugal.

KEYWORDS: Hansen's disease; Biological anthropology; Paleopathology; Paleoepidemiology; Paleography; Artificial intelligence.

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JORNAL DA SOCIEDADE DAS CIÊNCIAS MÉDICAS DE LISBOA

C1.6. COMMUNICATION – FULL ARTICLE

Between Science and History: The IAP-PM Museum of the Faculty of Medicine of the University of Coimbra in Transformation

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ABSTRACT: This article aims to present the history of the creation and evolution of the Museum of Pathological Anatomy at the IAP-PM (Institute of Pathological Anatomy and Molecular Pathology), located within the Faculty of Medicine at the University of Coimbra. Created as an aid to the study of medicine, this museum has accompanied the various phases of this institute, including the creation of the discipline of Pathological Anatomy, its emergence as a distinct field, and its evolution into an institute, also marking the passage of numerous famous figures through it. This article aims to summarise not only these aspects but also to explore the museum's immense and diverse collection, which has grown over the decades from the Pathological Anatomy preparations, which benefited from the contribution of distinguished doctors from Coimbra, such as Bissaya Barreto and Daniel de Matos, to the Collection of Anatomical Models, which dates back to 19th-century French artisans. Next, this article refers to a few projects that are underway through European investments (PRR) since the creation of digital applications such as a Virtual Museum, a Macroscopy Simulator, and Pathobox. We also explore the adoption of a new exhibition discourse to integrate this new digital vision, which has long been necessary in this Museum.

KEYWORDS: Museums, Medicine, Pathological Anatomy, History.

INTRODUCTION

Nowadays, museums play a fundamental role in preserving, interpreting and promoting heritage, acting as privileged spaces for the production and dissemination of knowledge. In addition to their purpose of safeguarding heritage assets, these very special institutions act as dynamic agents of cultural mediation, promoting social dialogue and bringing the public closer to the diverse narratives that museum objects convey.

In this context, the Pathological Anatomy Museum of the IAP-PM of the Faculty of Medicine of the University of Coimbra stands out for its collection, the central axis of its identity, of historical and scientific value, which documents the History of Medicine, scientific re-

search and medical education, contributing to ethical, academic and social reflection on health and disease.

Currently, the Museum extends beyond its traditional role of supporting specialised teaching, highlighting the exhibition and educational value of its collection. Accordingly, the analysis of the collection and its relevant location reveals the challenges inherent in its conservation, management and communication, particularly in a context marked by rapid technological changes and new public expectations.

In this sense, the University and the Institute have invested in the design and implementation of projects that aim to enhance the Museum and its collection, made possible by european fundings *(PRR- Recovery and Resilience Plan funding*). These initiatives are mainly related to the adoption of new technologies, such as 3D digitalisation of the collection and installation of interactive digital displays in the museum space, which also involves the development of preventive conservation actions, historical research, heritage management and the creation of scientific and educational content, seeking to respond to the current challenges of museology and the needs of the Museum itself.

From a methodological point of view, the research is grounded in a qualitative approach, appropriate for interpreting scientific museum contexts, based on the analysis of historical sources, direct observation of the museum space and the organisation of the collection, as well as a bibliographic review of specialised literature in the areas of Museology, History of Medicine and Scientific Heritage. This approach allows for a deep understanding of the Museum as an institution, the narratives associated with its collection, and the objectives supporting the projects currently in development.

This article, divided into three fundamental points related to the history, collection, and rehabilitation of the Museum, aims to highlight the importance of this initiative, which reinforces the value of the Museum of Pathological Anatomy and its medical- scientific heritage, framing it within current museological practices defined by the specific challenges and characteristics of the field.

HISTORICAL BACKGROUND

Located in the Faculty of Medicine, the current Institute of Pathological Anatomy and Molecular Pathology of the University of Coimbra, along with its Museum, has its origins in the University's Anatomical Theatre, founded during the Pombaline Reforms (Reforma Pombalina), a period of renewal applied to education and various spheres of Portuguese life [1].

Thus, within this important intellectual movement that drove the renewal of academia in the face of new scientific principles, the Faculty of Medicine of the University of Coimbra, naturally inserted in this context, founded new establishments fundamental to the teaching of medicine in the 18th century, including the Anatomical Theatre, which emerged as an important space for the observation of patients, cadavers and their pathologies, representing the pedagogical and practical function of teaching anatomy [2].

In the 19th century, in Coimbra, an important figure in the history of the future Institute of Pathological Anatomy Museum emerged: Dr Carlos José Pinheiro, an anatomy demonstrator who prepared hundreds of anatomical specimens, which were preserved and organised in a museum space dedicated to normal, pathological and tocology anatomy. He published significant works, including the *Inventario Scientifico das Peças e Preparados do Theatro Anatomico da Universidade de Coimbra*, in 1829 [3].

His successor, Sebastião de Almeida, professor of anatomy until 1859, together with his disciple, Inácio Rodrigues da Costa Duarte, were responsible for acquiring anatomical specimens, dissection instruments, books and anatomy atlases. Sebastião de Almeida was later replaced by Calisto Inácio de Almeida Ferraz, Director of the Anatomical Theatre and the Museum of Normal Anatomy from 1860 onwards, who imported wax specimens and plastic substances, preserving the existing natural specimens in phenolic glycerin [1].

In the field of Pathological Anatomy, it was Francisco António Alves, professor at the Faculty of Medicine, who founded the Cabinet of Pathological Anatomy in 1861 [4]. Under his direction, the first catalogue of the Cabinet, *Catálogo dos Gabinetes de Chimica Médica e Anatomia Pathologica da Universidade de Coimbra*, was published in

1865, with hundreds of specimens forming its collection [4]. Thus, the Cabinet, the basis of the current Institute and Museum, underwent a period of evolution, parallel to the affirmation of Pathological Anatomy as an individualised discipline:

> *"Special museums are founded; iconographic collections multiply; journals and monographs become commonplace; the statutes of our University recognise the advantage of cadaveric research; anatomical societies are organised, and the 17th and*

early 19th centuries represent flourishing periods for Pathological Anatomy. Portugal did not fail to recognise these advances;" [5].

Francisco António Alves was succeeded by Júlio de Sande Sacadura Botte, the second professor of pathological anatomy, who, following in the footsteps of his predecessor, published a new catalogue of the Museum in 1877, entitled *Catologue des Cabinets d'Anatomie Pathologique et de Chimie médicale - Cordonné avec la coopération de Préparateurs*, which lists the specimens in the collection, also mentioning their preparers, Manuel Justino de Azevedo and Daniel de Matos [4].

In the 20th century, the discipline of Pathological Anatomy was transferred to Raimundo da Silva Mota, who took over as Director of the Cabinet of Pathological Anatomy from 1885 to 1904, being responsible for the continuous growth of the museum's collection, which had around 1,400 specimens at the time [4].

> *"When Prof. Raimundo Mota died in 1910 (...), "the museum constituted a precious collection of all types of lesions. (...). Its collections of embryology, monstrosities, lesions from bubonic plague and cerebrospinal meningitis are interesting from all points of view..."* [4].

In 1910, the year that marked the establishment of the First Republic (Primeira República) in Portugal, structural changes were implemented across various sectors, including university education, which benefited from important reforms [6]. In this context of reorganisation and transformation, the Cabinet became an Institute in 1911, under the direction of Luís dos Santos Viegas, at a time when institutions were placed under the supervision of universities, enabling the creation of new centres of research and teaching [7].

> *"The renovation of the old offices, museums and university laboratories was not limited to a simple nominal change, but involved significant transformations in terms of their organisation, structure and scope of action. In addition to their traditional functions of supporting theoretical teaching and introducing experimental work, they took on additional responsibilities in the areas of practical teaching and scientific research."* [6].

Thus, we are faced with an extensive scientific movement that justifies the developments that took place at the Institute and its Museum during the first decade of the 20th century. The Institute began to publish scientific archives, which indicate the exponential increase in acquisitions for the Museum between 1912 and 1914, allowing the collection to grow by 152 new specimens: *"(...) originating from hospital operations, the urban clinic, and autopsies performed at the Institute (...) including extremely curious and rare cases (...)"* [7].

These important figures, published under the direction of Luís dos Santos Viegas, with the support of João Marques dos Santos, assistant and future director at the Pathological Anatomy Laboratory, attest the history, objectives, and achievements of the institution. The 'historical news' article, written by Marques dos Santos, refers to the expansion of the space carried out at the time:

> *"The three rooms that were part of the old corridor of the Faculty library were adapted, one into a cloakroom, where, through independent side doors, access is gained to the Institute's Museum and the respective General Laboratory; another serves as a dissection and assembly room (...) and a third as a private laboratory for the Assistants. (...) there are complete collections of dyes, various chemical reagents, records of the specimens collected (...)"* [7].

It also notes that the Museum is full of specimens and that visitor access is regulated to avoid disrupting school services, suggesting that the Museum is already somewhat open to the public [7]. In the 1930s, the Museum's opening to the public was formalised by the Decree of 9 March 1931, published in the Diário da República (Official Gazette of Portugal), which set out opening hours and admission prices, thereby authenticating the community character the Museum has come to embody.

In the early 1940s, the Estado Novo, a dictatorial regime under the leadership of António de Oliveira Salazar, established an administrative commission aimed at radically redesigning the city of Coimbra, guided by the need to rebuild the Alta (Upper Town of the city) and remedy the serious unsanitary conditions in the surrounding neighbourhoods. This controversial plan gave rise to a vast urban and architectural intervention, which irreversibly altered the appearance of the University of Coimbra over the following decades [8].

From 1942 onwards, the discipline of Pathological Anatomy was held by Michel Mosinger, and the acting management of the Institute was ensured by Augusto Vaz da Serra:

> *"New horizons opened up; studies in Pathobiology began, services were set up in the then new Faculty of Medicine (in 1955), teaching methods were remodelled, and an era of experimental Pathology began, which came to fundamentally mark the work of Michel Mosinger."* [4].

As the culmination of this transformative process, the emblematic Faculty of Medicine building was inaugurated on 29 May 1956, established next to the Paço das Escolas, now the headquarters of the Institute of Pathological Anatomy and its Museum [8]. From 1960 onwards, the Institute was directed by Renato Trincão, a professor of pathology, who focused his efforts on preserving the Museum. This was evidenced by the creation of the '*Exposição iconográfica e bibliográfica comemorativa do 1.º centenário da Cadeira de Anatomia Patológica de Coimbra*' in view of the celebrations marking the first centenary of the establishment of the discipline of Pathological Anatomy, "*installed in its magnificent Museum filled with several thousand anatomical pieces and about 200 wax pieces*" [9].

In addition to the museum collection, the exhibition featured several photographs of macroscopic pieces, histological documentation from the collection, graphs, historical documents, bibliographic works from the Institute, and instruments [9], confirming the existence of an important collection that, in this exhibition, was curated to facilitate public understanding and appreciation.

The passing of Renato Trincão in 1996, on the eve of the new century, marks the beginning of the Institute's contemporary era, with Manuel Matos Beja as director until 2003, followed by Lina Carvalho, who will hold the position until 2025. During Lina Carvalho's directorship, Dr. Rosa Gouveia, an anatomical pathologist and technical specialist at the University of Coimbra, played a key role in the organization and development of the Museum, carrying out significant work in structuring and preserving its collections.

The Museum continues to play an important role in the educational and scientific fields within the Institute. However, it lacks modern museum resources and techniques, making it difficult to safeguard its historical heritage and create new methods for exhibitions, expanding its reach to a broader audience. Since April 2025, the Institute and its Museum have been under the direction of Vítor Sousa and from May onwards, the Museum has been undergoing technical refurbishment, carried out by the new museological team.

COLLECTIONS

Having established this, the largest collection at the Museum is undoubtedly the Pathological Anatomy preparations, i.e. biological specimens from autopsies, carefully preserved — mostly in formalin solution — to illustrate various pathologies affecting different organs and systems of the human body.

At the end of the 19th century, the process of fixing and preserving organic tissues was influenced by the introduction of formalin (by Blum, in 1893) and by procedures for preserving colour in specimens fixed in formalin, discovered by Kaiserling in 1896, which influenced the use of this chemical compound in scientific and museum contexts (10).

This was also the museum's first collection, by Professor Carlos José Pinheiro, preparer of specimens at the Anatomical Theatre at the time. Unfortunately, the referred specimens have not survived to the present day.

However, the Museum was enriched by the work of other doctors who came after Carlos José Pinheiro, and today it is possible to find around two thousand pieces distributed throughout the museum, offering a unique perspective on the morphological changes caused by diseases and allowing for a deep understanding of pathological anatomy.

Alongside the Pathological Anatomy preparations, there is another equally important collection from the same period, the Anatomical Wax Collection. This section of the Museum brings together anatomical models made mainly of wax, whose main purpose is their use in the study of different dermatological diseases, many of which are rare or currently eradicated. This work with wax is an art that has been perfected by various craftsmen until it went hand in hand with clinical rigour, where it gained greater visibility in teaching due to its realism, becoming the perfect learning aid and an essential tool for the prevention of STDs at the time (11). The collection includes several works by two famous artisans and important wax sculptors of the time: Jules Baretta and Pierre Vasseur, from Saint-Louis Hospital and Maison Vasseur-Tramond, respectively.

To create these anatomical moulds, it was required a patient with a pathology to be preserved, a doctor to assess the area, and an artist to produce the piece. For this production, the artisan first made a plaster mould of the area of interest, to which melted wax was applied with other organic and inorganic materials that were kept secret by the artisan (12). After drying, it

moved on to the finishing stage, where it was painted, and real hair was added, inserted one by one (11). Created with great scientific and artistic rigour, these moulds were fundamental to the teaching of medicine in the 19th and 20th centuries.

In addition to these collections, we also have the Osteological Collection. This section of the collection displays human bones — complete or fragmented — that are preserved for educational, scientific, and anatomical-pathological diagnostic purposes. The specimens on display allow direct observation of various bone pathologies, visible to the naked eye or in histological sections, including fractures, infectious lesions, degenerative processes, and tumour formations. Through these remains, it is possible to understand how certain diseases affect the human skeleton and how knowledge about the body has evolved.

The next section of the museum presents a unique collection of Dehydrated Anatomical Specimens — human organs, tissues and bones carefully prepared without the use of preservative liquids. Unlike specimens immersed in formalin, these specimens have undergone special dehydration and preservation techniques, allowing them to be exposed to the air. This method reveals, with remarkable clarity, anatomical details and pathological changes that are sometimes difficult to observe in liquid form.

Another curious collection is the Calculi Collection, which refers to solid formations or stones that develop in different parts of the human body from the crystallisation of mineral salts and other organic substances. These calculi can be surgically removed or eliminated naturally and then sent for laboratory analysis to determine their chemical composition and origin.

Other collections in the Museum stand out more in the area of preparation and information about the pieces found in the Museum, such as Chemical Reagents, Instruments and Documentation.

The reagents, once used in the preparation and conservation of anatomical specimens, represent fundamental techniques of pathological anatomy in the 19th and 20th centuries, illustrating the scientific and laboratory evolution of medical education at the faculty. Like the reagents, the historical instruments were used mainly for research and diagnosis at the Institute. Among the items on display are microscopes, microtomes, slides, scales, thermometers and various laboratory utensils.

Finally, the museum includes a documentary collection with medical records, clinical photographs, histological analyses, and visual comparisons of before and after various treatments. These materials complement the anatomical models and instruments, reflecting the methods of observation, diagnosis, and research used at the Institute, and bear witness to the evolution of medical knowledge over time.

Due to the value attributed to this collection and its importance to the University of Coimbra, the museum is undergoing a renovation process with the aim of modernising, conserving and breathing new life into the site through a technological development enabled by european fundings (*PRR - Recovery and Resilience Plan*).

PROJECTS

Therefore, this funding has enabled the Institute to invest in equipment for 3D scanning and augmented reality, as well as the devices needed to ensure the compatibility and full functioning of the software purchased.

At the same time, two digital applications are being developed as part of the HfPT (Health from Portugal) project. The Macroscopy Simulation app is designed to teach one of the most important procedures in the field of Pathological Anatomy, allowing users to practise the fundamental steps of macroscopic practice. The target audience for this software includes medical students, pathology residents and technicians in training.

The application integrates several stages of the process, from the digitalisation of the organ, through orientation, description, measuring, staining, cutting and sampling. This approach contributes to greater accessibility to practical teaching, promoting the development of technical skills in a safe and pedagogical way without spending resources directly on Pathological Anatomy Services.

The Virtual Museum app aims to provide users with complete and integrated visiting experience. In addition to the exhibition dimension, this technological innovation aims to support the systematisation and organisation of the collection through the creation of a future digital database.

This platform, currently in beta version, will make the collection accessible to the public, facilitating its study and promoting the participation of researchers, students, and the public, who will be able to con-

tribute to the analysis and research of the pieces in the collection.

In addition, the app plays an important role in illustrating and understanding different pathologies, as the museum's specimens are currently being digitalized for integration into this app. This will allow any user to view the pieces currently on display at the Museum digitally, broadening access to heritage and reinforcing its educational and scientific function.

Finally, the IAP-PM developed, in cooperation with the technology partners BMD Software, the PathoBox system, a PACS system for diagnostic in daily routine practice, educational and scientific objectives used predominantly in the field of Pathological Anatomy, developed to support routine diagnostics, teaching, training and the dissemination of knowledge in pathology. In general, it is a digital platform that integrates pathological cases, bringing together images, digital models, virtualised samples and multimedia content, organised for diagnostic, educational and research purposes.

DIGITALIZATION PROCESS

As mentioned above, the Museum's collection consists of several collections, whose conservation methodologies vary according to their nature and the materials they are made of. The use of formaldehyde requires the adoption of strict safety measures during its handling. Therefore, the use of personal protective equipment (PPE) is mandatory, namely nitrile gloves, PAPR (Powered Air-Purifying Respirator) respirators and disposable gowns.

The handling of historical objects requires great care, both because of their fragility and because of the lack of detailed information associated with some pieces. These circumstances make the digitalisation process particularly demanding and time- consuming. Most collections can be digitalised by a single operator; however, the collection of anatomical pieces in preservative liquid requires the support of the museology team, technician and pathologists from the Institute, ensuring the safety of the procedure and the preservation of the pieces.

The process begins with the removal of the specimen from the Museum's display cabinet and its transport to the Service's Macroscopy area, where there are adequate working conditions, namely a large workbench and an air extraction system, which is essential for reducing exposure to potentially toxic substances. The glass container is first cleaned externally, followed by the removal of any glue or silicone present on the lid, until it can be opened safely.

Subsequently, the specimen is removed from inside the container, ensuring the removal and storage of the container in a safe area. The specimen is then carefully cleaned and secured in a stable position to minimise or avoid handling during the scanning process.

Once scanning is complete, the glass container is cleaned again, and the procedure is used to replace the preservative liquid with a less harmful one (glycerol + antifungal). The specimen is then returned to the container and remains in quarantine for about a week. This period allows for monitoring, adjustments and verification of the absence of fungi or other substances that could compromise the conservation of the specimen. After this control phase, it is sealed with silicone and returned to the Museum, ensuring its preservation and continuity in the museum collection.

INVESTMENT IN EXHIBITION DISCOURSE: PROSPECTS FOR CHANGE

Within the scope of ongoing technological investment, the renovation of the Museum's exhibition discourse plays a central role. The main objective is to update and innovate the ways of communicating with the public through the introduction of interactive tables and digital billboards distributed throughout the exhibition route.

Despite this modernisation, the Museum will retain its original spatial and logistical organisation. The museum team has chosen to preserve the historical order of the space, respecting the layout of the cabinets and the traditional configuration of the rooms, to safeguard the identity and authenticity of the site. In this context, the digital displays and interactive tables complement the existing exhibition discourse, allowing the c ontent to be updated without compromising the historical integrity of the Museum.

These digital devices will have an informative and educational function, providing contextualised content directly linked to the collections on display in the corridors and rooms. They aim to enrich the visitor's experience, promoting a deeper, more accessible and interactive understanding of the museum objects.

In addition, these tools will enable the creation of temporary or modular thematic exhibitions aimed at raising awareness and educating people about health issues, addressing topics such as breast cancer, sexually transmitted infections, and the harmful effects

of smoking. At the same time, they will contribute to the interpretation of historical exhibitions and the influence of research carried out by prominent medical figures, such as Bissaya Barreto and Daniel de Matos, whose specimens are widely represented in the Museum's collection.

The interactive tables will also be used to integrate advanced digital content, including educational applications such as the Macroscopic simulation, as well as other interactive resources related to the Museum and the field of medicine. In addition to the scientific aspect, this equipment will support the historical contextualisation of the space through the compilation of images, books and other documentary sources, allowing visitors to build an informed view of the history of the Museum and its institutional framework.

CONCLUSION

The Museum of the Institute of Pathological Anatomy and Molecular Pathology is a testimony to the evolution of medical education, scientific research, and museum practices in Portugal from the 18th century to the present day. Its origins in the Anatomical Theatre of the Pombaline Reform, the progressive enrichment of its collection throughout the 19th and 20th centuries, and its institutional consolidation as an Institute reflect not only the development of Pathological Anatomy as an autonomous discipline, but also broader transformations in scientific, pedagogical, and social thought.

The collections that make up the Museum reveal a scientific heritage of high historical, technical, and artistic value. These collections offer insight into the evolution of medical knowledge, diagnostic and teaching methodologies, as well as the relationship between science, art, and clinical practice, underscoring the Museum as a unique space for the transmission of knowledge and scientific heritage.

In light of contemporary challenges, the current phase of museum and technological rehabilitation is a decisive moment for the preservation and enhancement of this heritage. The focus on digitalisation, augmented reality, educational applications, and new exhibition narratives reflects a clear effort to reconcile the preservation of the Museum's historical identity with the need for innovation, accessibility, and openness to more diverse audiences. This process not only reinforces the Museum's educational and scientific function but also expands its role as an agent for the dissemination of knowledge and health education.

In this way, the IAP-PM Museum today stands as a space in continuous transformation, where past, present, and future come together. The integration of new technologies, combined with respect for the authenticity of the place and its collection, allows the Museum to project itself into new forms of research and learning, ensuring the continuity of its mission and relevance in the national museum and scientific landscape.

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JORNAL DA SOCIEDADE DAS CIÊNCIAS MÉDICAS DE LISBOA

C 2.1. COMMUNICATION – FULL ARTICLE

Beneficial Nutrition in Galicia at the End of the Nineteenth Century: The Case of Santiago de Compostela

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ABSTRACT: This article examines the emergence and development of the Economic Kitchen of Santiago de Compostela within the broader context of social assistance and nutritional change in late nineteenth-century Galicia. Drawing on archival documentation, contemporary press sources, and institutional records, the study analyses the dietary model promoted by these charitable dining halls and compares it with the habitual diet of the urban working classes and the poor. The research highlights both the limitations and improvements introduced by this initiative, including the provision of affordable meals, improved food quality through regulated procurement, and the introduction of certain dietary innovations such as dairy consumption and diversified protein sources. Particular attention is given to the distinctive role of ecclesiastical management in Santiago, which enabled the integration of the Economic Kitchen into a wider Catholic assistance network serving schools, charitable institutions, prisoners, and pilgrims. The findings suggest that these institutions played a significant role in alleviating nutritional deficiencies among vulnerable populations and contributed to the modernization of social welfare practices in Galicia at the turn of the twentieth century.

KEYWORDS: Economic Kitchens, Social assistance, Nutrition history, Galicia, Nineteenth century

INTRODUCTION

Throughout the nineteenth century, Spain developed a public system for providing assistance to those in need. The requirements for accessing these institutions delineated very specific social groups: the sick and the indigent. Increasingly, however, a new sector facing subsistence difficulties emerged during the century. Day labourers and low-skilled workers were often unable to support themselves. Working conditions in both urban and rural environments fostered the growth of a lower social class that, under certain circumstances (such as years of poor harvests or lack of employment), faced serious difficulties in sustaining itself, resulting in insufficient and low-quality nutrition.

SOCIAL ASSISTANCE AND THE EMERGENCE OF THE ECONOMIC KITCHENS

In an effort to alleviate this situation, various initiatives and institutions were created to distribute, albeit sporadically, certain common food items: flour, grain, seasonal fruit, vegetables, or cured pork fat. In

many cases these distributions responded to catastrophic events or were carried out on festive occasions. It was common to distribute food during periods of famine or severe weather, as well as on patronal feast days or events related to the Royal Household: name days, births of heirs, or anniversaries of accession to the throne. In all cases, these were occasional distributions with no regularity or continuity.

In 1885, the liberal politician Segismundo Moret imported from the Normandy region[1] the model of the social dining hall that we now know as *Cocinas Económicas* ("Economic Kitchens"). That same year, the first establishment opened in Madrid, and the format quickly spread throughout Spain. It consisted of a simple structure with two spaces: a kitchen and a dining room. From early morning until nightfall, it provided food rations to dockworkers at the purchase cost of the ingredients. The cost of preparation – limited to fuel and the labour of cooks and waiters – as well as the purchase of utensils, furnishings, and the maintenance of facilities was covered through subscriptions or subsidies. In addition to being able to eat at any time of day, the main room was heated, allowing users to remain inside during adverse weather conditions to warm themselves and regain strength. The general purpose was to offer prepared dishes at minimal prices so that the working class could access stable menus allowing at least one daily meal of guaranteed quality. The menu had to align with the customary diet of labourers.

Following the ideological criteria of the founder of the *Tienda-Asilo* of Le Havre and of the promoter of its diffusion in Spain, these social dining halls were sponsored by public entities such as municipalities or provincial councils, or by philanthropic societies (athenaeums, artisans' circles, and similar organizations)[2].

Galicia was not immune to this wave of foundations, and between the opening in Madrid and the year 1900, similar dining halls were created in nine cities: the seven capitals of the old Kingdom, plus Ferrol and Pontevedra. The first was in A Coruña (1886), re-founded in 1887 and still active. The next, in 1891, were those of Santiago and Ferrol, opened less than two months apart and also still in operation.

THE ECONOMIC KITCHEN OF SANTIAGO DE COMPOSTELA AND ITS DIETARY MODEL

The *Cocina Económica* of Santiago marked a turning point in the country, as it was created within a Catholic society founded specifically for that purpose and with the explicit support of the Archbishopric, which assumed its direction. Until then, foundations throughout Spain had emerged within already-existing societies, and the participation of the Church was minimal, if present at all.

Despite ideological differences and management models, the food offered was very similar in all such establishments[3].

The rationale behind this composition of dishes, practically identical throughout the country, lies in the initial idea of offering food consistent with users' eating habits.

TABLE 1. Menus and prices from the first ration list of the Santiago Economic Kitchen. Prepared from Gaceta de Galicia, 23 July 1891, p. 2

RATION	PRICE
Bread	5 cts.
Broth	5 cts.
Cocido or assorted stew	10 cts.
Cod wiht rice or potatoes	10 cts.
Meat wiht rice or potatoes	15 cts.

The period of creation and expansion of the *Cocinas Económicas* coincided with the nutritional transition from vegetable-based diets, predominant in the eighteenth century, to the protein-, calorie-, and animal-fat-rich diets of the mid-twentieth century. This change was due mainly to a general increase in average income (Popkin 1993, p. 153), as well as to cultural shifts regarding certain foods such as milk, which went from being undervalued to being considered a staple (Pujol-Andreu and Cussó, 2014, p. 136).

According to studies by Castro Pérez (2019) and

1 In 1884, the politician and entrepreneur Jules Siegfried established a social dining hall in the port of Le Havre (France), whose design Moret later introduced in Spain in an almost identical form.

2 Siegfried was a prominent anticlerical figure who, from his various positions of authority, sought to remove religious orders from the charitable institutions under his jurisdiction. Moret, also a liberal, was less combative, yet he likewise avoided involving the Church in the newly created organizations.

3 The Economic Kitchen of Santiago was the first to introduce the distribution of meals in three shifts (breakfast, lunch, and dinner). Until then, comparable institutions typically provided only the midday meal, and in some localities, the evening meal as well.

Posse Antelo (1992), the usual diet of Galician urban workers – and specifically those of Santiago – was based on potatoes, bread (cornbread or mixed), wine, and broth (vegetables, broad beans, and *unto* – pork fat –). Meat or fish consumption was occasional due to cost or difficulty of access. Eggs and milk, as noted, were undervalued and often sold. Breakfast consisted of a piece of cornbread and a shot of brandy for men. Women replaced this with corn porridge or leftover broth from previous days. Over the study period, the liquor shot shifted to the afternoon snack, replaced at breakfast by milk with or without ground cocoa shells. Mid-morning, workers paused to eat bread and wine, sometimes accompanied by bacon or onion. The midday meal again featured bread, wine, and broth (to which increasing amounts of salted meat and a greater variety of legumes, alternating beans and chickpeas, were added), with a second dish of potatoes and/or salted pork or sausage (mainly chorizo). Gradually, wine consumption shifted to the evening, with water becoming the standard drink at lunch. Dinner again consisted mainly of bread and broth, occasionally accompanied by seasonal fruit obtained locally. In urban areas, other foods such as cod, sardines, or omelettes were more commonly found.

The other segment of the lower class – the poor and indigent – could enter one of the city's public charitable institutions: the Poorhouse and the Home for the Elderly, both supported by the municipality. Their dietary regime was similar to that of the Economic Kitchen; that is, based on their usual diet as described. Purchase invoices confirm this, including regular wine consumption. It was only in the final years of the nineteenth century that dietary changes began to appear, including the introduction of milk, cocoa, and beef.

The other major charitable institution in the city, the Conjo Asylum, owned by the Archbishopric, had a dietary regime completely different from those described. There, meal preparation was supervised by medical authorities as part of the patients' treatment, with some diets individually tailored. The operation of a farm and garden[4] provided the hospital with a large supply of fresh foods, freeing budget allocations for less typical items such as fresh fish or meats from different sources.

In municipal charities, as well as in the Founding Society of the Economic Kitchen, the quality of the food served was ensured by the conditions established in procurement contracts. Supplies, in addition to having particular characteristics, were subjected to several quality inspections, with the stipulation that if any were not passed, the vendor had to remove the goods and provide replacements within three days, without applying any surcharge. Thus, ingredients were of optimal health quality, as it was in the supplier's best interest.

NUTRITIONAL CHARACTERISTICS AND SOCIAL IMPACT

All this suggests that the food model disseminated by the Economic Kitchens and aimed at the needy was rich in fats and carbohydrates and low in high-value proteins. Fresh fruit consumption was not common, suggesting a diet low in both water- and fat-soluble vitamins. Furthermore, the most commonly consumed vegetable among rural and working-class Galicians was *grelo* (turnip greens), which is high in water and low in proteins, fats, and carbohydrates, and has shown certain goitrogenic properties. Nevertheless, several strengths of the model should be noted: the replacement of wine by water in all services, the introduction of dairy in breakfast, the regular offering of beef and fish, the variety of legumes, and the daily preparation of food, which avoided repeated reheating and its consequent nutrient loss. But undoubtedly, the most appreciable improvement in the diet of the lower classes was the quality of the products offered, ensured through contract conditions and exhaustive sanitary inspections. Combined with the low selling price[5], this allowed the needy to eat in these social dining halls at lower cost and higher quality than they could achieve on their own. Evidence of this improvement lies in the excellent reception the Economic Kitchens enjoyed among their target audience, whose habitual diet was deficient. Except for particular cases of poor management or insufficient clientele, most of those created in the final years of the nineteenth century

4 The asylum derived three major benefits from this project: the proper upkeep of the vast grounds of the former Mercedarian monastery, a steady supply of fresh products for its storerooms – thereby ensuring full traceability and quality from the source – and the use of these activities as occupational therapy for a significant number of its inmates.

5 As noted above, the price of each meal was calculated solely on the basis of the cost of the raw ingredients. Expenses related to labour, fuel, building maintenance, kitchenware, furniture, and other operational needs were covered by the monthly subscriptions of the members. This was the arrangement in the early years, to which additional sources of extraordinary funding were later added: monetary and in-kind donations, subsidies, testamentary bequests, and income from property.

remain active or operated for several decades. Those founded under philanthropic principles expanded their facilities and services. For example, the A Coruña kitchen came to have three dining halls in different parts of the city, and the Ferrol kitchen expanded from one to two daily services. Those aligned with Christian charity expanded their services as well, such as the Santiago or Vigo kitchens, which soon added their own school.

CONCLUSIONS

The main contribution of these new forms of social assistance was, first, to provide a food resource to those in need and to workers who, not meeting the admission criteria, could not enter poorhouses or similar institutions. They served the needs of a large social sector that otherwise had to resort to begging. Secondarily, they contributed to the disappearance of the earlier model of food charity based on issuing poverty certificates. The Economic Kitchens opened their doors to anyone wishing to attend, without requiring proof of social status.

In the case of Santiago de Compostela, this benefit was, if anything, greater than in other cities, precisely because it was the first to be governed by Catholic principles and run by ecclesiastical personnel. Between the end of the century and the first quarter of the twentieth, it has been documented that meals prepared in the Economic Kitchen were also served at the Abbreviated School of First Letters and Small Industries, the Maternal Classes, and the Board for Abandoned Children, three educational institutions for poor children. Beneficiaries also included users of the Compostela Charity Association, inmates of the district jail, and indigent pilgrims arriving to venerate the apostolic relics. All these entities belonged to the Church or to institutions closely linked to it, forming an assistance network in which the Economic Kitchen acted as the connector. Finally, through a collaboration agreement, it also provided food to children attending public schools throughout the city through the School Canteen, organized by the University of Santiago.

The occupancy figures clearly demonstrate the success of this initiative. During the first years for which data are available, the Santiago dining hall served more than one hundred users per day on average, reaching peaks of more than 250,000 annual rations (1904). Considering that the city's population was around 25,000 inhabitants, and that the registered figures do not include services provided in associated institutions (schools, associations, prison, etc.), the significance of the Economic Kitchen in turn-of-the-century society is evident.

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JORNAL DA SOCIEDADE DAS CIÊNCIAS MÉDICAS DE LISBOA

C 2.2. COMMUNICATION – ABSTRACT

Forty Years of Basic Courses in Medical Hydrology in O Carballiño: Stories

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ABSTRACT: In 1985-1986, the first two editions of the Basic Courses in Medical Hydrology were held in O Carballiño (Ourense). These training activities exemplified collaboration, deep interest, and commitment to hydrotherapy, under the auspices of entities such as the O Carballiño Town Council and the Health Directorate of the Galician Regional Government's Ministry of Health, and with coordination between the Chair of Preventive Medicine of the Faculty of Medicine (University of Galicia) and the Chair of Medical Hydrology of the Complutense University of Madrid. Four decades after those courses, the University of Vigo developed the Expert in Hydrotherapy, Water, and Health program, with professors such as Dr. Gestal, director of the USC-Galician Spas Chair of Medical Hydrology, and Professor Araujo, the current dean of the Faculty of Sciences at the University of Vigo-Ourense Campus. Both are living legends of the original Medical Hydrology courses from the 1980s. Likewise, distinguished figures in the history of medicine and hydrotherapy in Spain, such as Professor Armijo Valenzuela, Professor San Martín Bacaicoa, and Drs. Miguez and Carro Otero, contributed to this period of genuine scientific and academic awakening in the culture of SPA and mineral-medicinal water in Galicia. The author proposes a contextual and historical framework, while also reviewing the profiles of several of the speakers in these courses from the medical, scientific or political fields of the time, some of whom continue to develop scientific work related to Hydrotherapy and others who, although they have passed away, deserve mention in their curriculum and considering their scientific or healthcare legacy in relation to Medical Hydrology.

KEYWORDS: O Carballiño, Hydrotherapy, History of medicine, Hydrology, Courses.

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JORNAL DA SOCIEDADE DAS CIÊNCIAS MÉDICAS DE LISBOA

C 2.3. COMMUNICATION – FULL ARTICLE

Scientific Construction in Portuguese Journalism of the Enlightenment (1749–1807)

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ABSTRACT: Between the censorship imposed during the Pombaline period and the disruption caused by the French invasions, the Portuguese periodical press disseminated many of the major scientific advances and discoveries of its time. This period witnessed the flourishing of scientific and encyclopaedic periodicals, in contrast with the general decline of the broader press between the late eighteenth and early nineteenth centuries. Reflecting the triumph of Science and the innovations of the Enlightenment in Portugal, scientific publications proliferated, often in contrast to the Gazeta de Lisboa, the official and largely "submissive" publication. Many contemporary periodicals focused on commercial, agricultural, and literary matters, yet they also incorporated scientific knowledge and practical information. Imbued with the intellectual spirit of the Enlightenment, these publications became important vehicles for the dissemination of knowledge, heralding the late Portuguese Encyclopedism and bearing witness to a remarkable period for science that deserves renewed scholarly attention.

KEYWORDS: Press; Censorship; Science; Enlightenment; Encyclopedism.

INTRODUCTION

Between the censorship restrictions of the pombaline government[1] [1750-1777], not forgetting the reign of D. Maria I[2], the regency of D. João[3], and the French Invasions[4] [1807-1811], our periodical press attempted, to the extent of its possibilities, to disseminate the most effusive scientific advances and discoveries of its time. At that time, we witnessed the splendor of scientific and encyclopedic periodicals, which contrasted with the decline of our official journalism between the late 18th and early 19th centuries, prohibitive remnants that even the *Viradeira*[5] [a period of political revolution in Portugal] could not overcome.

Proclaiming the triumph of Science and the innovations of the *Enlightenment*[6] among us, scientific periodicals proliferated increasingly in Portugal, even the old *Gazeta de Lisboa*[7] [1st series: 1715-1762], the 'submissive' official publication that paid little or no at-

1 Tavares, Rui. O Censor Iluminado. Ensaio sobre o Pombalismo e a Revolução Cultural do Século XVIII. Lisboa: Tinta-da-China Edições, 2018.

2 Ramos, Luís A. de Oliveira. D. Maria I, «Reis de Portugal», vol. XXVI. Lisboa: Círculo de Leitores, 2007.

3 Pedreira, Jorge & Costa, Fernando Dores. D. João VI, «Reis de Portugal», vol. XXVII. Lisboa: Círculo de Leitores, 2007.

4 Cardoso, Rui. Invasões Francesas. 200 Anos. Mitos, Histórias e Protagonistas. Lisboa: IN-CM, 2010.

5 Serrão, Joaquim Veríssimo. «A Viradeira: seu limite histórico». In: História de Portugal. O Despotismo Iluminado (1750-1807), vol. VI. Lisboa: Editorial Verbo, 2000, pp. 295-297.

6 Ramos, Luís A. de Oliveira. Sob o signo das «Luzes». Lisboa: IN-CM, 1988.

7 Belo, André. As Gazetas e os Livros: a Gazeta de Lisboa e a vulgarização do impresso (1715-1760). ICS: Lisboa, 2001.

tention to such matters. Instead, most contemporary periodicals were dedicated to matters of a mercantile nature, scientific content, and agricultural use, among other uses , but where, here and there, a thirst for scientific knowledge was emerging.

Zodiaco Lusitanico-Delphico [1749], the *Gazeta Literaria* [1761-62], the *Diario Universal de Medicina* [1764], the *Jornal Enciclopedico* [1788-1793/1806/1820], the *Bibliotheca das Sciencias, e Artes* [1793], the *Anno Medico* [1796], the *Palladio Portuguez ou Clarim de Pallas* [1796], the *Gazeta do Campo* [1804-06], the *Ephemerides Astronomicas* [1803-?] and *Minerva Lusitana* [1801-03], etc. Imbued with the spirit of the century, these periodicals were the messengers of our Encyclopedism, even if 'in tow' with the main european enlightenment movements, being protagonists of a remarkable era for Science, which urgently needs to be remembered in greater depth.

On the path to specialization and diversification in the world of periodicals, the first purely scientific portuguese periodical was *Zodiaco Lusitanico-Delphico*[8] was simultaneously the first newspaper to be printed in Oporto[9]. Published under the auspices of a short-lived scientific association, the ephemeral «Academia dos Escondidos da Cidade do Porto, Imitadores da Natureza», its editorship was the responsibility of Manuel Gomes de Lima Bezerra[10] [1727-1806].

Due to its curiosity and innovation, the *Zodiaco Lusitanico-Delphico* was developed purely in analogy with the *Zodiacvs Medicvs-Gallicvs* [Geneva, 1680], edited by Nicolas de Blegny[11] [1652-1722], constitutes a very important testament to the scientific advances in Oporto. Among its main authors and collaborators, who used pseudonyms such as *Andromaco* or *Rhasis*, for example, this periodical had the royal protection of D. José I and his brother, D. José de Bragança, then archbishop of Braga.

Only the inaugural edition of *Zodiaco Lusitanico-Delphico*, although it is known that other issues were published between January and May 1749, the exact details of which remain uncertain[12]. Nevertheless, this single issue has 18 «in-quarto» folios, supplemented with the statutes and appointments of the members of the «Academia dos Escondidos da Cidade do Porto». Here, some practical medical cases were presented by medical professionals based on a bibliography in use at the time, standing out for its impartiality and scientific value among its restricted readership.

THE ADVANCEMENT OF SCIENTIFIC JOURNALISM IN THE SECOND HALF OF THE 18TH CENTURY

Between 1761 and 1762, the first portuguese literary periodical, also of a scientific nature, was published: the *Gazeta Literaria*, edited by Francisco Bernardo de Lima [1727-1764], initially in Oporto and, shortly afterwards, in Lisbon. This is a record of exceptional quality, even by today's critical eye, both for its novelty and its scientific bent, the *Gazeta Literaria* was a major symbol of the *Enlightenment* in Portugal[13]. Considered the first and oldest of the literary periodicals, although other periodicals such as *O Anonymo* [1752-1754] and *O Occulto Instruido* [1756-1758] are, in some way, authentic literary periodicals.

Being an individual work, the universality of its author[14] can be attested to by the epistolary dialogue with various european scholars and academic associations. Obviously, the *Gazeta Literaria* benefited from the dissemination of *gazettes*, *newspapers*, and scientific works in our country, despite the proverbial

8 Zodiaco Lusitanico-Delphico. Anatomico, Botanico, Chirurgico, Chymico, Dendrologico,Ictyologico, Lithologico, Medico, Meteorologico, Optico, Ornithologico, Pharmaceutico, e Zoologico..., pela «Academia dos Escondidos da cidade do Porto, Imitadores da Natureza». Porto: [s. n.], 1749.

9 Pereira, A. X. da Silva. «Zodiaco Lusitanico». In: Diccionário Jornalístico Portuguez, vol. I [manuscrito]. Lisboa: ACL, [s. d.], f.os 56-59; Cunha, Alfredo da. «Elementos para a História da Imprensa Periódica Portuguesa (1641-1821)», separata das Memórias da Academia das Ciências de Lisboa, tomo IV. Lisboa: ACL, 1941, pp. 242-243; Martins, Rocha. Pequena História da Imprensa Portuguesa. Lisboa: Editorial Inquérito, 1942, pp. 44-52; Nunes, M.ª de Fátima. Imprensa Periódica Científica (1772- 1852). Leituras de «Sciencia Agricola» em Portugal. Lisboa: Estar Editora, 2001, p. 54.

10 Machado, Diogo Barbosa. «Manuel Gomes de Lima Bezerra». In: Bibliotheca Lusitana, Lisboa: Officina de Antonio Isidoro da Fonseca, vol. III, 1752, pp. 278-279; vol. IV, 1759, p. 243; Silva, Inocêncio Francisco da. «Manuel Gomes de Lima Bezerra». In: Diccionário Bibliográphico Portuguez, vol. V. Lisboa: Imprensa Nacional: 1860, pp. 444-445.

11 Nicholls, A. G. «Nicolas de Blégny and the First Medical Periodical». In: *The Canadian Medical Association Journal*, vol. XXXI, n.º 2, Montreal: CMAJ, 1934, pp. 198-202.

12 Zodiaco Lusitanico-Delphico, [s. n.], Porto, 1749. Fac-simile, Porto: Laboratório Normal, 1980.

13 Rodrigues. Ernesto. «Gazeta Literária». In: Biblos. Enciclopédia Verbo das Literaturas de Língua Portuguesa, direcção de José Bernardes [et al.], vol. II. Lisboa: Editorial Verbo, 1997, pp. 804-805; Lopes, Óscar & Saraiva, António José. História da Literatura Portuguesa. Porto: Porto Editora, 1996, pp. 613, 624, 637.

14 Mattos, Manuel de Sá. Bibliotheca Elementar Chirurgico-Anatomica. Porto: Officina de António Álvares Ribeiro, 1788, pp. 145-147; Costa, Agostinho Rebelo da. «Dos homens ilustres em Letras e Armas». In: Descrição Topográfica e Histórica da Cidade do Porto. Lisboa: Frenesi, 2001, cap. IX, p. 243; «Francisco Bernardo de Lima». In: Diccionário Bibliográphico Portuguez, vol. II, 1859, pp. 352-353; Sampaio [Bruno], José. Portuenses Ilustres, vol. I. Porto: Magalhães & Moniz, 1907, pp. 140 e ss.

delays[15]. The editorial program of the *Gazeta Literaria* prominently features translated news from scientific works, in addition to Literature and Natural History, among other areas of knowledge. A true forum of *Enlightenment*, the *Gazeta Literaria* requested the active participation of its readers and correspondents in his programmatic direction, encouraging comments on the new ideas conveyed therein.

From this, we can deduce what kind of audiences accessed this dissemination 'tool'[16]. How should we evaluate the editorial gambling taken by Francisco Bernardo de Lima to disseminate the 'enlightenment' knowledge presented in the *Gazeta Literaria*? Although he wasn't entirely an admirer of french Encyclopedism, he was more receptive to its british expression, but this didn't prevent him from aligning himself with the purposes of the *Encyclopédie*[17]. He was adamant in his ambition to publish a comprehensive work on all subjects necessary for the development of Reason and, in this sense, understood the relevance of questioning the transition between the Modern Age and the Contemporary Age[18].

In the very first issue of *Gazeta Literaria*, he offered several opinions on the concept of "time" in the epistemological ordering of History, whose use was understood as the mainstay of civilization and scientific progress, dating back to the end of the Middle Ages. Focusing on numerous areas of knowledge, the *Gazeta Literaria* presented the latest scientific works on the "art of war" in Europe and Portugal. Receiving exhaustive commentary from the editor, the second volume of the *Gazeta Literaria* is a wealth of information for Military History, disseminating national and foreign works[19]. A simple reading of the *Gazeta Literaria* confirms the attention given to the popularization of Natural Sciences and Literature, although the practice of History, Politics, and Medicine was also extensively discussed[20].

Also dedicated to the advancement of Mechanical Arts in Portugal, the *Gazeta Literaria* suffered from the dysfunctions of technical progress, quickly faltering in the face of the Government's despotism, which is why it was suppressed on the orders of Sebastião José de Carvalho e Melo, 1st Marquis of Pombal[21]. The *Gazeta Literaria* resisted for a short time , but it was enough to sow the *utilitarian seeds* of Science against the obstacles of portuguese superstition and orthodoxy.

O Occulto Instruido [22], one of the most famous periodicals of the 18th century, was a paradigm of professionalism in the journalistic profession in our country. Practically unknown to historiographical studies, it dedicated itself to the entertainment and instruction of its readers. In about two years, it managed to retain the attention of an audience attracted by current events and various information. The editor of this periodical is still unknown due to the militant anonymity of these *papers*, given that, in the author's opinion, only scholarly works should be identified by their true name. *O Occulto Instruido* has 17 «in-quarto» pamphlets of 8 folios each, whose numbering appears

15 "La época en la cual la «Gazeta Literaria» salió no nos ha dejado documentos portugueses suficientes para hacernos una idea de la eficacia que su función iluminadora pueda haber tenido sobre la opinión pública de su país. La «Gazeta Literaria» misma, sin embargo, nos ha transmitido un documento significativo de su eficacia, ya pocos meses después del inicio de su publicación, al mejorar el desastroso concepto que los extranjeros entonces se hacían de Portugal. El inglés Ricardo Tremblet se ofrece en una carta a Lima a traducir su gazeta en inglés, para que ésta tenga la difusión que merece y sirva para hacer disminuir el número de los extranjeros que «llegando a Portugal, se juzgan en la verdadera habitación de la superstición y de la ignorancia» [Enero de 1762]". Rossi, Giuseppe. La "Gazeta Literaria" del padre Francisco Bernardo de Lima (1761-1762). Nápoles: Instituto Universitario Orientale, 1963, pp. 11-12.

16 Fernandes, Joaquim. «Gazeta Literária (1761-62): reflexos e sombras de um jornal das <Luzes>». In: Revista da Faculdade de Letras. História, II Série, vol. X. Porto: FLUP, 1993, pp. 205-231.

17 "O optimismo, depurador da memória histórica, prolonga no tempo e no espaço a claridade ofuscante de um século 'memorável' na história do juízo humano pela revolução que se tem feito no império das letras. A fé, acompanhando o movimento de dessacralização do universo, é sujeita a actualização. A renúncia à crítica entorpece a liberdade de acreditar. A religião, submetida ao exame livre e público da razão, transforma- se em motivo de acesa polémica. Atento aos ventos de mudança que fazem estremecer as igrejas do Ocidente, Bernardo de Lima abre, discretamente, as páginas da Gazeta Literária aos enunciados da teologia natural, não se furtando também a expor, com mediana clareza, o essencial das teses deístas, materialistas e pietistas." Araújo, Ana Cristina. A Cultura das Luzes em Portugal: temas e problemas. Lisboa: Livros Horizonte, 2003, pp. 75-76.

18 Balbi, Adrien. Essai Statistique sur le Royaume de Portugal et d'Algarve, vol. I. Coimbra/Lisboa: Faculdade de Economia da Universidade de Coimbra/Imprensa Nacional-Casa da Moeda, 2004 [fac-simile da edição de Chez Rey et Gravier, Paris, 1822], p. CLXXVII; «Gazeta Literaria», in Diccionário Jornalístico Portuguez, vol. I, fl.os 104-105v.º; Cunha, Alfredo da. «Elementos para a História da Imprensa Periódica Portuguesa (1641-1821)», p. 245; Reis, Artur Duarte Sousa. Jornais do Porto, edição fac-similada. Porto: BPMP, 1896/1999, pp. 33-35.

19 Bebiano, Rui. A Pena de Marte. Escrita da guerra em Portugal e na Europa (séculos XVI-XVIII). Coimbra: Edições Minerva, 2000, p. 480.

20 Lemos, Maximiniano. História da Medicina em Portugal. Doutrinas e Instituições, vol. II. Lisboa: Dom Quixote/Ordem dos Médicos, 1991, pp. 167-168.

21 Tengarrinha, José. História da Imprensa Periódica Portuguesa, 2.ª edição revista e aumentada. Lisboa: Editorial Caminho, 1989, pp. 46-47.

22 O Occulto Instruido, que para licito divertimento, e honesta recreaçaõ se ha de publicar dividido em diferentes partes, n.º 1. Lisboa: Officina de Domingos Rodrigues, 1756.

sequentially, given the possibility of binding these volumes at the end of each series[23].

Disseminating historical, geographical, and political news from various european nations, he nurtured a preference for biographies of foreign sovereigns and major religious controversies[24]. Concerned with presenting an encyclopedic journalistic work, he reveals the influence of french literary currents, while also giving impetus to contemporary scientific currents. In his historiographical texts, he used numerous historical sources and works in short, easily readable texts[25]. A search for equitable and respectful criticism of good morals is also observed, where – unprecedented until then –, he debated the accessibility of periodicals to all people. He responded to the fierce criticism of various scholars, declaring that knowledge should be accessible to all and not solely to the elites, perhaps one of the reasons for his anonymity.

For posterity, he bequeathed to us a historiographical analysis guided by events in easily readable descriptions, albeit with some deficiencies in its historical rigor. There was, in fact, impartiality in the construction of this discourse and, considering the graphic *layout* of the periodical, one observes the progressive union between historical narration and a maturing journalistic writing style.

One of our first scientific journals with international reach was the *Diario Universal de Medicina*[26] [1764], also under the responsibility of Manuel Gomes de Lima Bezerra, the author of the first scientific journal, the *Zodiaco Lusitanico-Delphico*. Thus, the *Diario Universal de Medicina* was published between January and April 1764, containing approximately 500 «in-oito» folios, but it was written in castilian spanish, possibly in response to its promotion/distribution at the iberian and european level, but largely revealing of national scientific advances.

In defending surgical *practice* given that these areas of medicine were vying for different therapeutic practices, the *Diario Universal de Medicina* suggested dosages for various medical cases, based on auscultations recorded in portuguese and european hospitals, stimulating comparative studies. In the field of medical research, it frequently cited classical and medieval authors such as Hippocrates, Galen, Avicenna, and Roger Bacon, among many others. In a completely innovative way, it addressed female sexuality with almost current terminology, certainly causing some scandal, but it became a fundamental landmark in our History of Medicine[27].

Then came the *Jornal Enciclopedico*[28], one of the vehicles of our Encyclopedism, although with modest expression in the national scientific community. After its publication ceased, other periodicals would bear the same name until the eve of the Liberal Revolution of August 24, 1820. The *Jornal Enciclopedico* began publication in July 1779, under the direction of Félix António Castrioto, who was granted a *Royal Privilege*. The first issue, or "notebook", was then called *Prospecto d'um Jornal Enciclopedico*[29] [1779] and was published in the name of a «Sociedade de Homens de Letras», the 'embryo' of the *Jornal Enciclopedico* itself.

Due to various impediments, the *Jornal Enciclopedico* only reappeared in June 1788, being published monthly until May 1793. Printed in different *officinas*, it counted on the participation of Manuel Henriques

23 «O Occulto Instruido», in Diccionário Bibliográphico Portuguez, vol. XVII, 1894, p. 117; «O Occulto Instruído», in Diccionário Jornalístico Portuguez, vol. I, f.os 123-125v.º; Cunha, Alfredo da. «Elementos para a História da Imprensa Periódica Portuguesa (1641-1821)», p. 243; O Anónimo. Journal portugais du XVIIIe Siécle (1752-1754), leitura, introdução e notas de Marie-Helene Piwnik. Paris: Centro Cultural Português/Fundação Calouste Gulbenkian, 1979, p. 65.

24 Tengarrinha, José. História da Imprensa Periódica Portuguesa, pp. 45-46; Alves, José Augusto dos Santos. O Poder da Comunicação. A História dos Media dos primórdios da imprensa aos dias da Internet. Lisboa: Casa das Letras, 2005, p. 209.

25 "Para a historia me valerey de Plinio, Justo Lipsio, Natal Alexandre, Marianna, Zahn, Neremberg, Brito, Ozorio, Faria e Sousa, Sousa, Rezende, Barros, Couto, Cardoso, Solîs, Macedo, Telles, Brandaõ, Marinho, Goes, Marîs, Calmet, Diderot, D'Alembert, Historia geral das Viagens, Historia Romana, e da propria de cada Naçaõ, e outros muitos livros, que citarey". Cf. O Occulto Instruido, n.º 1, fl. 4.

26 Diario Universal de Medicina, Cirurgia, Pharmacia &c. Lisboa: Officina Patriarchal de Francisco Luiz Ameno, 1764. Cf. «Diario Universal de Medicina». In: Diccionário Jornalístico Portuguez, vol. I, f.º 87; Rocha, João L. de Moraes. O essencial sobre a Imprensa em Portugal. Lisboa: IN-CM, 1998, p. 22.

27 "O jornalismo médico renascia em 1764 com a aparição do Diario Universal. Não era Gomes de Lima homem para desanimar; se o Zodiaco Medico- Delphico apenas tivera um número, não impedia isso que uma nova gazeta de medicina, em melhores condições, tivesse voga e aceitação. Fiado nisso, deu à luz o Diario Universal, publicando sucessivamente três fascículos mensais. Não era, porém, ainda a época azada para tais publicações; a ausência de protecção do público e da classe médica em especial, a escassez de colaboração sobretudo, eram obstáculo invencível a que a nova tentativa fosse coroada de bom êxito. Daí resultou que o 4.º e último número só saíram em 1772, pelas diligências do seu proprietário e redactor. [...] Assim é que se encontram no Diario as análises bibliográficas de grande número de publicações francesas da época, relatórios sobre os progressos da cirurgia entre nós e o começo de uma Flora Médico- Portuguesa, infelizmente incompletíssima [...]." Lemos, Maximiniano. História da Medicina em Portugal. Doutrinas e Instituições, vol. II, p. 169.

28 Felicidade, Utilidade e Instrução. A divulgação científica no Jornal Enciclopédico dedicado à Rainha 1779; 1788-1793; 1806, introdução e coordenação por Fernando Egídio Reis. Porto: Porto Editora, 2005.

29 Idem.

de Paiva [1752-1829], Joaquim da Costa e Sá [1740-1803] and José Agostinho de Macedo [1761-1831], among others. In 1806, the bookseller António Policarpo da Silva [1790? -1819?] planned to resume its publication, but this *Jornal Enciclopedico* would only distribute one issue. However, it mobilized the educated reader to participate in our cultural and economic life, in addition to having disseminated various medical news[30]. A space of encyclopedic vanguard, it would not resist, even with institutional support, the defamers, manifested in the difficulties denounced by the *Jornal Encyclopédico de Lisboa* [31] [1820].

One of the least known scientific periodicals of this period was undoubtedly the pamphlet *Bibliotheca das Sciencias, e Artes*[32], published in Oporto in 1793. Only one issue is known, although it is believed that at least two quarto issues existed. Its author, the translator of the international news, and whether it was protected by any institution are also unknown. We note that not all historians agree that it constitutes a "periodical", for various reasons. However, we support the examination of the single issue of the pamphlet *Bibliotheca das Sciencias, e Artes* in this appreciation.

This issue was then dedicated to the dissemination of a revolutionary work in Medicine, authored by Johann Peter Frank [1745-1821], an austrian physician, who proclaimed that "misery was the mother of all illnesses". He is considered the founder of Hygiene as a scientific discipline with the publication of *System einer vollständigen medicinischen Polizey* [1779-1819]. Also within the scope of the *Bibliotheca das Sciencias, e Artes*, another work of his was commented on, translated and entitled *Tractado dos meyos, que saõ, ou podem ser applicados, tanto para nós, como para os differentes póvos, para obter huma povoaçaõ numeroza, e robusta*. It has no date of publication, having been translated from german into flemish, then back translated into portuguese by the anonymous editor of this periodical, who added some personal notes.

Concerned with the poor social hygiene habits in our country, he evoked medieval times and the absence of sanitary conditions as catalysts for the great epidemics of History, such as smallpox and leprosy[33], among other scourges, also responsible for seasonal demographic declines. The pamphlet *Bibliotheca das Sciencias, e Artes* was not a publication dedicated to historiography, but to scientific dissemination. Even so, the translator's comments are rich in historical notes, even if not explicitly guided by that intention.

Within the context of scientific dissemination conveyed by the periodical press at the end of the 18th century, it is extremely important to remember the periodical *Anno Medico*[34], organized by the physician José Bento Lopes[35] [?-1800]. Published in «in-oito» pamphlets in 1796, its title explicitly refers to meteorological observations recorded in 1792, a fact that has led some bibliographical studies to error. Thus, *Anno Medico* meticulously recorded the meteorological conditions observed in Oporto, presenting descriptive tables for every day of 1792. Simultaneously, José Bento Lopes discussed the most common diseases reported in Oporto and its surroundings.

Based on meteorological observations, the journal sought to establish correlations between weather conditions and the seasonality of certain illnesses. This periodical is fundamental for understanding the social customs of Oporto, evident in the prophylactic search for answers to the social ailments of the city. A clear sign of this premise was the recording of several cases, such as the application of the most appropriate dosages, supported by the medical recommendations then in vogue. With the *Anno Medico*, Oporto positioned itself as a privileged city in portuguese medical research, a trend that dated back to the *Zodiaco Lusitanico-Delphico* [1749].

30 «Carta sobre a inoculaçaõ das Bexigas». In: Jornal Enciclopedico, Fevereiro 1789, pp. 151-152.

31 Dias, Eurico Gomes. «O esplendor do Jornal Encyclopedico na imprensa periódica portuguesa entre os séculos XVIII-XIX». In: Mátria Digital, n.º 2. Santarém: CIJVS, Novembro 2014 [vide matriadigital.cm-santarem.pt].

32 «Bibliotheca das Sciencias, e Artes». In: Diccionário Bibliográphico Portuguez, vol. VIII, 1867, p. 402; Nunes, M.ª de Fátima. Imprensa Periodica Científica (1772- 1852), pp. 63-64.

33 Bé Béniac, Françoise. «O medo da lepra». In: As Doenças têm História, apresentação de Jacques Le Goff. Lisboa: Terramar, 1997, p. 128; Bibliotheca das Sciencias, e Artes, n.º 1. Porto: Officina de Pedro Ribeiro França, 1793, pp. 8-9.

34 Anno Medico, que contem as observações meteorologicas, e medicas, feitas na cidade do Porto em 1792. Porto: Officina de Viuva Mallen Filhos e Companhia, 1796. Cf. «Anno Medico». In: Diccionário Jornalístico Portuguez, vol. I, fl.os 69-69v.º; Cunha, Alfredo da. «Elementos para a História da Imprensa Periódica Portuguesa (1641-1821)», p. 248; Paulo, Zeferino. Periódicos Portugueses de Medicina e Ciências Subsidiárias. Lisboa: Instituto para a Alta Cultura, 1944, p. 12.

35 «José Bento Lopes». In: Diccionário Bibliográphico Portuguez, vol. IV, 1860, pp. 271- 272; vol. XII, 1884, p. 257; «José Bento Lopes». In: Grande Enciclopédia Portuguesa e Brasileira, vol. XV, p. 435.

Among the periodicals that reported on European and North American scientific advances, we recall the case of *Palladio Portuguez, ou Clarim de Pallas*[36], published monthly by father José Mariano da Conceição Veloso[37] [1742-1811], a famous portuguese botanist of brazilian origin. This periodical heralded the end of the Encyclopedism, although it only published two issues with about 150 «in-quarto» pages – the enthusiasm for the new inventions described *Palladio Portuguez, ou Clarim de Pallas*, such as the still rudimentary telegraph, motivated the inclusion of excellent color illustrations, the first time this had happened in portuguese journalism.

This periodical boasted a descriptive style geared towards technical dissemination, although we can point to an encyclopedic apparatus[38]. The translation of articles extracted from the *European Magazine* [1782-1826] or *The London Gazette*, among other european newspapers, reveals the editor's correspondence with the main news circles of the time. Moreover, there was a growing need to report scientific innovations through journalism, despite its high cost. One can also consult reflections of a medical-pharmaceutical nature originating from Portuguese doctors in Brazil and other parts of the empire, something completely unprecedented. This newspaper was dedicated to the Junta do Comércio, Agricultura, Fábricas e Navegação [1788-1834], perhaps the protectors and/or promoters of this publication.

Scientific interest in agriculture also benefited from increasing popularization in our periodical press, as was the case with the *Gazeta do Campo*[39] [1804-1806], also edited by José Mariano da Conceição Veloso, the abbreviated name of the periodical *Extractos Praticos, e Uteis, á Economia Rural Portugueza assim no Reino, como nas Colonias, ou Gazeta do Campo*. Specializing in botanical and agricultural subjects, only 8 «in-oito» issues were published in eight-page format, representing a tiny fraction of the dissemination promoted on national and overseas agricultural matters by the pela Academia Real das Ciências de Lisboa [1779-], evidenced in numerous translations and summaries of scientific works adapted to common use.

In another scientific context, the periodic publication of *Ephemerides Astronomicas*[40], composed of tables with the daily astronomical position, according to the geographical position of the meridian of Observatório Real da Universidade de Coimbra. With the University's seal, this quarto-format publication was intended for the university public, but also for Army and Navy officers, with each issue indicating the astronomical forecast for the following year. Belonging to the group of almanacs, most specialists include this title in the universe of periodical press, albeit with some reservations. In the *Ephemerides Astronomicas* contains calendars and horoscopes, a list of professors, and catalogs of medical works printed by the University. It was one of the longest-running periodicals in our journalism, published between 1803 and 2001, albeit with some gaps.

GENERAL CONSIDERATIONS

Thus ended a phase of scientific journalism that began in the mid-18th century and lasted until the beginning of the 19th century, abruptly ended with the entry of french troops into Portugal [November 1807], a turning point in our journalistic world. During the French Invasions [1807-1811], printing workshops suffered heavy losses due to the looting and destruction of printing materials, the destruction of sales and distribution points, etc. However, resistance to the occupiers found an effective weapon in the periodical press and kept the patriotic *flame* alive.

In the scientific field, the interests of most editors were understandably focused on their daily lives, but the political-ideological debate would gain new ground for dissemination to public opinion. The polit-

36 «Palladio Portuguez». In: Diccionário Bibliográphico Portuguez, vol. VI, 1862, pp. 334-335; vol. XVII, 1894, p. 333; «Palladio Portuguez». In: Diccionário Jornalístico Portuguez, vol. I, fl.os 129- 29v.º; «Palladio Português». In: Grande Enciclopédia Portuguesa e Brasileira, vol. XX. Lisboa/Rio de Janeiro: Editorial Enciclopédia, [s. d.], p. 37; Cunha, Alfredo da. «Elementos para a História da Imprensa Periódica Portuguesa (1641-1821)», p. 248.

37 Gama, José de Saldanha da. Biographia e Apreciação dos Trabalhos do Botanico Brasileiro Frei José Mariano da Conceição Velloso. Rio de Janeiro: Typographia de Pinheiro & C.ª, 1869; Nunes, M.ª de Fátima & Brigola, João Carlos. «José Mariano da Conceição Veloso (1724-1811) – Um frade no Universo da Natureza». In: A Casa Literária do Arco do Cego (1799-1801). Lisboa: BNL/IN-CM, 1999, pp. 51-75.

38 Tengarrinha, José. História da Imprensa Periódica Portuguesa, p. 51.

39 «Extractos Praticos, e Uteis, á Economia Rural Portugueza». In: Diccionário Jornalístico Portuguez, vol. I, fl.os 100-102; Cunha, Alfredo da. «Elementos para a História da Imprensa Periódica Portuguesa (1641-1821)», pp. 253-254; Nunes, M.ª de Fátima. Imprensa Periódica Científica (1772-1852), pp. 68-69.

40 Ribeiro, José Silvestre. Historia dos Estabelecimentos Scientificos, Litterarios e Artisticos, vol. V. Lisboa: Typographia da Academia Real das Sciencias, 1876, pp. 67-68; vol. VI, pp. 123-124; «Ephemerides Astronomicas». In: Diccionário Jornalístico Portuguez, vol. I, fl.os 93- 96; «Efemérides Astronómicas». In: Grande Enciclopédia Portuguesa e Brasileira, vol. IX, p. 434; Cunha, Alfredo da. «Elementos para a História da Imprensa Periódica Portuguesa (1641-1821)», p. 252.

ical tone of acceptance and/or rejection of the French invader would be discussed in the overwhelming majority of portuguese periodicals after November 1807. The news discourse itself would undergo profound transformations, equally visible in the scientific studies published in periodicals edited during wartime, notably with the first daily newspapers [September 1809], later fueled by news of the Peninsular War [1811-1815].

The ideological battle that will soon take place between *Old Portugal* and *New Portugal* is undeniable. The periodical press will increasingly fuel the political gains of an emerging public opinion, because of the *periodical's affirmation* as a political weapon[41]. As for the news discourse of these periodicals, especially in its scientific aspect, this will serve, in general terms, to assist the patriotic cause by raising the level of education and science in the face of external interference in national life.

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C 2.4. COMMUNICATION – FULL ARTICLE

Extra-scientific Factors in the Awarding of the Nobel Prize in Physiology or Medicine: The Case of Jaume Ferrán

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ABSTRACT: The undeniable prestige of the Nobel Prizes is sometimes seen as scientifically unjustified or lacking in merit compared to the work and medical and social impact of other nominated candidates. Dr. Jaume Ferran i Clua, a pioneer in the experimental study of the bacteriology of infectious diseases, a driving force behind laboratory medicine, and the creator of the first human vaccine against cholera in 1885, as well as against other serious contagious diseases, is a striking example of this apparent devaluation. He was nominated for the Nobel Prize in Physiology or Medicine six times during the second decade of the 20th century, without receiving it. We analyze the possible non-scientific reasons that contributed to the rejection of this deserving candidate.

KEYWORDS: Nobel Prize of Physiology; Dr. Jaume Ferran; Extra-scientific factors.

INTRODUCTION

The Nobel Prize in Medicine or Physiology was established by Swedish chemist and businessman Alfred Nobel (1833-1896), inventor of dynamite. In his will, he bequeathed his entire fortune to create and fund the Nobel Prizes. He was a member of the Royal Swedish Academy of Sciences (1884) and an honorary doctor of the University of Uppsala (1893). Together with his brothers, he founded an oil company in Azerbaijan and Turkmenistan.

Thanks to dynamite and oil, he amassed a great fortune. In 1895, in the Swedish-Norwegian Club in Paris, Nobel drafted his will, specifying that the Swedish state should establish the Nobel Prize after his death, to be awarded without distinction of nationality to individuals who had shown excellence in their life and work in one of the awarded fields. These were: literature, physics, chemistry, physiology or medicine, and peace. Later, the economics category was added. These prizes have enjoyed worldwide prestige, and their recipients have received international recognition throughout the 20th century.

However, the fact that the evaluation of merits and the choice of winners is surrounded by secrecy and a lack of transparency has raised doubts about the suitability of some of the recipients and about the honesty and independence of the evaluating committee or its members. In an objective evaluation of all Nobel Prizes awarded to date in different fields of knowledge and culture, we find indisputable figures alongside others with questionable merits, and even cases of deceit. Moreover, the presumed objectivity and independence of the Nobel Committee are not reflected in the list of awardees. There is an evident bias: gender, nationality, ideology, language, opportunism, etc. In some cases, the Nobel Committee's decisions seem to have been influenced by issues of a circumstantial, cultural, ideological, linguistic nature, personal sympathies of its members, external pressures, ignorance, etc.

THE CASE OF JAUME FERRÁN I CLÚA (1851-1929)

This Catalan physician and scientist from the late 19th and early 20th centuries made notable contributions to the understanding of several microbes causing infectious and contagious diseases, such as cholera, typhus, diphtheria, tuberculosis, plague, rabies, and influenza. He was a pioneer in bacteriology and virology and one of the initiators of "laboratory medicine." He became acquainted with the ideas and works of Pasteur through the journal *Comptes rendus de l'Académie des Sciences* in the private library of his friend, astronomer and geologist J.J. Landerer, in Tortosa. He formulated the concept of "primary prevention" of infectious diseases through vaccination and serum therapy.

In 1884, a cholera epidemic broke out in France, in the regions of Marseille and Toulon. Ferrán was commissioned by the Barcelona City Council to travel to the Hospital del Faro to study the causes and evolution of the cholera outbreak, as well as its potential prevention and treatment. After spending several weeks there (with his collaborator Innocent Pauli), Ferrán returned with samples of vomit and feces from patients who were ill or had died. In the following fall and winter, he began experimenting with laboratory animals, testing the attenuation of the causative agent and its effects on humans. These trials were published and disseminated through monographs in German, Spanish, French, and Italian.

In the spring and summer of 1885, the cholera epidemic spread with particular virulence in the Levante region of Spain. At this point, the Valencian physician and politician Amalio Gimeno, who knew of Ferrán's work, traveled to his laboratory in Tortosa and conveyed an invitation from the Governor of Valencia for Ferrán to go to the most affected areas and begin a vaccination campaign, without any public financial support. Together with his collaborator Innocent Pauli, Ferrán traveled to the most affected areas and initiated a private cholera vaccination campaign. This led to a significant reduction in morbidity and mortality among those exposed and vaccinated, as confirmed by bio-statistical records.

This new preventive approach, through cholera vaccination, to address the collective epidemic problem, sparked the interest and enthusiasm of some doctors and media, but also provoked rejection and opposition from others. This scientific controversy reached society, becoming a political, economic, ideological, journalistic, and even parliamentary battle.

This scientific, ideological, and even personal conflict pitted the defenders of tradition against the proponents of innovation. Medically, it was a battle between the "miasmatic" theory and Pasteur's microbial ideas. Socially, it was a struggle between the "fixists" and the "evolutionists." Politically, it was a divide between liberals and conservatives. Economically, it was a conflict between proponents of isolationist measures (cordon sanitaires, lazarettos, etc.) and those in favor of vaccination.

A key figure in this dispute was future Nobel Laureate Santiago Ramón y Cajal, who, at that time, was Professor of Anatomy at the University of Valencia. Cajal and Ferrán had previously met in Zaragoza and shared an interest in drawing and photography. What is surprising is Cajal's change of attitude towards Ferrán and the cholera vaccine. Although Cajal had initially been vaccinated by Ferrán in Valencia in 1885, during his vacation in Aragón that year and after being commissioned by the Provincial Council of Zaragoza to report on cholera vaccination, he became an ardent critic of the validity and safety of the preventive method, raising doubts about Ferrán's motivations.

The negative report from the French Commission, composed of doctors Brouardel, Charrin, and Albarran, also gained international attention. The commission was skeptical of the vaccine preparation methods and did not appreciate the positive results of its application. It seems that during the meeting between the French Commission and Ferrán, there were some misunderstandings and tensions on both sides. While the commission showed mistrust of Ferrán's method, he refused to provide more details about his vaccine's preparation process. This friction led to the unfavorable report presented by the French Commission.

In the Spanish medical community, a bipolarization occurred between staunch supporters and fierce detractors of what was the first human bacterial vaccine, which contradicted the miasmatic theory and opened the door to the new field of preventive medicine. The academies and professional journals also took sides in the debate over the novelty of the vaccine, issuing contradictory judgments.

The journalistic controversy was significant, reaching general newspapers, with maximalist and intransigent positions on both sides. The discussion even made its way into the Spanish Congress, with opposing arguments between liberals and conservatives, but no public funding for the vaccine.

Economics also played a significant role in this controversy. The sanitary barriers or quarantines applied during epidemics severely affected trade, as well as agriculture, with proponents of vaccination seeing it as a solution to these economic challenges.

A MISSED NOBEL PRIZE

Jaume Ferrán y Clúa was the first Catalan scientist nominated for the Nobel Prize in Physiology six times. The first three nominations were in 1911, 1912, and 1913, before World War I. Later nominations came in 1915, during the war, and in 1920 and 1921, when the benefits of cholera vaccination were well known, as it had been used effectively by most of the warring armies, along with vaccines for rabies, typhus, tetanus, and plague, improved by Ferrán. The nominators were: Prof. Nicolás Fuente Arrimadas of Valladolid (1911); Prof. Rafael Forns, Professor of Hygiene in Madrid (1912); Dr. F. Sojo Batlle, professor of ENT in Barcelona (1913); Gabriel Lupiáñez, Professor of Medicine in Seville (1915); Felix Krause, Professor Emeritus at the University of Berlin (1920); and Amalio Gimeno Cabañas, Professor in Madrid (1921). The main argument for Ferrán's nomination was his cholera vaccine and the idea of serum therapy, which were new contributions to the prevention and treatment of infectious diseases. The Nobel Prize in Physiology for 1915 and 1921 was declared vacant.

Given the valid and strong arguments provided by Ferrán's nominators in favor of his candidacy, we may wonder what caused the neglect of Ferrán by the Nobel Committee. Based on the evidence presented so far, several extra-scientific factors may have influenced the final result.

1. Ferrán's individual approach to research, without financial support and outside public and academic institutions.
2. The paradigm shift from the miasmatic theory to the microbial theory.
3. The lack of recognition of the value of sanitary statistics.
4. The personal opposition to Ferrán and his cholera vaccine by leading scientists such as Cajal and the members of the French Commission of 1885.
5. The dissemination of Ferrán's experimental and clinical works was largely through monographs published by himself in Spanish, French, or German, rather than in medical journals, which limited the spread of knowledge about his discoveries.
6. The malicious gossip typical of the Latin spirit, which distorted the personal and scientific value of his research work.
7. A bias in the Nobel Committee due to personal ignorance, language barriers, ideological bias, thematic preferences, diplomatic pressures, or circumstantial opportunism.

The historian of science Joel Levy states in his book *Scientific Rivalries* that: "The history of science is as much a story about personalities as it is about ideas, and often it has progressed through fierce struggles for scientific and personal supremacy. Through the clash of ideas and egos, many of the great debates of science are explored, shedding light on the sometimes painful genesis of concepts and theories that today are considered paradigmatic".

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C 2.5. COMMUNICATION – ABSTRACT

Portugal's Contribution to Brazilian Medicine

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ABSTRACT: The historical and cultural past of Brazil portrays the entire process of the formation of Brazilian medicine and highlights Portugal's contribution to its evolution. The arrival of the royal family in Brazil in 1808 marked a turning point in this trajectory, dividing it into two stages. The first stage deals with the healing practices carried out by the natives before the arrival of Pedro Álvares Cabral in 1500, followed by the colonial or Cabralian period, during which a medicine influenced by knowledge and practices from Portugal developed, coexisting with other practices exercised by indigenous shamans and African healers. The second stage saw the creation of the Surgical School of Bahia and the Anatomical, Surgical and Medical School of Rio de Janeiro by decision of the Prince Regent, D. João VI, thus institutionalizing official medicine in Brazil. These schools were transformed into Faculties of Medicine in 1832, continuing the trajectory of formal medical education in Brazil, in which Portugal played a significant role.

KEYWORDS: Medicina no Brasil Colônia, Medicina Luso-Brasileira, História da Medicina, Brasil, Instituições Médicas

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C 2.7. COMMUNICATION – FULL ARTICLE

Aphorisms as an Educational Strategy in the Health Sciences: An Experimental Essay

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ABSTRACT: An aphorism is an expression of simple construction, usually succinct and sententious, with a high density of content. In the words of one of the authors (JLAG), it is an intelligent and orphic summary or abstraction which, due to its brevity and singularity, has an evocative character. Once grasped, it becomes an easy motto to apply in exhibitions, forming part of verbal scientific elegance. The challenge for the authors was to set a strategy to evaluate the usefulness of its inclusion in an extracurricular teaching/learning activity addressing various aspects of health, in an era in which motivation and adherence are highly dependent on technology. The Museu *Memórias da Saúde* (Health Memories Museum, MdS museum), at the Faculty of Health Sciences of the University of Beira Interior, supports educational activities while preserving historical pieces and documents, and has organized thematic serial exhibitions on ethical and historical subjects. The authors, who are responsible for the initiative, questioned its efficiency, as exhibiting does not necessarily mean reaching the targeted population. To attain this endpoint, a consultation and participation evaluation component was added to an exhibition of William Osler's aphorisms. Tools were created for interaction and for quantifying active visitors and those who completed the collaboration, along with their comments. After four weeks of exhibition, not a single valid opinion was recorded. From the analysis of the limitations of the strategy and the disappointing result, conclusions can be drawn to guide the development of future educational initiatives with similar objectives.

KEYWORDS: Medical Aphorisms; Medical Education; Medical Humanities; Museum Education; Student Engagement

BACKGROUND AND AIM

Clinical medicine has greatly increased its scientific knowledge but it has not lost, nor can it lose, its inherent field of human relationships and the practice limitations based only on probability. This is clear from the words of Joseph Alpert (2025) when he wrote "I estimate that at least half of my outpatient visits and many of my inpatient consults involve relieving patients of anxiety caused by their illness or fear of illness". There is no doubt that health professionals who deal with patients require, other than knowledge, a humanistic behavioural profile, a subject that must be stressed during high school education. Health professionals are one of the groups that should be best endowed with humanistic skills. To educate is to create habits; to educate well is to create good habits, and to do so adequate models shall

be chosen. The aphorism is a verbal expression with a definition profile, usually a succinct but sententious phrase with a high density of content. It is transmitted as an apothegm and has either a direct and intelligible character, difficult to contradict, or a challenge profile posing provocative questions of interpretation on more controversial subjects. Due to their current shortness and condensation there is room for misinterpretation (Aronson, 2022). However, if they may be accepted as truths at a certain time and context, and not definitive neither purely affirmative (Bursztajn & Hamm, 1979; Chandler & Blommfield, 1987; Yost, 2012), they shall be taken mainly as tools for provocative interpretation and internalization of behaviour, ethical or technical relevant subjects, particularly in health-connected professions. In accordance with Correa-Rivero (2022), "We must work hard to deeply humanize students and prevent the dehumanization by action of the hidden curriculum and the structure of most medical programs".

The museum has structured several exhibitions based on ethical themes or the history of the health professions, some involving humour, but without any evaluation of their impact. However, if a teacher wants to be effective, he must adopt methods and techniques that allow messages to reach their recipients. At the university level, learning progressively involves the student assuming an active role, while the teacher serves as tutor, enhancer and motivator. In a preliminary step to evaluate the receptivity of an exhibition based on current methodology of displaying posters with William Osler's aphorisms, we asked students to individually record their commentaries through a specifically designed platform. We had no great expectations of adherence but wanted to confirm that simply displaying the material in an obligatory passage area and announcing its existence would not be enough to bring teachers and students to volunteer.

Rational for the experiment

The rationale for the experiment was based on the following assumptions: (1) all professionals linked to FCS-UBI should enjoy cultural activities that keep alive the flame of the humanities; (2) the use of aphorisms as a theme is suitable for this purpose; (3) an expository approach can be a way of attracting students to the humanities; (4) the MdS museum has been organizing exhibitions at FCS-UBI (although not only there) as part of its interactive activities; (5) the effectiveness of these initiatives has never been quantified; and (6) this gap justified the present evaluation.

MATERIAL AND METHODS

A pilot experiment was designed based on a request for collaboration consisting of commenting on a set of aphorisms by William Osler displayed on posters (Fig. 1 and 2). Conditions were created for interaction, feedback and quantification (Fig. 3 and 4). The experiment logistics and strategy included: (1) an installation phase of supposed inactivity; (2) an initial exhibition period (basal, without email announcement) during a two-week period; and (3) a period after promotional announcement by e-mail, with a three-week duration.

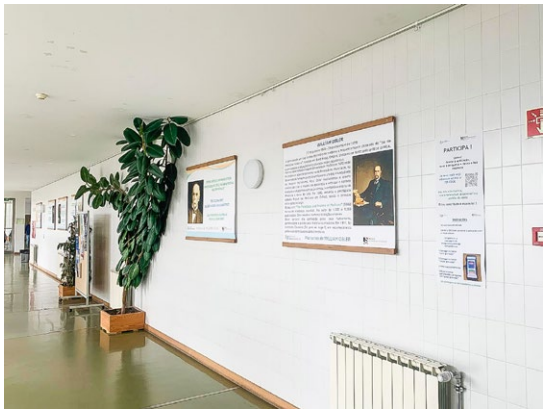

Fig. 1 – Perspective of the exhibition at the main corridor.

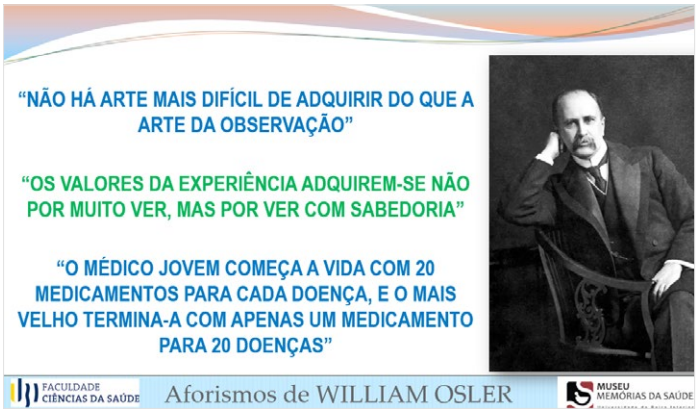

Fig. 2 – One of the posters include in the exhibition, including three Osler's aphorisms, described in Silverman et al (2003): *There is no more difficult art to acquire than the art of observation / The value of experience is not in seeing much, but in seeing wisely. / The young physician starts life with twenty drugs for each disease, and the old physician ends life with one drug for twenty diseases.*

Fig. 3 – Call for participation by using QR code or, alternatively, a mobile phone.

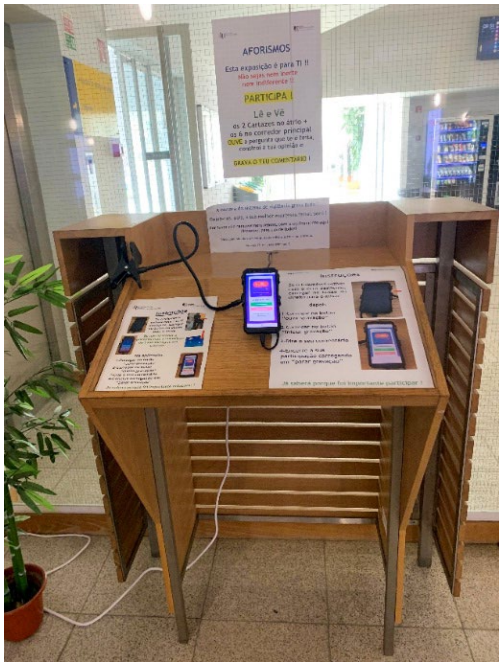

Fig. 4 – Call for participation by using QR code or, alternatively, a mobile phone.

RESULTS

At the end of the exhibition, only six comments were recorded, two of which were from guests (and so not evaluable) and four were inappropriate (nonsense).

Along with periodic revisions, the existence of improper contents records assures the functioning of the system and, so excludes technical error.

CONCLUSIONS

The objectives of the experimental study had been fully achieved. The disappointing results should not be attributed to a local reason as, as Nina Simon (2010) wrote, "Over the last twenty years, audiences for museums, galleries, and performing arts institutions have decreased" and "increasingly, people have turned to other sources for entertainment, learning, and dialogue". We chose a supposedly easier interaction using voice recording, which is one among other means of gathering comments, such as visitor books, comment cards, feedback boards and screens, website comments and social media comments (Winter, 2018). The rehearsed display model does not seem to have been attractive to students, nor does it seem to have attracted teachers and researchers, who have distanced themselves from it, which fits with the overall concept of a putative excessive global (in)formative supply. From a doctrinal discourse to provocative actions, pedagogic tools are changing, and daily life shows differences in behaviour and affinities between cohorts with less than a decade of difference.

The authors' perspective of contemporary students is that, when faced with a problem, they quickly seek a solution using internet platforms and then execute it very rapidly but without thinking deeply about the issue, resulting in a loss of opportunities for human interaction and for acquiring humanistic skills. In addition, a high degree of immaturity was perceived among those who responded, a behavioural profile that is inappropriate for those involved in health professional sciences and that reinforces the need to improve behavioural education in high schools.

PERSPECTIVES FOR FUTURE INITIATIVES

Except for high value pieces and documents, museums can no longer be felt as passive exhibitors (Falk, 2023) and this concept do apply nowadays for simple displays. This may explain the decrease in numbers of visitors to museums (Simon, 2010).

Curiosity is required along with tools to induce it. But how can we overcome the difficulties posed by current social communication dynamics?

Regarding Students:

– the viable formula seems to be to address topics that are part of the subjects under assessment;
– in order for training to reach its target, the recipient must be involved (Simon, 2010).

It is accepted that they are, but the expository models may not be suitable for the university student population, if we accept a passive attitude from this population.

Regarding Teachers and Researchers

– it will be advisable to involve them prospectively in the selection and production of the contents, which over time (it is hoped) will generate habits of participation

Regarding EVERYONE:

– to seek for more intrusive ways of inducing adherence and provoking curiosity.

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* *Author´s additional note: for the elaboration of this research the authors used PubMed, Google Scholar and ChatGPT4.0 for collecting information and references, and DeepL to assist in English reviewing of the text*

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C 3.1. COMMUNICATION – FULL ARTICLE

Notes on the History of Neurology in Northern Portugal

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ABSTRACT: Before the establishment of the Portuguese Republic, Ricardo Jorge, Magalhães Lemos, Júlio de Matos and Lopes Martins were renowned physicians involved in Neurology in Northern Portugal. However, academic chairs of Neurology and Psychiatry were only formally established under the Republic. Subsequently, other important figures emerged, including Corino de Andrade and Celso Cruz.

In this article, the author, a practicing neurologist, highlights the curricula of these pioneers, with additional comments on on the academic and hospital care development backgrounds.

KEYWORDS: Neurology; History of Medicine; Northern Portugal; Pioneers

INTRODUCTION

From the dawn of time until the second quarter of the 19th century, references to neurological sciences were scattered and scarce. Then, crucial steps were taken in Neurology: Charcot described Parkinson's disease (1817), amyotrophic lateral sclerosis (1825), and multiple sclerosis (1865); Broca (1861) and Wernicke (1874) identified areas of the brain responsible for language; and Ramón y Cajal described neurons and dendrites (1888).

In Portugal, Passos Manuel, in 1836, by decree, reformed the national education system and transformed the Royal School of Surgery into the Medical-Surgical School. Between 1836 and 1911, the identifiable neurologists were Ricardo Jorge, Magalhães Lemos, Júlio de Matos, Lopes Martins, among others. In 1911, after the establishment of the Republic, the Faculty of Medicine was founded, and the inclusion of Neurology and Psychiatry courses in its curriculum was then established. In Porto, the Medical School was located at the Hospital de Santo António building and remained there until 1959, when it was moved to the new Hospital Escolar S. João (S. João University Hospital).

Here are some highlights from the profiles of the main Northern Portugal Neurology pioneers in the XIX–XX centuries and their backgrounds.

RICARDO JORGE

Ricardo Jorge was born in Porto on May 9th, 1858. He studied at Colégio da Lapa and graduated from the Porto Medical-Surgical School in 1879, presenting a dissertation with a charismatic title: *'An Essay on Nervousness'* (Jorge R – *Um ensaio sobre o nervosismo*. Tese. Porto, 1879). In May 1880, he applied for a teaching position at the Porto Medical-Surgical School, presenting the dissertation *'Motor Locations of the Brain'*, following which he was appointed on April 27th, 1881. He made several trips to Strasbourg and Paris, where he attended Jean-Martin Charcot's lectures, seeking in the local

hospitals a learning experience impossible to acquire in Portugal, where neurological knowledge was still in its infancy.

In 1883/1884, upon returning from an internship abroad, he opened a *'Course on the Anatomy of the Nervous System'* and a free course on Neurology. At that time, he published work related to nervous diseases. In 1884, he abandoned Neurology and began to dedicate himself to Public Health. With his work *"Social Hygiene Applied to the Portuguese Nation"*, a series of lectures published that same year, he introduced a new perspective on addressing public health issues in Portugal, which would elevate him to an important career as a hygienist and researcher, with a significant influence on health policies in Portugal.

He was the main author of the sanitary measures taken to combat the plague that ravaged the city. These measures did not please the merchants and journalists of Porto, who pursued and threatened him with death, leading him to abandon the city and his neurological studies. Ricardo Jorge then moved to the school in Lisbon, where he assumed the Chair of Public Hygiene and Legal Medicine.

In 1883, the Hospital de Alienados (Mental Hospital) do Conde de Ferreira was opened in Porto. It was the first Portuguese institution built from the ground up for Psychiatry and the result of Joaquim Ferreira dos Santos' legacy. There, the study of Neurology and Psychiatry was established and, as clinicians, Magalhães Lemos and Júlio de Matos were admitted.

MAGALHÃES LEMOS

António de Sousa de Magalhães Lemos was born at Casa do Curral, in Margaride, Felgueiras, on August 18th, 1855. He did his studies in Braga and then in Porto, where he graduated in October 1882 from the Porto Medical-Surgical School, with a thesis entitled *'The Psychomotor Region: Notes for the Study of its Anatomy'*. Magalhães Lemos applied in 1883 to the Conde de Ferreira Hospital, which, as already mentioned, had just opened, and was accepted as an assistant physician.

On February 15th, 1887, he was appointed Assistant Lecturer for the 7th, 8th, 9th, 10th, and 11th chairs at the Industrial and Commercial Institute of Porto. He taught at this institution until 1929. In 1889, he published *"General Paralysis"*, a dissertation required for his admission to the Porto Medical-Surgical School. In 1890, he created a Clinical Course on Mental and Nervous Diseases at the Conde de Ferreira Hospital. At Conde de Ferreira Mental Hospital, on May 12th, 1892, he assumed duties as an Associate Physician and later as director, a position he held until 1928.

In 1911, he was appointed the first Professor of Neurology at the Porto Faculty of Medicine, and in 1921, he was assigned to the Chair of Psychiatry. He participated in multiple scientific meetings and was Honorary President of the Neurology and Psychiatry Section of the International Medical Congress in Paris. He wrote several scientific works, including *"Hallucinations de l'ouïe"* (Paris, 1912) and *"Psychiatry and Neurology in Porto: History and Current State of Its Teaching"* (Por-

Fig. 1 – Ricardo Jorge (reproduced from Pinto, 2009).

Fig.3 – Magalhães Lemos (extracted from the site of *Câmara Municipal de Felgueiras* – Felguerias City Council) *https://cm-felgueiras.pt/viver/cultura/historia-e-patrimonio/figuras-ilustres/*

to, 1925). The national and international recognition of his life and work was reflected in the distinctions he received. He was an honorary member of the Lisbon Academy of Sciences, a member of the Society of Medical Sciences and of the Institute of Coimbra, a corresponding member of various international scientific institutions, a knight of the Legion of Honor, and an officer of Public Instruction of France. In 1927, he bequeathed his house and adjacent lands to the Faculty of Medicine of the University of Porto, which served as the foundation of the Magalhães Lemos Dispensary.

JÚLIO DE MATOS

A renowned psychiatrist and one of the most important reformers of psychiatric education in Portugal, Júlio Xavier de Matos was born in Porto on January 26th, 1856 and died in Lisbon on April 12th, 1922. He graduated in 1880 from the Porto Medical-Surgical School by presenting a thesis on hallucinations. He was admitted to the Conde de Ferreira Mental Hospital at the time it opened and, since 1890, he assumed its direction. In 1908, Júlio de Matos was invited to give courses on Psychiatry and Neurology at the Porto Medical-Surgical School and, in 1911, when the School was elevated to the status of a Faculty of Medicine, he was nominated Professor of Psychiatry.

Distinguishing himself in the fields of alienism and forensic psychiatry, Júlio de Matos moved to Lisbon in 1911 when he was appointed to the Chair of Psychiatry that became vacant there and to serve as director of Rilhafoles Hospital. Although mainly linked to Psychiatry, on their own initiative, Júlio de Matos and Magalhães Lemos gave Sunday lectures on Neurology and Psychiatry to the general public.

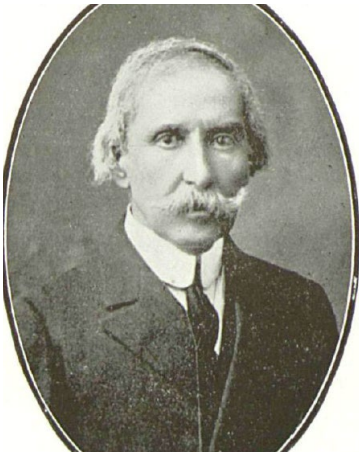

Fig. 2 – Júlio de Matos (reproduced from Anuário da Faculdade de Medicina do Porto XIV, 1928).

LOPES MARTINS

João Lopes da Silva Martins Júnior was born (1866) and died (1945) in Porto and graduated in 1888 with the dissertation *'Hysteria and its motor locations'* (study of semiology). In 1895, he presented the dissertation entitled *'Epileptics in Medicine'* in the competition for a teaching position at the Porto Medical-Surgical School. He taught the Auxiliary Course of Medical Propedeutics during the academic years of 1895 to 1900, 1903 to 1906, and 1907 to 1910, and also the Course of Neuropathology and Psychiatry (between 1895 and 1898) on a pro bono basis.

In 1903, he founded and directed the Museum of Hygiene at the Porto Medical-Surgical School. In 1911, at the now Faculty of Medicine of the University of Porto, he was appointed ordinary professor of the 5th class – History, Bacteriology, and Parasitology.

Lopes Martins, while being an officer in the Portuguese Army, served as physician and professor of Medicine at the Porto Medical-Surgical School, but also as director of the Faculty of Medicine and vice-rector of the University of Porto (1922–1923) and later rector of the same university (1927–1928). In 1918, with the appointment of psychiatrist José Fernandes de Magalhães to the Chair of Neurology, the individuality of the neurology chair was lost. Following a period during which psychiatrists taught Neurology in 1923, under Gonçalves Azevedo, First Assistant of the Faculty of Medicine, its subjects were taught as a Course in Neurological Propedeutics. In 1925, the Chair of Neurology was entrusted to the First Assistant, Jorge de Azevedo Maia. He would remain in charge of the course for the next 16 years. However, it was difficult for Neurology in Porto to acquire a status of citizenship. In 1928, the Regulations of the Faculty of Medicine of Porto, within the general framework of the courses offered, which included Psychiatry, placed Neurology as an ancillary discipline. It was evidence of the degree of inferiority that this specialty had at the Medical School of Porto.

From 1941 to 1957, Ferraz Júnior was appointed by the School Council of the Faculty of Medicine of Porto to teach Neurology. His doctoral thesis, *Functional Exploration of the Liver* (1935), would not have predicted his later affinity for Neurology. In 1957, Emídio Ribeiro assumed the Chair of Medical Propedeutics, succeeding

Ferraz Júnior. Professor Emídio Ribeiro was my professor of Neurology and, later, in the 1970s, he entrusted Neurology to Celso Cruz, a trained neurologist. At the two main hospitals in Porto (Santo António Hospital and São João Hospital), Departments of Neurology were then structured by Corino de Andrade and Celso Cruz.

CORINO DE ANDRADE

Corino de Andrade was born in Moura on June 19th, 1906 and graduated in 1929 from the Faculty of Medicine of Lisbon. Following this period, he worked with recognized doctors, such as Mário Moreira at Santa Maria Hospital, while training in surgery at Arroios Hospital with Azevedo Gomes. When he finished his course, he was introduced to António Flores (a distinguished neurologist and psychiatrist in Lisbon) and decided to become a neurologist. He then began an internship under Egas Moniz while assisting Gentil Martins in surgeries.

Following a recommendation from António Flores, he went abroad and, in 1938, he returned to Portugal from Strasbourg, where he had spent seven years working with Barré, and from Germany, where he had worked with Oscar Vogt. Egas Moniz and António Flores directed him to Porto, where he first worked at Hospital Conde de Ferreira but shortly thereafter moved to Hospital de Santo António. In 1940, he was invited by the director of Hospital de Santo António to head the Neurology Department, which, at that time, consisted of himself and João Resende. In 1941, he started an outpatient Neurology clinic, where he received his first patient from Póvoa de Varzim with Familial Amyloid Polyneuropathy.

In 1942, responding to a perceived need, Corino began performing neurosurgical procedures with the help of Fernando Magano, Sousa Pereira, and Oliveira Santos, all renowned general surgeons. In 1952, he published an article on Familial Amyloid Polyneuropathy (*Brain* 1952; 75: 408–27). That same year, he was arrested by the PIDE (Polícia Internacional de Defesa do Estado, the Portuguese security and political police) and was imprisoned for several months for alleged "subversive activities and links to the Communist Party".

At the hospital, he gathered as collaborators, besides João Resende, Jorge Campos (who later went on to practice Neurology in Mozambique); Pereira Guedes (one of the most qualified anatomopathologists in Porto); António Coimbra (neuropathologist, histologist and professor at the Porto Faculty of Medicine); Castro Alves (an intelligent and irreverent psychiatrist); and Rocha e Melo (whom he convinced to pursue neurosurgical training in Edinburgh because he believed it would become one of the most sought-after specialties in the future). When Rocha e Melo created his own neurosurgical group, with Leão Ramos, Alfredo Calheiros and Serafim Paranhos, Corino de Andrade ceased his surgical activity.

In 1962, Corino de Andrade founded the Respiratory Resuscitation Centre at Hospital de Santo António and, in 1967, he created the first Cranioencephalic Traumatology Unit in Portugal. In 1972, he took over the management of the Paramyloidosis Study Centre at the Ricardo Jorge Institute and, in 1975, he joined the Instituto de Ciências Biomédicas Abel Salazar (ICBAS) Installation Committee. When he retired in 1976, the group of doctors he left in his department included João Resende, Castro Lopes, Bastos Lima, Paulo Mendo, Almeida Pinto, Rosalvo de Almeida, Sampaio e Melo, Serafim Paranhos, Januário Veloso, Luís de Carvalho, Leão Ramos, Paula Coutinho, Pereira Monteiro, Viana Pinheiro, Alfredo Calheiros, Manuel Strecht Monteiro, Pinho e Costa, Lopes Lima, Pinto de Almeida, Rocha e Melo, António Guimarães, and Cândida Maia.

In 1976, he travelled with Paula Coutinho to the Azores Islands to investigate a degenerative disease of the central nervous system known as Machado-Joseph disease. The University of Porto awarded him the title of Full Professor. He received numerous distinctions, honours and honorary doctorates. Corino de Andrade passed away on June 16th, 2005.

Fig. 4 – Corino de Andrade (reproduced from Pinto, 2009).

CELSO CRUZ

Celso Renato Paiva Rodrigues da Cruz was born in Porto on September 4th, 1936, and enrolled in the Faculty of Medicine of the University of Porto in 1953. As early as 1958, during his fifth year of undergraduate studies, he began attending the service run by Corino de Andrade and, under the guidance of Rocha e Melo, he began his neurosurgical training.

When the Faculty of Medicine was relocated to S. João Hospital in 1959, members of the Neurology Department at Santo António Hospital moved there, some of them working at both hospitals. Neurosurgery at São João Hospital was performed in the Operative Medicine Department and was mainly undertaken by Sousa Pereira, Rocha e Melo, and Nestor Rodrigues. The head of the Department, Sousa Pereira, was a general surgeon who performed neurosurgery with Corino de Andrade and had a particular interest in angiography, having shared arteriographic research with Egas Moniz. At the same time, neurosurgery was also undertaken by Paulo Mendo, Luís de Carvalho, and Celso Cruz at the Department of Propedeutics, led by Emídio Ribeiro. Emídio Ribeiro tried to better integrate the neurosurgical care provided, which was divided between the two services. He began by sharing neurotraumatologic support to the Hospital Emergency Department, which had previously been entirely assumed by general surgeons. Corino de Andrade then asked Rocha e Melo to return full-time to Hospital de Santo António, and the same occurred with Paulo Mendo and Luís de Carvalho.

Fig. 5 – Celso Cruz (reproduced from Francisco, 2023).

Under these new circumstances, Celso Cruz fully dedicated himself to assisting Emídio Ribeiro in constructing, stone by stone, the Neurology Service, assuming, together with Maria Luiza Guimarães and Olga Cardoso Viseu, neurological care and incorporating neurosurgery into it. On February 8th, 1963, he performed his first neurosurgical intervention and thereafter carried out a large part of the neurosurgical interventions of the service, including almost all emergency exploratory procedures. Consequently, Celso Cruz assumed leadership of the Neurosurgery team of the Neurology Service at the S. João School Hospital, under the endorsement of Emídio Ribeiro. On July 31, 1971, with the works *"Antigenic Stimulation and Cerebrospinal Fluid – Experimental Contribution"* and *"Hypophyseal Surgery – Indications and Techniques"*, he obtained his doctorate in Neurology from the Faculty of Medicine of Porto, having been approved with distinction and praise. On March 10th, 1972, he took permanent office as Director of the Neurology Department at São João Hospital, a role that, in practice, he was already performing.

In 1974, Celso Cruz was finally able to bring together the different neurological and neurosurgical areas at São João Hospital by incorporating the craniocerebral trauma unit. It was at this Department that I graduated in 1973. At that time, the Neurosciences and Neurological Diseases Department headed by Celso Cruz included himself (Neurosurgery), António Saraiva (Neurology), Pedro Barata Feyo (Cranioencephalic Traumatology), Joaquim Cruz (Neuroradiology), Maria Luiza Guimarães (Neurophysiology), Teresa Lavandeira and Maia Gonçalves (Neuropaediatrics), and Carlos Alberto Silva (Cerebrospinal Fluid Laboratory).

In addition to this progress at Hospital de São João, Celso Cruz succeeded in 1972 in establishing the Neurology Department at Hospital de S. Marcos in Braga, which was headed by one of his colleagues and former students, José Maria Brandão. Later, in 1995, in Madeira Island, the Neurosurgery Department was launched with António Reis and Gil Ferreira, and the Neuroradiology Department with José Franco, all of whom had been trained in the Neurology and Neurosurgery Department at São João Teaching Hospital. In 1998, after 36 years of dedication to S. João, following in the footsteps of his companion Dr. Pedro Barata Feyo, Celso Cruz left the university hospital service he had created, entrusting it to his friend Professor António Saraiva, whose successors would be Carolina Garrett in Neurology and Rui Vaz in Neurosurgery.

Celso Cruz was described as a Catholic man, extremely cultured, an avid and tireless reader, a lover of classical music and Spanish bullfighting, and an enthusiast of military history and mountaineering (which he practiced particularly in Gerês, a natural region he loved). He was always passionately dedicated to his work at the Faculty of Medicine of the University of Porto and Hospital de São João. He was a founding member of the League of Friends of the Military Museum of Porto. Celso Cruz passed away on October 6th, 2004, at the age of 68.

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JORNAL DA SOCIEDADE DAS CIÊNCIAS MÉDICAS DE LISBOA

C 3.2. COMMUNICATION – ABSTRACT

Santo António Hospital and the Modernization of Medicine in Porto (1900–1950)

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ABSTRACT: The first half of the twentieth century represents a period of remarkable significance in the history of Medicine in Porto characterized by the modernization of scientific knowledge and clinical practices. Central to this process was the Santo António Hospital (HSA), founded in 1799 and historically linked to medical education since the establishment of the Royal School of Surgery in 1825. Although the Medical-Surgical School of Porto (1836) moved to its own building in 1883, clinical teaching remained institutionally anchored in HSA until 1959 thereby consolidating its status as a privileged center for medical education and research. Drawing on the heritage collections of the Centro Hospitalar do Porto Museum this presentation examines the evolution of hospital life from 1900 onwards with particular emphasis on two central dimensions: the introduction of new auxiliary diagnostic and therapeutic methods and the development of medical specialties, which contributed to increased differentiation and improved quality of care at the principal healthcare institution in Northern Portugal. Through medical instruments, archival documents and material culture that testify to clinical practice, scientific and technical progresso and everyday hospital life, this research revisits key moments in the history and collective memory of HSA highlighting the decisive contributions of several of its most distinguished physicians. The museological evidence enables an understanding of how science, memory, and material culture intersect in the construction of a distinctive institutional identity. HSA emerges as an exemplary teaching hospital open to innovation and continually renewing its commitment to scientific advancement and humanistic values. This legacy establishes Santo António Hospital as a major reference point in the medical history of Porto and Portugal during the nineteenth century.

KEYWORDS: Santo António Hospital; Centro Hospitalar do Porto Museum; Medical Heritage; History of Medicine; Medical specialties; Material culture.

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SPECIAL ISSUE

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JORNAL DA SOCIEDADE DAS CIÊNCIAS MÉDICAS DE LISBOA

C 3.5. COMMUNICATION – FULL ARTICLE

Yellow Fever and Sanitary Policies in the Nineteenth-Century Portuguese Empire: Lisbon and Luanda, 1856–1860

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ABSTRACT: Yellow fever became a recurrent threat to public health across the Atlantic during the nineteenth century, long before its aetiology and transmission were scientifically clarified through the work of Carlos Finlay and Walter Reed. Within the Portuguese imperial context, two outbreaks were particularly significant: Lisbon (1856–1858), which gave rise to the *Relatório da Epidemia de Febre Amarella em Lisboa no anno de 1857*, later praised by Ricardo Jorge as a model of hygienist mobilisation; and Luanda (1860), which led to the publication of the *Relatórios sobre a epidemia de febre amarella em Loanda no anno de 1860*, underscoring the strategic importance of disease control in colonial settings and its articulation with metropolitan health authorities. This study centres on these official reports, read alongside previously underused documentation from the Maritime Health archives preserved at the Museum of Health in Lisbon (reports, correspondence, records from the Casa de Saúde de Belém and the Lisbon Lazaretto, and sanitary inspections of vessels).

In Lisbon, a predominantly contagionist paradigm underpinned isolation, hospital expansion, sanitary statistics, autopsies, cartographic mapping and intensified maritime surveillance, in dialogue with European hygienism and the International Sanitary Conferences. In Luanda, physicians favoured an anti-contagionist, miasmatic reading, attributing the outbreak to local environmental conditions and poor acclimatisation among newly arrived Europeans; containment prioritised municipal hygiene and policing—cleansing miasma-producing sites (notably refuse-laden beaches) and managing insalubrious areas rather than systematic isolation of people. By comparing these paradigms and their institutional settings, the article highlights the centrality of ports, quarantine and isolation measures in nineteenth-century epidemic management, and situates Portugal's response within the broader circuits of international sanitary governance.

KEYWORDS: Yellow fever; Lisbon; Luanda; Nineteenth century; Quarantine and contagion

INTRODUCTION

In the history of tropical medicine, yellow fever is often characterised as an "Atlantic" disease, whose trajectory since the seventeenth century has been intertwined with colonial ports, the slave trade, imperial wars and major epidemics in cities such as Havana, Philadelphia, Rio de Janeiro and New Orleans. The outbreak of 1793 in Philadelphia, then the federal capital of the United States, illustrates the social and economic

impact of these crises: high mortality, the flight of inhabitants and authorities, the collapse of trade and intense medical controversy regarding the origin of the disease [1].

Between the eighteenth and nineteenth centuries, yellow fever emerged as a European public health problem closely associated with Atlantic commerce and with the routes linking Europe to the Caribbean and South America. In this context, William Ludlow Coleman sought to explain its historical genesis through the slave trade, arguing that the unsanitary conditions of ship holds and certain anchorages had created the conditions for the persistence of a specific "germ". His interpretation, rooted in an environmentalist and anti-contagionist perspective, privileged quarantine and port sanitation as instruments of control, while relegating the hypothesis of mosquito transmission to a secondary position [2].

For South America, Jaime Larry Benchimol has emphasised, in the Brazilian case, the centrality of yellow fever as a decisive setting for the reception and practical translation of Pasteurian theories [3].The disease thus became a key arena for the incorporation of new concepts of microbes, infection and prevention, contributing to the consolidation of a programme of intervention grounded in microbiology and to the reorganisation of urban sanitary policies.

Before the formulation of the vector hypothesis by Carlos Finlay (1881) and its confirmation by the commission led by Walter Reed (1900), the history of yellow fever was largely characterised by a long pre-etiological phase marked by oscillation between miasmatic, contagionist and environmental explanations. In this context, lazarettos, quarantines and maritime regulations multiplied and were debated at the International Sanitary Conferences from 1851 onwards, which sought to reconcile sanitary protection with trade. Portugal participated in these debates [4], often aligning with the Mediterranean powers and progressively adapting the vocabulary of international hygienism to its port and imperial realities.

It is within this framework that the outbreaks in Lisbon (1856–1857) and Luanda (1860) must be situated. Far from peripheral episodes, these events allow us to observe how the Portuguese Empire sought to manage an epidemic threat in a context of scientific uncertainty, articulating maritime sanitary practices, commercial interests and the transnational circulation of knowledge and sanitary regulations.

YELLOW FEVER IN LISBON (1856–1858)

In 1694, J. Ferreira da Rosa, in the *Tratado Único da Constituição de Pernambuco*, described yellow fever in the Brazilian colonial context, associating it with climatic conditions, the environment and the urban dynamics of the city of Recife [5]. This text constitutes one of the earliest systematic attempts at a medical interpretation of the disease within the Portuguese Atlantic world and reflects an explanatory framework dominated by miasmatic theories, which linked the origin of illnesses to environmental and atmospheric factors.

Throughout the eighteenth century, yellow fever came to be included among the so-called "exotic pestilences" that threatened Europe, alongside diseases such as cholera morbus and bubonic plague. In Portugal, references exist to outbreaks recorded in Peniche (1718), Ericeira (1721) and Lisbon (1723) [6]. It was in this context that Simão Félix da Cunha published, in 1726, the *Discurso e observações apollineas sobre as doenças que houve na cidade de Lisboa occidental e oriental o anno de 1723*, seeking to interpret the Lisbon health crisis in the light of contemporary medical knowledge. [7]. His account describes a clinical picture that nineteenth-century authors would later revisit as a reference for understanding subsequent episodes of yellow fever – or outbreaks then interpreted as such – that affected the country in the nineteenth century. The circulation of this work throughout the nineteenth century shows that, for contemporaries, the episode of 1723 functioned as an interpretative precedent through which new epidemic crises could be understood.

Within this interpretative framework, the disease was frequently associated with maritime circulation and contagion linked to ports, which reinforced the importance of sanitary surveillance structures established in such infrastructures, particularly relevant for port cities. In 1849 Brazil once again became the scene of a major yellow fever epidemic, now within a context of increasing commercial interconnection across the Atlantic world. A few years later outbreaks were recorded in the city of Porto (1850, 1851, 1856 and 1860) and, in a particularly devastating form, in Lisbon between 1856 and 1858, with the epidemic reaching its peak in 1857.

The first case of yellow fever in Lisbon was reportedly identified in Belém, in the courtyard of the royal stables, near the customs area. From this initial focus, the disease spread first through the low-lying central

areas of the city and subsequently to neighbouring districts closely connected with maritime activity and port life. In 1857 the epidemic assumed particularly alarming proportions: the lower districts of Lisbon and the parishes close to the River Tagus were the most severely affected, with very high levels of incidence and mortality. According to official records, 5,652 deaths were registered, corresponding to approximately one death for every 35.4 inhabitants of the capital and one death for every 3.18 individuals affected by the disease [8].

Faced with the scale of the disaster, the government and the health authorities mobilised to organise a coordinated response. In September 1857 the Extraordinary Council of Public Health was created specifically to manage the crisis, with the task of responding to the immediate sanitary demands and, once the epidemic had ended, proposing measures capable of preventing new outbreaks or at least mitigating their effects. The Council brought together a group of physicians with scientific and administrative responsibilities and was also entrusted with producing a detailed report to be presented to the King – the *Relatório sobre a Epidemia de Febre Amarela em Lisboa no anno de 1857* – compiling clinical observations, statistical mortality data and analyses of the city's urban and social sanitary conditions [8].

This report therefore represents not only a systematic record of the epidemiology of yellow fever in Lisbon but also a fundamental document for studying the origins and development of the epidemic and the measures adopted to contain it. The systematisation of clinical, statistical and observational data contributed to consolidating new ways of observing and interpreting epidemic diseases and reinforced, within the Portuguese medical community, the gradual affirmation of a contagionist paradigm aligned with the scientific transformations associated with microbiology and the theories of Louis Pasteur.

The cartography of the epidemic (see Figure 1) also illustrates the organisational plan of the sanitary response. The "*Plano de Lisboa com o diagrama da epidemia de febre amarella que esta cidade sofreu no anno de 1857*" simultaneously identifies the distribution of cases and the location of the institutions mobilised to treat and isolate patients within the city.

Fig. 1 – Plan of Lisbon with the diagram of the yellow fever epidemic of 1857, indicating the concentration of cases in the riverside areas of the city and the location of the civil and military hospitals that received patients. Source: *Relatório sobre a Epidemia de Febre Amarela em Lisboa no anno de 1857,* Extraordinary Council of Public Health, Lisbon, 1859.

The map shows a strong concentration of cases along the city's riverside front, particularly in the so-called *cidade baixa,* where densely populated parishes were directly linked to port, commercial and customs activities. This area corresponds to the zones where the greatest number of cases and deaths were recorded, reinforcing the contemporary perception that the epidemic was associated with maritime circulation and with the sanitary conditions of port environments.

The cartography also indicates the organisation of the infrastructures mobilised to assist patients. Several civil and military hospitals were used, and provisional hospitals and medical posts were created specifically to deal with the outbreak, many of them installed in former convents or adapted public buildings. The distribution of these facilities reveals an attempt to combine medical assistance with the containment of the disease, placing treatment structures relatively close to the most affected areas while dispersing them throughout the urban fabric.

Among the most important institutions was the Hospital do Desterro, which became the principal treatment centre during the outbreak, receiving more than 2,500 patients and playing a central role in the clinical observation and investigation of the disease [9]. It was complemented by provisional civil hospitals created to respond to the sanitary emergency, such as the Hospital of Santa Anna and the Hospital of Santa Clara [8].

The assistance network also included military structures adapted for medical care, notably the Hospital dos Mariannos and the Hospital da Boa Hora, organised in adapted convent buildings that functioned as emergency wards. Other institutions also participated in the system of surveillance and isolation, such as the Casa Pia, used for preventive observation, and the Hospital da Estrela, later linked to the quarantine system and to the Lazaretto hospital [8].

The yellow fever epidemic in Lisbon also placed pressure on the health authorities and reinforced the need to consolidate isolation institutions such as lazarettos and quarantine hospitals, understood as essential infrastructures for preventing the spread of epidemics associated with maritime circulation. The Lisbon Lazaretto, located in Porto Brandão on the southern bank of the Tagus, together with the health structures in Belém, played a crucial role in the quarantine of ships and in the medical assistance provided to their passengers, despite the "deplorable" conditions in which they were found at the time of the outbreak.

It was the epidemic itself that prompted the reinforcement of quarantine regimes applied to passengers arriving from "foul ports", particularly from 1869 onwards, when the new lazaretto hospital facilities in Porto Brandão came into operation, allowing the reception of quarantined individuals who required isolation outside the city.

Documentation preserved in the Maritime Health Archive makes possible to reconstruct some of the medical and therapeutic practices associated with the treatment of quarantined patients at the Lazaretto hospital after the 1856–1858 outbreak had subsided. At the Lazaretto hospital, quarantined patients were treated with Port wine used as a tonic and stimulant and appearing in the records as one of the substances that was well tolerated. The most frequently recommended measures were "general hygienic precautions, cleanliness and the ventilation of dwellings; avoiding fatigue and emotional disturbances, exposure to the sun, indigestion and colds" [10]. During the first stage of the illness, diaphoretics (to induce perspiration),

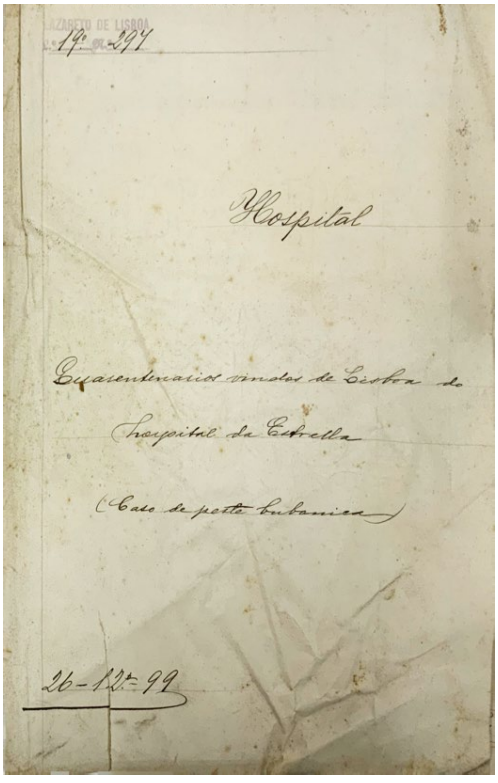

Fig. 2 – The Lisbon Lazaretto received quarantined patients transferred from the Hospital da Estrela, 26 December 1899.[10]

lemonades and acidulated drinks were used. In the second and third stages, quinine sulphate was administered in high doses, especially against intermittent fevers – though with controversial results in yellow fever – together with syrup of orange peel, opium syrup and orange-blossom syrup; camphor, used as a stimulant and antispasmodic; and purgatives such as salts and castor oil to relieve constipation. Vesicatories, cold baths, opiates and iron preparations were also used to address specific symptoms such as delirium, vomiting and haemorrhages [11]

All these elements indicate that in Portugal, and particularly in Lisbon, the programme of maritime sanitary surveillance remained active throughout the nineteenth century and extended into the early decades of the twentieth century, as demonstrated by the records preserved in the maritime health archives. This programme included quarantine regulations applied to passengers and goods, the monitoring of port installations and the maintenance of observation and isolation structures such as the lazaretto hospital.

The yellow fever epidemic in Lisbon exposed the sanitary fragility of an Atlantic capital heavily dependent on maritime traffic. Through the Extraordinary Council of Public Health created to manage the crisis, the State structured a robust sanitary programme that was set out in the Council's report; this document became a landmark of hygienist management of the epidemic and would later be recognised by Ricardo Jorge – a central figure in Portuguese public health at the beginning of the twentieth century – as an example of organised sanitary mobilisation in the face of epidemic crises.

YELLOW FEVER IN LUANDA

Luanda was also struck by an outbreak of yellow fever in 1860, shortly after it had been brought under control in Lisbon.

The first identified victim was a newly arrived ensign who landed in Luanda on 2 July 1860 aboard the war steamer Estephania, which carried a contingent of 400 soldiers from Lisbon. The officer fell ill four weeks after his arrival, and the disease was initially classified as a rapidly evolving "bilious remittent cerebral fever". In September, with the arrival of the corvette Bartholomeu Dias, the steamer D. Antonia, and the Portuguese packet Paquete de Loanda from Brazil, the number of patients gradually increased. Among the resident population, cases were rare. The epidemic affected 292 individuals and caused 89 deaths, of which 38 were autopsied. Most of the recorded cases (220 out of 292) were military personnel [12]. These figures alarmed the central government in Lisbon at a time when the memory of the Lisbon epidemic remained vivid and suspicions existed regarding the correct identification of the disease in Luanda. The origin of the epidemic also became the subject of considerable debate between the theory of importation and the hypothesis of spontaneous development.

Faustino José Cabral, who held the post of chief physician of the Health Service in Angola, was "obliged by official order, issued in a circular from the physico of this province (Angola), dated 26 February (1861), to give an opinion on the diagnosis of the severe fevers that existed as an epidemic in this city of Loanda during the last quarter of the previous year" [12]. Consequently, a report was sent for publication in Lisbon in 1861 which contained, in addition to the report of the physico-mor of the Province of Angola, a series of other reports prepared by several physicians who had followed the development of the disease in Luanda, Moçâmedes and Benguela. This document, published under the title Relatórios sobre a epidemia de febre amarella em Luanda no anno de 1860, in addition to the contributions of Faustino Cabral, also brought together the contributions of Antonio José dos Santos (brigade surgeon), José Maria de Bulhões Maldonado (first-class surgeon), Miguel Augusto da Veiga (surgeon-major of the army), Francisco José dos Santos Chaves Junior (first-class surgeon of the Royal Navy, on service in Luanda), Matheus Alexandre Gueullete (second-class surgeon), and João Cabral Pereira Lapa e Faro (second-class surgeon of the health service of the Province of Angola), as well as João Januário Vianna de Rezende (physician of the Military Hospital of Benguela), Thomás de Aquino Pinheiro (surgeon of the steamer D. Maria Anna), and Francisco Maria de Méra (physician of the steamer D. Antonia) [12].

Although most of the physicians who contributed to the study of the epidemic in Luanda agreed on the diagnosis of yellow fever, important disagreements arose, particularly concerning the nature of the disease. Some even stated: "if this is yellow fever, then we have had it here many times before" [12]. In fact, Faustino Cabral eventually admitted that the disease might have appeared several times previously without being

recognised by most physicians in the province, and that this may also have occurred with the earliest cases that preceded the first one identified in the report; nevertheless, he stated that "we calmly await what happens around us without fearing the future, because we have the conscience of having fulfilled a duty" [12]. However, detailed information on the symptomatology of the disease had already been described by the physician Pinto de Azeredo in 1799, *Ensaios sobre algumas enfermidades d'Angola dedicados ao Serenissimo Senhor D. João Prinipe do Brazil* [13]. The population also raised objections to the diagnosis of yellow fever. The inhabitants appear to have lived in a state of great alarm, oscillating between paralysing fear of the fatal symptoms and resistance to accepting the seriousness of the situation because of the social and commercial implications associated with the name "yellow fever". Fear of public reaction was such that some physicians accused colleagues of deliberately avoiding the publication of certain facts in order not to "frighten the population" without an immediate practical benefit.

The disease thus progressed in an insidious and gradual manner, evolving through the three stages described during the Lisbon epidemic: the first, marked by chills and high fever; the second by an apparent and deceptive improvement; and the third by haemorrhages (such as black vomit) and extreme prostration, which normally led to death. During the first stage of the illness, general bloodletting was attempted, but without effective results. Leeches (local bloodletting) were also applied to the hepatic region when pain was present, but the practice was abandoned because it caused haemorrhages that were difficult to stop. Emollient drinks and sudorifics were administered, notably Dower's powders and ammonium acetate. For constipation, mild laxatives were prescribed, such as magnesium citrate lemonade, calcined magnesia and castor oil. Opium was the principal sedative used in cases of great severity. Headache and the initial bilious vomiting were treated with sinapisms (mustard poultices) and the application of sedative water compresses to the epigastric region. In the second stage of the disease, a simple saline mixture was used. If vomiting reappeared, physicians resorted to Rivière's anti-emetic drink, opium administered by enema, and vesicatories (application of irritant substances to produce blisters on the skin) applied to the epigastric region. Quinine sulphate was administered in several cases, but physicians observed that this medicine was not useful in treating this specific disease, unlike in other fevers common in the region. To combat the feared black vomit and other haemorrhages, monesia, tannin and rhatany were used, but generally without success. Iron preparations, especially iron citrate, proved more useful in reducing haemorrhages. To relieve persistent hiccups, physicians used asafoetida, musk (administered by enema) and ether internally. When patients presented extreme weakness after heavy blood loss, they were revived with Port wine mixed with broth, administered by the spoonful. In cases of loss of consciousness, vesicatories were applied to the nape of the neck or the head, together with stimulating enemas and dry friction. During convalescence, dyspepsia and gastric obstruction were treated with subnitrate of bismuth and pills of aloes and calomel [12].

Faustino José Cabral categorically defended the diagnosis of yellow fever, drawing on the knowledge he had acquired when observing the disease in Brazil while serving aboard the corvette D. João I. Of the 200 passengers on board, four sailors and one passenger contracted the disease in the port of Bahia; three died very rapidly, while the others experienced a prolonged convalescence. Cabral also passed through Rio de Janeiro and Lisbon in 1857, when the disease was spreading there. His diagnosis was based on the clinical observation of symptoms such as black vomit, jaundice and suppression of urine, drawing on the previous experience he had acquired with the disease in Brazil. He argued that the epidemic developed spontaneously in Luanda, rejecting the theory of importation and person-to-person contagion, and maintaining that the disease had a miasmatic origin while simultaneously rejecting the contagionist theory defended in Lisbon. Nevertheless, ships leaving the port of Luanda for other ports of the province were advised to observe quarantine measures "as far as possible in harmony with commercial interests". Examples included the war steamer D. Maria Anna, bound for Benguela, which recorded a case of yellow fever on board, and the steamer D. Antonnia, bound for Moçâmedes, which carried a clean bill of health. [12].

Antonio José dos Santos confirmed without hesitation the diagnosis of yellow fever after verifying the characteristic symptoms presented by the patients described by Faustino Cabral, recognising the disease in its early stages.

José Maria de Bulhões Maldonado admitted that he had not followed the beginning of the epidemic be-

cause he was serving in the Congo, but upon returning in December 1860 he analysed cases in the hospital and in his private practice. He argued that it was yellow fever by comparison with earlier outbreaks (1848 and 1851), noting that although some referred to them as "typhoid" or "pernicious" fevers, the symptoms of this epidemic corresponded to those of yellow fever [12].

Miguel Augusto da Veiga also identified the disease as yellow fever in the first cases observed in August in a cavalry ensign. Having previously observed the same set of symptoms in other regions and after consultation with colleagues, he became convinced that Luanda was facing an epidemic of "true yellow fever". [12].

Francisco José dos Santos Chaves Júnior likewise supported the diagnosis of yellow fever, drawing on his experience as a student in Lisbon during the epidemic of 1857. He highlighted the insidious progression of the disease, the abundant haemorrhages, the black vomit and the presence of albumin in the urine as key diagnostic features. In his view, the disease showed a tendency to become endemic in Luanda [12].

Matheus Alexandre Gueullete represented the most dissenting and sceptical voice in the report. He classified the cases as typhoid fever or errors in the clinical bulletins and argued that gastric lesions and the yellow colouring of the skin, as well as stomach lesions such as the blackened and disintegrated mucous membrane, were not exclusive to yellow fever but could occur in several pernicious fevers. For him, the disease was one of the varieties of a "miasmatic poisoning" underlying various diseases such as plague and cholera. He confessed that he had signed the diagnostic papers identifying yellow fever merely out of "excessive confidence" in the opinion of colleagues who had seen the disease in Portugal, even though he himself had never treated it before. Indeed, he openly admitted that he had never seen nor treated yellow fever before that time. For this reason, he stated that he had signed the diagnostic certificates for yellow fever merely out of trust in colleagues who claimed to have treated the disease in Portugal and other countries. He also noted that during his twenty years of medical practice in Angola, earlier physicians had always classified similar cases as typhus or typhoid fevers, and that the outbreak of 1860 had simply become more severe due to atmospheric conditions and the arrival of numerous Europeans who were not acclimatised. In short, Gueullete represented the perspective of long-standing resident physicians in Angola who regarded the epidemic of 1860 as a more severe manifestation of local endemic fevers and resisted the classification of yellow fever because of its potential social and psychological consequences for the population. His disagreement reflected a view rooted in the traditional clinical practice of Angola, which favoured the diagnosis of endemic fevers rather than the acceptance of a new nosological entity that, in his opinion, merely served to terrify the population [12].

Thomás de Aquino Pinheiro also concluded that the disease was yellow fever, basing his view on the information produced by colleagues in Lisbon in 1857. He described it as a "true epidemic", of occasional origin, caused by the concentration of Europeans in unhygienic and climatically adverse conditions. Pinheiro's report emphasised that the large influx of Europeans aggravated the situation, since they were "lodged in buildings without the indispensable hygienic conditions", facilitating the action of the morbid element on their non-acclimatised organisms [12].

Francisco Maria de Méra likewise agreed that the disease was yellow fever, noting the strong similarity between the cases in Luanda and the epidemic he had witnessed in Lisbon. He argued that the illness developed spontaneously due to local and individual causes. João Cabral Pereira Lapa e Faro and Vianna de Rezende, physicians in Moçâmedes and Benguela respectively, confirmed that the patients presented symptoms of yellow fever such as black vomit and haemorrhages, reinforcing the diagnosis made in the capital. Although the disease appeared after the arrival of several ships in Luanda, Faustino José Cabral maintained that it had not been imported but had instead developed spontaneously in the city [12].

According to Cabral's reports, the reaction of the population of Luanda to the epidemic of 1860 was marked by feelings of terror, moral despondency and intense controversy. Some physicians, such as Matheus Gueullete, even argued that this panic was "more fatal to humankind" than the disease itself. Among those who fell ill, a profound "moral discouragement" was observed. The most severe symptoms, especially black vomit, terrified patients to such an extent that they abandoned themselves to "neglect and indifference", losing all hope of recovery. The impact on families was also notable. The case of the family of Captain Soares is described as an example of emotional impact: after

the death of a close servant, the family was overcome by a "moral impression of terror and grief", which the author suggests may have contributed to the remaining members also succumbing to the disease.

The unhealthy conditions of Luanda appear to have been crucial for the development and spread of the epidemic of yellow fever in 1860, providing the fertile ground for what was believed to be the spontaneous development of the disease. The city lies within the tropics and is built along the seashore, which, combined with "thermo-electro-hygrometric" influences (heat and humidity), was believed to favour the formation of miasmas. The "lower town" was considered the most dangerous area because of its extremely poor hygienic conditions. Insalubrity there was aggravated by proximity to the sea and the direct influence of the coastline. Beaches accumulated waste that was believed to produce miasmas. It was thought that in unhealthy places such as Luanda a "deleterious principle" or "miasmatic poison" formed in the atmosphere. This agent was believed to attack first the nervous system of individuals, particularly those in "specific conditions", such as newly arrived Europeans.

Although Cabral argued that isolation was unnecessary because he considered yellow fever to be a "primitive infection" of the environment (miasmatic) rather than contagion between individuals, other physicians were more cautious and attempted to separate patients arriving in Luanda or travelling to other ports in Angola. The principal measures adopted by the authorities included observation quarantines, control of bills of health, disembarkation and isolation of patients, inspection of irregularities, and monitoring of secondary ports.

Upon the arrival of a vessel, the quarantine regulations in force in the country were followed. The local medical officer (physician or port doctor) was responsible for boarding the ship, examining the sick and classifying the disease. Health authorities in the ports decided whether patients should be disembarked for treatment in local hospitals. When disembarkation was authorised, doctors or surgeons determined that the patients should be treated in "a place separate from other patients" in order to mitigate the risk of contagion. Port health services recorded the entry of patients and issued death certificates, detailing the observed symptoms (such as haematemesis and melena) for statistical and clinical monitoring of the epidemic.

Ships departing from Luanda for other ports of Angola (such as Benguela or Ambriz) underwent an "observation quarantine". Control through bills of health was based on the classification of vessels through clean or foul bills of health. However, Cabral pointed to failures in this system, noting that the brig Paquete de Loanda, arriving from Rio de Janeiro (an endemic port), carried a "clean bill of health" and reported no illness during its long voyage, which he considered suspicious.

The authorities in Lisbon specified strict penalties for breaches of quarantine regulations. The report mentions that an official explanation was requested from the medical officer of Ambriz for granting "free pratique" (permission for communication and disembarkation) to the steamer D. Antonia, despite the fact that the vessel had presented a foul bill of health.

Cabral used the effectiveness of these measures – or the absence of negative consequences when they failed – to reinforce his thesis that the disease was not contagious, emphasising that even in cases where patients disembarked the epidemic did not spread to the local populations. He concluded that it was indeed an epidemic rather than isolated occurrences of disease, reaffirming the amarilic nature of the outbreak, its non-contagious character, and the decisive role of environmental factors in its emergence.

The miasmatic theory, which dominated medical thought at the time, was fundamental to the understanding of the nature of the epidemic of 1860 in Luanda and directly influenced the therapeutic and preventive approaches adopted by physicians, as detailed in the report of Faustino José Cabral. He classified yellow fever as the result of a "miasmatic, zymotic, pestilential or putrid infection or poisoning" [12]. This view was based on the belief that a "deleterious principle" or "septic principle" formed in the atmosphere due to local conditions of insalubrity. Consequently, treatment was influenced by the belief that the body reacted against a toxic atmospheric agent, resulting in a therapy that attempted, with limited success, to mitigate symptoms and strengthen the vital response of patients.

Believing that the disease represented a reaction of the body to an external miasmatic agent, physicians passed through the first stage of the illness without recognising it. For this reason, initial treatment was largely expectant and supportive. As quinine sulphate – effective against the intermittent fevers of the region – proved useless in this epidemic, physicians concluded

that it represented a different form of "miasmatic poisoning" that did not respond to usual methods, forcing them to adopt a purely symptomatic treatment.

Since the "morbid element" was believed to attack first the nervous system and produce general collapse, treatment focused on stimulating the nervous system to resist the miasma. Stimulants were used to support the patient's strength during profound prostration, and vesicatories were applied in an attempt to "divert" the action of the poison from the internal organs to the surface of the body. Treatment was therefore strongly influenced by the belief that yellow fever resulted from a corrupted atmosphere attacking the individual, leading physicians to pursue therapies aimed at mitigating symptoms and reinforcing the vital resistance of the patient against an external toxic agent.

The miasmatic interpretation also led to the proposal that the disease was a "primitive infection" contracted directly from the local atmosphere and not from other patients, as seemed to be confirmed in hospitals. Patients were treated in common wards because physicians believed that the risk lay in the air of Luanda – particularly in the unhealthy lower town – rather than in direct contact with the sick. The preventive and "curative" focus for the city therefore lay in improving the activity of the municipal police, especially through cleaning the beaches in order to eliminate the causes that produced miasmas.

Believing that the disease was a "primitive infection" contracted directly from unhealthy air rather than through contagion between individuals, and therefore not prioritising the isolation of patients, Faustino Cabral openly acknowledged that he diverged from the opinion held in Lisbon. He used the experience of Luanda to reinforce his conviction that yellow fever was neither contagious nor imported, but rather the result of local miasmatic conditions and the lack of acclimatisation of Europeans.

The comparison between the anti-contagionist stance adopted in Angola and the contagionist position of the Extraordinary Council of Public Health of the Kingdom rests on a divergence in the interpretation of the observed facts, and not merely on a distinction between military and civil spheres. While in Lisbon the official policy favoured isolation based on the assumption of contagion, in Luanda the "promiscuity" of treatment served, in Cabral's view, as scientific proof that the disease was not transmissible from person to person and that restrictive measures on the circulation of people and goods were therefore unnecessary.

Cabral acknowledged that he had read the "conscientious report" of the Lisbon Council of Health on the epidemic of 1857 and confirmed that it had "strongly shaken his spirit". Nevertheless, his previous observations in Brazil and his direct experience in Luanda "subjugated his spirit" in favour of the non-contagionist position, leading him to consider the facts advanced by contagionists as "very rare and extraordinary" and outside any plausible explanation. He gave greater weight to accounts of ships arriving at European ports with sick passengers without the disease spreading, as well as to "emigrations caused by terror", in which crowds of sick people fled cities without spreading the fever to neighbouring populations. However, in Benguela – a smaller civil and hospital sphere – the local physician João Januário Vianna de Rezende acted in a manner closer to contagionist assumptions.

The position adopted in Angola therefore represented a deliberate departure from the scientific authority of Lisbon. If the disease had truly been contagious, as Lisbon maintained, the hospital in Luanda and the households of families (with the exception of that of Captain Soares) would have become major centres of transmission, which according to the report did not occur. For Cabral, the results observed in Luanda gave "incontestable value" to his anti-contagionist thesis, allowing him to regard the conclusions reached in the Kingdom with respect but as conclusions that did not apply to the factual reality he had witnessed in Angola. Moreover, the work of his eighteenth-century predecessor Pinto de Azeredo, rather than simply enabling a definitive diagnosis of yellow fever, also served to suggest that the disease had already existed in Angola before the outbreak of 1860, thus reinforcing Cabral's argument that the disease could develop spontaneously in the region and was not necessarily an imported infection.

SOME CONCLUDING REMARKS

The comparative analysis of the outbreaks in Lisbon and Luanda demonstrates that yellow fever constituted a moment of interpretative rupture in which competing aetiological models, commercial interests and processes of scientific authority-building intersected between the metropole and Angola.

By revisiting these episodes through official reports and documentation from the maritime health

services, this study also seeks to reposition the Portuguese case within the broader historiography of Atlantic public health, showing how debates concerning contagion, environment and maritime circulation were appropriated and reinterpreted within different institutional contexts of the empire.

In Lisbon, the predominantly contagionist interpretation supported policies of isolation, the expansion of hospital capacity, the organisation of sanitary statistics and the intensification of maritime surveillance, in line with the debates and recommendations emerging from the International Sanitary Conferences and from European hygienism. The existence of a more robust institutional apparatus – large hospitals, a high concentration of cases, the systematic practice of autopsies and the production of extensive reports – allowed the physicians of the Extraordinary Council of Public Health to observe patterns of dissemination on a large scale and to structure a sanitary response that sought to reconcile the protection of public health with the continuity of maritime commerce. In this sense, the yellow fever epidemic contributed to consolidating modern forms of sanitary administration based on the production of statistics, epidemiological cartography and containment policies.

In Luanda, by contrast, Faustino Cabral adopted an anti-contagionist interpretation rooted in miasmatic theory. He argued that the disease resulted from specific environmental conditions – heat, humidity, the insalubrity of the *cidade baixa*, and the lack of acclimatisation of newly arrived Europeans – rather than from importation or interpersonal transmission. The absence of explosive outbreaks in hospitals and family groups was presented as empirical evidence in favour of non-contagiousness, legitimising a strategy less centred on strict isolation and more oriented towards urban hygiene and port management, even though mechanisms of observation quarantine were maintained.

This divergence cannot be explained solely in terms of political opposition between centre and periphery, but rather by distinct institutional and epistemological contexts. The Lisbon report "shook" Angola's *físico-mor*, Cabral. Even so, it did not alter his conviction, shaped by his earlier observation of the disease in Brazil and by clinical practice in a territory where endemic fevers with partially overlapping manifestations predominated. In this sense, the reference to Pinto de Azeredo's eighteenth-century descriptions served less to consolidate an unequivocal diagnosis than to support the hypothesis that the disease had an ancient – and potentially autochthonous – presence in Angola.

Revisited within the longue durée of the pre-aetiological debates surrounding yellow fever, these episodes reveal how the Portuguese Empire sought to manage the epidemic within an Atlantic space marked by the intense circulation of people, goods, knowledge and power.

By drawing on official archival sources and maritime health records, this study enriches the historiographical narrative of yellow fever in Portugal, complementing what has already been published, while also helping to integrate the Portuguese case into the international historiography of Atlantic epidemics. It emphasises that the management of sanitary crises in the nineteenth century was inseparable from imperial dynamics, from tensions between science and administration, and from the global transformations of public health policies that preceded the discovery of the disease's aetiology at the dawn of the twentieth century.

Taken together, the Lisbon and Luanda cases demonstrate that, well before aetiology stabilised, yellow fever had already become a structuring force for public health policies and care practices in periods of epidemic stress: an arena in which sanitary frontiers were drawn and contested, scientific authority was asserted and disputed, and the language and practices of empire were negotiated through the management of risk, circulation and state responsibility.

The recent COVID-19 pandemic, far from relegating such dynamics to the past, brought them sharply back into view: at a moment when scientific knowledge and effective countermeasures were still emerging, epidemic control once again relied heavily on primary containment strategies – restrictions on mobility, border measures, isolation and quarantine – while health systems faced acute pressures in organising care and publics negotiated, often contentiously, the authority of expertise under administrative, political and societal constraints.

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JORNAL DA SOCIEDADE DAS CIÊNCIAS MÉDICAS DE LISBOA

C 3.6. COMMUNICATION – FULL ARTICLE

The Impact of the Atlantic Plague (1596–1602) on the City of Tui, according to the First Minute Book of the Municipal Council

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ABSTRACT: The demographic growth experienced by Galicia between 1480 and 1560 reached a turning point with the onset of a late-century crisis marked by years of famine – at least nine– interspersed with three plague cycles (1567–73, 1576–82 and 1598–99). The last of these, which is the focus of this article, had devastating effects on the city of Tui. Between 1591 and 1594, Tui had a total of 496 householders, corresponding to approximately 1,785 inhabitants out of about 630,000 for the whole of Galicia, and formed part of a weak urban network in a predominantly rural territory. In addition, we show that the earliest extant minute books of municipal councils are a fundamental source for the study of epidemic episodes within the framework of the history of medicine. In this case, we analyze the first minute book of the council of Tui, which records the decisions adopted between 1597 and 1616 by the ordinary judges, aldermen and general procurators to regulate municipal life and, in particular, to manage the arrival of the Atlantic Plague in this small town.

KEYWORDS: Atlantic Plague, Early Modern Epidemics, Municipal Council Minute Books, Tui (Galicia), Public Health History

INTRODUCTION

In the late seventeenth century, the town of Tui was an urban center that had become an administrative, military and religious hub. This was the period of the dual monarchy following the union of the Spanish and Portuguese crowns in 1580, and the passage of troops towards the neighboring country was therefore frequent, as was the billeting of soldiers in the homes of Tui's residents. Moreover, it was an episcopal seigneurial town and the capital of the province of the same name.

However, if we take into account Professor González Lopo's assertion that Tui was a city with limited dynamism – except for the mercantile activity conducted through its port, which had been significant since the beginning of the century (Flemish cloth and Aragonese woolens were by no means lacking) – and compare it, for example, with Santiago de Compostela, which was on the way to becoming the capital of the Kingdom of Galicia, a picture emerges of a fragile urban economy. The lack of a substantial artisanal sector, the

presence of an urban peasantry, and a considerable proportion of the population living in poverty made the town especially vulnerable to the effects of an epidemic such as the Atlantic Plague, which across the Crown of Castile would cause the death of more than half a million people.

DISCUSSION

The first Minute Book of the Municipal Council of Tui provides a precise record of both the preventive measures adopted in response to news of the advancing plague and the subsequent impact on the town. The epidemic originated with the arrival in Santander, at the end of 1596, of a ship called *Rodamundo,* coming from Flanders and Calais with clothes infested with fleas. The infection then spread from ship to ship and port to port throughout Castile, approaching Tui via the cities of Betanzos, Santiago and Pontevedra.

The document records the summons issued to carpenters and stonemasons to stockpile timber and materials in order to construct physical barricades *(atrancos)* at the town gates, as well as various prophylactic measures, such as the recommendation to clean and douse beds with water, the prohibition of lodging people coming from outside the town—under penalty of 30 days' banishment—the transfer of prisoners from a gaol infected with *Yersinia pestis* to the town hall buildings, and the flight of part of the population to the surrounding countryside.

Finally, the Minute Book attests to the consequences of the death of nearly 800 persons, including many merchants, which left the town, in contemporary testimony, as the poorest in the Kingdom. In this respect, it is pertinent to recall the figures provided by the historian Carlos Giráldez Lomba in his book *1598: La Peste en Vigo,* where he estimates that 3,500 people were infected and that only 22 of the 800 householders' dwellings escaped contagion. Although this author draws on sources from the Diocesan Archive of Tui, his data give an indication of the virulence of the disease throughout Galicia.

CONCLUSIONS

We conclude by drawing attention to the heuristic value – already highlighted – of the earliest minute books of Hispanic municipal councils. Since the regulations of the Catholic Monarchs in the late fifteenth century, these records constitute a privileged window onto historical realities of direct interest to historians of medicine, particularly in relation to epidemic disease, local governance and public health responses.

It is also important to emphasise that Tui was not an exception to the late-century patterns of catastrophic mortality of the six hundreds. Its population appears to have been reduced by approximately 30%, illustrating the scale of demographic impact that the Atlantic Plague could exert on small urban centres embedded in fragile economic and social structures.

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JORNAL DA SOCIEDADE DAS CIÊNCIAS MÉDICAS DE LISBOA

C 4.1. COMMUNICATION – FULL ARTICLE

History of the Stomatology Service at Hospital de Santo António in Porto

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ABSTRACT: This article presents a historical overview of the Stomatology Service at Hospital de Santo António (Porto), framed within the broader evolution of medical specialization at the institution. It begins by examining the early organizational model of the Hospital in the nineteenth century, highlighting the gradual differentiation of medical disciplines and the context in which Stomatology emerged as a distinct area of practice.

The study then traces the formal establishment and consolidation of the Stomatology Service from 1913 onwards, emphasizing the biographies and professional trajectories of the specialists who shaped its clinical, academic, and organizational development. Particular attention is given to the interaction between Stomatology and other medical and surgical specialties, as well as to the Service's progressive integration within the Portuguese National Health Service.

Finally, the article addresses the modernization of the Service in the late twentieth century and its development in the twenty-first century, including technological advances, expansion into maxillofacial surgery, and its ongoing role in training healthcare professionals. By situating Stomatology within the institutional history of HGSA, this study underscores its continued relevance and adaptability in contemporary medicine.

KEYWORDS: Stomatology; Maxillofacial Surgery; Hospital de Santo António; History of Medicine; Porto

EARLY ORGANIZATION OF HOSPITAL DE SANTO ANTÓNIO

The enormous development of medical knowledge, as well as the technological explosion seen in the 20th century, especially in its second half, led to the fragmentation of medical practice, with the emergence of successive "specialties" or even just "competencies," which modified the landscape of the organization of health services, particularly in hospitals.

As an important referral hospital for a large geographical area of the country, HGSA has a significant responsibility in the training of healthcare professionals, a role it acquired in 1825 with the creation of the Royal School of Surgery.

In 1895, the year Röntgen invented X-rays, the doctors at HGSA were almost all surgeons, mostly trained at the Medical-Surgical School. The inpatient units were mostly medical-surgical wards, although some were designated as Surgery and others as Medicine. However, this did not prevent doctors from working in either area. The "specialized" wards were more a matter of internal social or organizational reasons than of technical differentiation among professionals.

In 1890, and indeed for the next 30 or 40 years, the

Fig. 1 – A nineteenth-century engraving of Hospital Real de Santo António, Porto, and portrait of John Carr (1723–1807), British architect who designed the building.

Hospital was almost exclusively dedicated to inpatient care. The outpatient clinic, then designated as "Bank, Acceptance and Consultation," was small compared to the inpatient area, and the doctors who worked there were often hired exclusively for that purpose. Inpatient care, the most important core of the Hospital, took place in more than 70% of cases in wards designated as General or Medical-Surgical, which had a Medical Director and an Assistant Director as their medical staff.

Regarding the organization of HGSA, the regulations published in 1858 show that article 101 stipulated: "External physicians and surgeons must, and it is their responsibility, enter their respective wards no later than nine o'clock in the morning without fail, in summer and winter, to visit their patients." The surgeons operated on all pathologies, from phimosis to cataracts, from amputation to tonsillectomy.

The wards that existed at the time, in addition to the "General" wards, were intended for particular groups of patients, such as the "Delivery" ward, which housed the vast majority of women in labor; however, the doctors were not specialized, at least not in the current sense. The "tuberculosis" wards (one for men and another for women) and the "smallpox" ward were intended to isolate highly contagious patients. There was a tradition at HGSA of providing care to "prostitutes," so the "tolerated" ward was created separately, which was often a source of conflict and problems in the Hospital, as was the "prison" ward, where patients serving sentences in the nearby Relação prison were treated. However, these wards did not correspond to the modern notion of specialty, but rather to the need to isolate "undesirable" patients such as tuberculosis patients, plague victims, smallpox patients, prostitutes, or prisoners.

At that time, only Midwifery roughly corresponded to the concept of a specialty. Homeopathy, however, became the first truly autonomous specialty and even an alternative to the rest of medical activity, beginning operations on December 25, 1867, in fulfillment of a legacy. The "Specialty" of Homeopathy, created by legacy and testamentary disposition of the benefactor Count of Ferreira, began its activity in 1867, having from the beginning its own infirmary and specialized doctors. It was always very controversial and sometimes contested, notably in the Report of the Reformer Prof. Costa Simões, published as early as 1882.

In this report, the reformer expresses his astonishment at the ever-increasing number of beds that Homeopathy was acquiring, which he attributed to the fact that, in the 1860s and 1870s, the Provedor (head of

Fig. 2 – Nineteenth-century hospital register, HGSA.

the institution) was a doctor who promoted Homeopathy, Dr. Moutinho, who was succeeded as Provedor by his brother-in-law, Dr. Cyrne, who held the position from 1875 to 1882. Professor Costa Simões proposed "reducing the homeopathic clinic." Homeopathy, which, according to the reporter, treated patients with "the simple internal application of distilled water and bread crumb in pills," had been imported directly from Brazil by important merchants "very rich in fortune but extremely poor in medical science." Professor Simões ultimately proposed a maximum of 31 beds, just to fulfill the Legacy.

THE STOMATOLOGY SERVICE

The Stomatology Service had its beginnings on June 19, 1874, the date on which the position of dentist was created by resolution of the Board of Directors of the Santa Casa da Misericórdia of Porto. This decision was made at the request of Cândido Truco, a dental surgeon, so that he could be granted the effective title and, as such, the creation of the position, which could not be carried out without the consent of the Board. The Board then decided that the position should be created with an annual salary of 100.00 reais. Cândido Truco was succeeded by his son, Mariano Fernandes Truco, a "Dental Surgeon" from the Porto Medical-Surgical School, appointed on March 18, 1886.

However, the dental clinic was only created on August 11, 1913, by the Board of Directors and developed further after the bequest of the benefactor Higino António Silva, also a dentist, who left all his assets to the Santa Casa with the obligation to create an infirmary "for free dental care." The report of the Board of Directors for 1913–1914 refers to the session of May 5, 1913, in which the appointment of four Directors of Specialty Services was approved, among them Dr. Jerónimo Carlos da Silva Moreira for the Stomatology Service.

In 1915, competitions were opened for Assistants in various specialties, one of which was Stomatology. The jury was composed of four members: Dr. Jerónimo Moreira (Director of the Stomatology Service), Alberto Perry Sampaio and Alberto Ribeiro, surgeons, and A. Teixeira Lopes, Director of the ENT Service. It is worth noting that Dr. Perry Sampaio had completed an internship in Paris in 1902 in the areas of mouth and dental pathology but always continued to practice general surgery.

Fig. 3 – Late 19th-century oak dentist's cabinet.

Fig. 4 – Dental chair used for odontological treatments, first half of the 20th century. (Museu HGSA collection).

Fig. 5 – Whitehead mouth gag.

This competition provoked controversy, with protests and complaints, ultimately resulting in appointments made by the Board. In a session of the Medical Council on June 10, 1915, the Provider announced the opening of five positions for 1st Assistant and five for 2nd Assistant for Special Clinics, including Stomatology. After several sessions, the Clinical Director informed that, regarding Stomatology, it would not be prudent to open a competition until the construction of the outpatient clinic for that specialty was complete. However, as the Director, Dr. Jerónimo Moreira, stated that he had been assured the construction would be finished by the competition deadline, it was decided to proceed with the competition.

The 1916–1917 report includes statistics from the Stomatology Service, with 1,580 patients registered at the Emergency Department. The Director was Dr. Jerónimo Moreira; there was an assistant physician, Dr. António Mendes, and a student instructor, Alfredo Barata da Rocha. However, the statistics decreased in the following three years to 1,084, 882, and 789 in 1920, with the same staffing structure.

Until 1924, the two doctors continued, but from that date onwards the assistant became Dr. Amândio Costa Guimarães, who, after Dr. Jerónimo's retirement in 1934, became Director, with the assistant position being filled by José Maria Braga.

In 1937, competitions were opened for several positions, with Dr. José Frazão Nazaré (later Clinical Director of the Hospital) becoming Director, Dr. António Silva Paul becoming 1st Assistant, and Dr. Fernando Costa Leite becoming 2nd Assistant. Dr. António Silva Paul later succeeded Dr. José Frazão Nazaré and was responsible for the first surgical steps of the Service.

Following the decommissioning of barracks after the end of the colonial war, the former barracks on Rua D. Manuel II were handed over to HGSA (the eastern half) and to the University Rectorate. It is worth remembering the important role played in this process by then Brigadier Pires Veloso, who commanded the Northern Military Region. This allowed for the establishment, at the end of the 1970s, of the Pathology, Microbiology, Immunology, and Stomatology Services. In the 1980s, a modern pavilion was built for Outpatient Consultations, the Central Clinical Archive, and other administrative services.

In 1970, Dr. Lino Ferreira took office, a position he held until 1986, and he was one of the key figures in the development of Oral Pathology and Surgery. Dr. Teodoro Bettencourt de Sousa was appointed in 1986, and it was during this period that the Service assumed responsibility for all facial traumatology, with the Plastic Surgery department moving to the Prelada Hospital. Thus, by ministerial decree of December 29, 1988, it was renamed the "Stomatology and Maxillofacial Surgery Service."

Fig. 6 – Stomatology Service team under the direction of Dr. José Frazão Nazaré.

In this development, the collaboration of Drs. Adriano Figueiredo, Eduardo Coelho, and the current Director, Dr. Carlos Monteiro, was fundamental. The Service maintained and enhanced Oral Pathology, to which colleagues Drs. Henrique Santos, Carlos Moreira, and Barbas do Amaral contributed. Meanwhile, the Oral Pathology Course was established, with a biennial schedule.

During the last quarter of the century, HGSA evolved technically and scientifically and achieved great national and international prestige. In technological terms, it is worth noting the opening of the first CT scanner in 1982, the progressive automation of the laboratories, and the significant increase in Intensive Care units, whose quality of work has been the basis for the success of the Organ Transplant program, which greatly enhanced HGSA. In fact, the Ophthalmology Service had already been performing corneal transplants since the 1960s, having the largest national caseload, which by the end of the century was approaching 2,000. The Kidney Transplant program began in 1983, the Liver Transplant program in 1995, and the Pancreatic Transplant program in 2000.

THE SERVICE IN THE 21ST CENTURY

In 2001, the direction of the Stomatology and Maxillofacial Surgery Service came under the supervision of Dr. Conceição Cerqueira. At the end of the 1980s, the Service began providing surgical orthodontic treatment for patients with dentofacial dysmorphia. In this context, in addition to Dr. Conceição Cerqueira, Dr. Carlos Miranda and later Dr. Filipe Pina collaborated in orthodontic treatment. In the surgical area, the collaboration included Dr. Carlos Monteiro (current Director), Dr. Rui Costa e Sousa (who had completed a cephalometry internship in England), Drs. Alfredo Figueiredo Dias, Rui Balhau, and Dr. Lígia. Drs. Asdrúbal Pinto and Barbas do Amaral began collaborating in the Medicine course, teaching stomatological semiology, while maintaining the Orofacial Pain and Oral Pathology consultation, to which Dr. Eva Pacheco contributes, especially in patients with blood dyscrasias.

Drs. José Reis and Valdemar Gomes collaborated in oral rehabilitation, which are also areas of expertise of the Service.

In 2010, the management passed to Dr. Carlos Monteiro, who remains the current Director. The inpatient unit is now located in Surgery 2, and outpatient surgical activity is carried out in the new wing, while general anesthesia continues to be administered in the Orthopedics and Neoclassical Block. The specialists integrated into the eight emergency teams ensure the treatment of patients who come to the Emergency Department in the areas of Stomatology and Maxillofacial Surgery every day of the year.

After five years of collaboration with master's students in orthodontics and orthognathic surgery from the Faculty of Medicine of Porto, Dr. Filipe Pina, in partnership with Drs. Carlos Miranda, Asdrúbal Pinto, and Carlos Monteiro, launched a course on dentofacial dysmorphia.

In a survey of Porto citizens conducted in 1997 by the Faculty of Economics, when asked about the most important institutions in the city, HGSA ranked third, behind the City Council and FC Porto, but ahead of the University, SCMP (Santa Casa da Misericórdia do Porto), and the Palace of Justice. This data accurately reflects how the city regards "its" hospital. Its location in the city center, the grandeur of its headquarters building, and above all the important services provided to the population for over 200 years underpin how the city and the region feel connected to the Institution.

Fig. 7 – Stomatologists and staff associated with the Stomatology and Maxillofacial Surgery Service, HGSA

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JORNAL DA SOCIEDADE DAS CIÊNCIAS MÉDICAS DE LISBOA

C 4.3. COMMUNICATION – ABSTRACT

Traumas in the 1961–63 War in Angola

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ABSTRACT: War has always existed, exists and will exist. It takes on different aspects wherever it regrettably unfolds and persists, modeling itself, however, to the local circumstances of the theaters of operations. It constitutes a period of unprecedented violence, in which fear, savagery, hunger and dirt are present. Our soldiers, who fought in the Portuguese Army on all fronts, went through all of this. There is no place where fighting took place that is better or worse, when you suffer and death awaits you. Soldiers subjected to these traumas are often affected physically and, often forever, psychologically. I was a doctor at the Command of Battalion 114. The Companies that were part of the Battalion had dozens of attacks, which caused several deaths and injuries in combat. The adventures that occurred during the trips constituted some of the stories that I remember here, as well as some of the most notable incidents in the Angolan War. On one patrol, among many others, we left Quicabo in the direction of Birila but, to our surprise, after a kilometer or two signs of enemy presence appeared. Air support was requested and two Harvard T6 planes appeared almost immediately. We had no direct contact with the enemy, neutralized by the Air Force. I noted, in fact, what I already knew: in war there are a few minutes of action and many hours and days of boredom, peace and inaction. Either in the North or in the South, the «picadas» (roads through the bush) were incredible. To travel three or four hundred km, it sometimes took three days (if not more) because, when it rained, the vehicles became bogged down to the chassis. Missing, in this summary of what happened during the patrols in which I lived and participated in the Angolan war from 1961 to 1963, is the story of the men of the Battalion 114. The human story that encompasses the uncertainties they experienced, the moments of anxiety, their emotions and longings, and also the joy and sadness they felt with the feeling of victory or failure, in carrying out their missions. These are scars and memories, which often leave an indelible mark on the soul, and sometimes on the body, that forever accompany all military combatants, until their pilgrimage in this world ends...

KEYWORDS: Portuguese Colonial War, Angola (1961–1963), Military Medicine, Combat Trauma, Portuguese Army, Personal Testimony

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C 4.5. COMMUNICATION – ABSTRACT

Portuguese Student Files at the Royal College of Surgery of San Carlos in Madrid

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ABSTRACT: At the end of the 18th century, the Royal College of Surgery of San Carlos in Madrid became one of the leading centres of medical education. Among its students, a significant number came from Portugal, a country that contributed to the new scientific elites with professional aspirations and social mobility. Consulting the personal files of these Portuguese students, preserved in the National Historical Archives of Spain (Madrid), offers a glimpse into the lives of young individuals who embarked on a journey from towns, villages, and rural areas in another nation to the capital of Spain. The documents analysed are of diverse types, providing privileged information about their origins, prior education, ages, academic trajectories, and the challenges faced during their studies. The analysis of this information reveals the degree of success or failure of the students, as well as the geographical dynamics of their origins and, when traceable, their subsequent professional diaspora. Some returned to their hometowns as certified surgeons; others dispersed to various places, integrating into broader medical networks.

KEYWORDS: History of Medicine, 18th Century, Medical Education, Social Mobility, Professional Diaspora, Personal Files, Surgery, Professional Networks

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- NOTE: In addition, to produce these communication, we have used 42 files on Portuguese students who studied at the Royal College of Surgery of San Carlos, established at the Spanish court. These files are kept at the National Historical Archive of Spain (Madrid).

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JORNAL DA SOCIEDADE DAS CIÊNCIAS MÉDICAS DE LISBOA

C 4.6. COMMUNICATION – FULL ARTICLE

Manuel Rosado Fernandes Gião: The Physician and Surgeon of the Portuguese Army

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ABSTRACT: This article presents a biographical and analytical overview of Colonel Manuel Rosado Fernandes Gião (1878–1969), a leading figure in twentieth-century Portuguese military medicine. Drawing on research conducted for the volume *O Exército e a Saúde Militar na Primeira Guerra Mundial: Memórias e Progressos*, Biblioteca do Exército, 2021, (The Army and Military Health in the First World War: Memories and Progress», Portuguese Army Library, 2021), the study examines his clinical and organizational contributions, his pioneering role in radiology and electrotherapy within the Armed Forces, his participation in the 14th and 15th International Congresses of Medicine, and his relevance as one of the earliest historians of the Portuguese Military Health Service. The analysis highlights Gião's impact on the modernization of the medical services deployed in the field, as well as the lasting value of his historiographical works for the study of military medicine and the institutional evolution of the Portuguese Army.

KEYWORDS: Manuel Rosado Fernandes Gião; Military Health; Military History; Portuguese Expeditionary Corps; Army Library.

INTRODUCTION

The publication, in 2021, of the work *O Exército e a Saúde Militar na Primeira Guerra Mundial: Memórias e Progressos* (The Army and Military Health in the First World War: Memories and Progress, Portuguese Army Library, 2021) brought together a wide range of studies and a bibliographic catalogue with more than seven hundred resources on military health. During the preparatory work for this book, the figure of Colonel Medical Officer Manuel Rosado Fernandes Gião (1878–1969) emerged with particular prominence, whose scientific production, although extensive, remained little known.

This article aims to present the life, work, and organizational thinking of this military doctor, highlighting his influence on the evolution of the Portuguese Military Health Service and the modernization of field health formations.

BIOGRAPHICAL BACKGROUND

Manuel Rosado Fernandes Gião was born on February 17th, 1878. He graduated in Medicine from the Lisbon Medical-Surgical School and joined the Military Medical Corps on September 5th, 1900. In the early years of his career, he collaborated in the drafting of internal regulations for field medical teams, reviewed drug formularies for military hospitals, and contributed to technical manuals, such as the *Manual de Maqueiros* (Manual for Stretcher Bearers) of 1916. In 1909, he joined the Military Medical Corps, assuming the leadership

of the Radiography Department of the Permanent Military Hospital of Lisbon, and in the following year he became Director of the Radioscopy and Electrotherapy Laboratory, being recognized as one of the pioneers in the introduction of Radiology and Electrotherapy in a military context.

SERVICE IN THE FIRST WORLD WAR

As a graduate Medical Major, he joined the Portuguese Expeditionary Corps (CEP), embarking for France on February 7th, 1917, and remaining on mission until July 8th, 1918. After his return, he served as director of the 2nd Section of the 5th Division of the 2nd General Directorate of the War Ministry, later reassuming command of the Radioscopy and Electrotherapy Laboratory. He was also a professor at the Military School. The culmination of his career occurred between 1931 and 1933, when he served as Director of the Military Health Service, conducting technical and administrative reforms in hospital services and promoting military medical training. He was distinguished with 15 commendations and 14 national and international decorations, reflecting the relevance of his contribution to the Portuguese military medicine. He died on November 17th, 1969.

PARTICIPATION IN THE 14TH AND 15TH INTERNATIONAL CONGRESSES OF MEDICINE

Manuel Gião represented the Portuguese Army at the 14th (Madrid, 1903) and 15th (Lisbon, 1906) International Congresses of Medicine. His papers constitute fundamental documents for understanding the evolution of the organizational thinking of the Military Health Service.

14TH INTERNATIONAL CONGRESS OF MEDICINE (MADRID, 1903)

The paper *Service de Santé en Campagne – Organisation du Service de l'Avant* (Campaign Health Service – Advanced Service Organisation) analyzed the Portuguese health structure based on the 1895 Regulations. Gião identified three essential formations: First Aid Post; Divisional Ambulance; and Mobile Hospital (equivalent to the French field hospital). He considered the system of replacing the divisional ambulance with the mobile hospital after combat to be deficient. Inspired by the French model, he proposed its replacement with three new mobile units: First Aid Post; Blood Hospital; and Transport and Hospitalization Columns. These units should operate in an articulated manner, ensuring greater speed and continuity in care.

15TH INTERNATIONAL CONGRESS OF MEDICINE (LISBON, 1906)

In the communication *Organisation du Service de Santé de l'Avant* (Organization of the Advanced Health Service), Gião elaborates on the previous proposal, adapting it to the Portuguese reality, where the Division constituted the fundamental operational unit, unlike the French system based on Army Corps. He maintained the functional division into three levels: Regimental Service, Hospital Service, and Ambulance Service. He criticized the excessive weight of the vehicles, the dispersion of personnel, and the operational slowness of the ambulances. He proposed: maintaining the Regimental Service; replacing Ambulances and Field Hospitals with single-type, lightweight, and mobile Sanitary Training Units; creating an Independent Group Specialized in Transport; and defining the Hospitalization Column with precision. He also presented a complete organizational plan, with numbers and functions of the new units (for example, six Blood Hospitals, two Transport Columns, and four Hospitalization Columns).

The evolution of his thinking demonstrates a shift from a predominantly logistical analysis to an integrated structural vision of the Campaign Health Service. Many of these proposals would later be incorporated into the reorganization of the Portuguese Army.

14TH INTERNATIONAL CONGRESS OF MEDICINE *VERSUS* 15TH INTERNATIONAL CONGRESS OF MEDICINE

The papers presented by Manuel Gião at the Madrid and Lisbon congresses reveal a coherent evolution of his thinking on the organization of the Health Service in the Field, moving from the identification of structural problems to the formulation of a complete organic model. He maintains the functional tripartite division of the Frontline Health Service, but with progressive technical sophistication:

– the Regimental Relief Posts, mentioned in 1903, are fully valued in 1906 as the indispensable first line of the Health Service;

– the Field Hospital, an advanced medical unit intended for the immediate treatment of the wounded, constitutes the core of the system in 1903 and remains in 1906 with improvements in equipment;

– the Transport Column, responsible for evacuating the wounded from first aid stations to field hospitals, evolved from a complementary section into an independent and specialized group in 1906, and the Hospitalization Column, initially conceived as post-combat reinforcement, acquired a precise and well-equipped organization in 1906.

The logic of successive substitution between ambulances and hospitals was abolished, being replaced by an articulated structure, simultaneously mobile and stable, capable of ensuring continuity of care in combat (Table 1).

TABLE 1. Comparative table – 14th Congress *versus* 15th Congress

Key elements	14th Congress (1903)	15th Congress (1906)
First Aid Station	Only referred to as the initial evacuation point	Revalued as part of essential "regimental service"
Blood Hospital	Advanced medical unit for frontline wounded	It remains the essential core of the system
Transport Column and Hospitalization Column	Responsible for transporting the wounded Sets up and maintains hospital centers after combat.	Strengthened and organized as an independent group More detailed, with modern equipment (X-ray, tents, beds)

Manuel Gião recommends for mobile and articulated units, which are lighter and more efficient, the vehicle models of Colonel Doctor Cunha Belém — awarded in Paris in 1900 — among which are the sanitary vehicles (Fig. 1), the surgery and pharmacy carts (Fig. 2) and small hospital tents (Fig. 3).

This model would be adopted in the reorganization of the Portuguese Army Health Service, a sign of the recognition of the practical value of its ideas.

The set of two communications marks Portugal's transition to a modern, rational and integrated conception of the field health service, aligned with international trends of the early 20th century.

LITERARY PRODUCTION AND HISTORIOGRAPHICAL CONTRIBUTIONS

Manuel Gião is recognized as one of the first historians of the Portuguese Military Health Service. Among his main works are: «A Guerra Peninsular»; «O Serviço de Saúde na Campanha do Roussillon»; «O Recrutamento dos Cirurgiões Militares no Exército Português: notas históricas»; studies on the Military Health Service during the French Invasions; and texts dedicated to the military hospital structure, therapeutics, and medical training. A large part of these works is preserved in the collection of the Portuguese Army

Fig. 1

Fig. 2

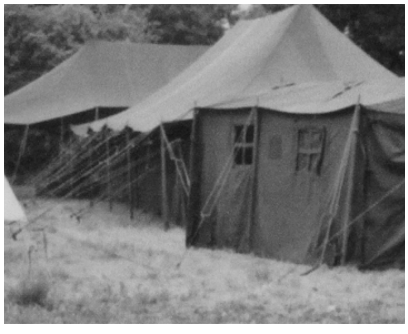

Fig. 3

Library, some accompanied by handwritten dedications, such as the one addressed to the erudite researcher, [...] Captain Chaplain Reverend Father Ernesto Pereira Sales, patron of the institution.

His vast work combines practical experience, administrative reflection, and historical reconstruction, offering a comprehensive view of the evolution of Portuguese Military Medicine.

CONCLUSION

Colonel Medical Officer Manuel Rosado Fernandes Gião was one of the main figures responsible for the modernization of the Portuguese Military Health Service at the beginning of the 20th century. His participation in international congresses, his pioneering work in radiology and electrotherapy, his contribution to the sanitary organization in the field, and his vast historiographical production makes him a central figure in the study of Portuguese Military Medicine.

His legacy remains relevant to both historians and researchers in the health sciences and military organization.

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C 5.1. COMMUNICATION – ABSTRACT

A Feminine Voice in Medical History and Deontology: The Legacy of Maria Olívia Rúber de Meneses

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ABSTRACT: Maria Olívia Rúber de Meneses (1932–1990) was a pioneering physician, historian, academic, and bioethicist whose work profoundly shaped the development of the History of Medicine and Medical Deontology in Portugal. As the first woman to obtain a Ph.D. at the Faculty of Medicine of the University of Porto, she established a scholarly trajectory grounded in rigorous historical inquiry, ethical reflection, and a sustained commitment to bridging scientific practice with humanistic sensibility.[1]

Her intellectual journey began well before her university years. From her adolescent years, she distinguished herself by exceptional academic performance and a deep engagement with literature and poetry, a sensibility that later informed both her historical writing and pedagogical practice. During her medical studies (1949–1955), she consistently ranked among the most outstanding students of her cohort, receiving academic distinctions, and cultivated a parallel literary activity, authoring poems for academic publications and commemorative volumes.[2]

Her scholarly career was inaugurated with the innovative 1956 dissertation, *Duas Figuras Femininas da Medicina Medieval,* in which Professor Olívia examined the intellectual legacy of Trota of Salerno and Hildegard of Bingen to challenge long-standing assumptions regarding women's intellectual inferiority, anticipating later feminist historiography.[3]

Following the institutional lineage of her mentor, Luís de Pina, Professor Olívia was closely associated with the Maximiano Lemos Museum from the outset of her career. She played a decisive role in its reorganization during the institutional transition of 1959–1960 and later became its director in 1976, having previously transformed the institution into a center for interdisciplinary research and pedagogical innovation.[4] In parallel, she succeeded her mentor as head of the disciplines of History of Medicine and Medical Deontology, consolidating their academic structure.

Her historiographical production encompassed medieval medicine, public health, tropical medicine, institutional history, and medical biography. Her studies on the evolution of Anatomy and Surgery in Porto constitute landmark contributions to Portuguese medical historiography.[5,6] In the field of Tropical Medicine, her doctoral thesis resulted from extensive archival research in Portugal, France, and Germany and remains a major reference.[7]

In Medical Deontology, Professor Olívia emerged as a precursor of modern bioethics in Portugal. Motivated by concerns regarding professional indifference and ethical decline, she emphasized the moral centrality of the doctor–patient relationship and professional secrecy, particularly in *Segredo Médico*.[8,9]

Her pedagogical legacy is highlighted by her leadership in the creation of the first pedagogy course for medical teachers in 1983, advocating that exemplary conduct was as essential as scientific competence.[10] Widely regarded as a mentor, she combined intellectual rigor with attentive personal guidance.

Until the end of her career, she remained intellectually active, leaving a final testament in the preface to the reedition of Maximiano Lemos's *História da Medicina em Portugal: Doutrinas e Instituições*.[11] Her death in 1990 marked the loss of a central figure in Portuguese medical humanism. [12]

By integrating historical consciousness, ethical reflection, literary sensibility, and institutional leadership, Maria Olívia Rúber de Meneses forged a lasting model of scholarly and professional excellence. Her work remains a definitive touchstone for understanding the intersections of history and ethics, while contributing to a sustained reappraisal of women's intellectual and professional legitimacy within Portuguese medical academia.

KEYWORDS: History of Medicine; Medical Deontology; Bioethics; Women in Science; Pedagogy; Portugal.

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C 5.2. COMMUNICATION – ABSTRACT

Aureliano Baptista da Fonseca: Physician, Professor and Artist – A Legacy for Portuguese Dermatology

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ABSTRACT: Professor Aureliano Baptista da Fonseca (1915–2016) stands as one of the most influential figures in twentieth-century Portuguese medicine, academia, and culture. A pioneer of Dermatology in Portugal, he became, in 1943, the first physician to obtain formal recognition as a specialist in Dermatology by the Portuguese Medical Association. Educated, awarded his doctorate, and later appointed professor at the Faculty of Medicine of the University of Porto, his career was marked by the integration of clinical excellence, pedagogical innovation, scientific productivity, social commitment, and artistic sensibility.

Throughout his professional life, Aureliano da Fonseca demonstrated a profound concern for the social dimensions of disease. His work in the fight against venereal diseases was particularly notable, having organised and led reference services at the Porto Military Hospital and the Central Dispensary of Social Hygiene. He later directed the Department of Dermatology at São João University Hospital, where he played a decisive role in structuring modern dermatological practice and training successive generations of specialists. His academic development was strengthened by international training programmes and study missions across Europe and the Americas, including a scholarship awarded by the World Health Organization.

As a university professor, he challenged traditional teaching models, advocating an educational approach centred on clinical reasoning, observation, and critical thinking. Between 1977 and 1985 his academic influence extended to Brazil, where, at the University of Campinas, he reorganised the teaching of Dermatology, founded a university dermatology service, and contributed to the development of social dermatology in South America.

Beyond medicine, Aureliano da Fonseca cultivated an artistic legacy as a photographer, pianist, and writer. His photographic archive, comprising thousands of clinical and artistic images, together with his literary and musical works, reflects the intersection of science, aesthetics, and human expression. Part of this legacy was entrusted to the Maximiano Lemos Museum, ensuring its preservation.

Practising medicine until the age of 99, he embodied a humanistic, person-centred approach that remains a reference in Portuguese dermatology.

KEYWORDS: Dermatology; History of Dermatology; Medical Biography; Portuguese Medicine; Medical Education; Aureliano Baptista da Fonseca

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C 5.3. COMMUNICATION – FULL ARTICLE

Child and Adolescent Psychiatric Emergency Service in Oporto: Historical and Contemporary Perspectives

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ABSTRACT: Background and Aim: Child and Adolescent Psychiatric Emergencies have undergone substantial transformation, mirroring the growing recognition of childhood psychopathology and its societal implications. This work examines the historical development, organization, and contemporary relevance of Child and Adolescent Psychiatric Emergency Services, focusing on the Oporto service as a model. The aim is to contextualize its emergence, delineate its core functions, and reflect on its clinical and public health significance. **Material and Methods:** Sources include historical and legislative records, national mental health policy documents, scientific publications on Portuguese Child and Adolescent Psychiatric emergencies, and expert interview data from the leadership of the Department of Child and Adolescent Psychiatry of Oporto. International guidelines (IACAPAP) and epidemiological data on emergency presentations were also reviewed to frame the evolution of Portuguese Child and Adolescent Psychiatric emergencies within broader global trends. **Results:** The analysis reveals a progressive consolidation of Portuguese Child and Adolescent Psychiatric emergencies in Portugal, beginning with mid-20th-century acknowledgment of childhood mental disorders and followed by the creation of specialized services in Lisbon, Coimbra, and Oporto. The Oporto service exemplifies this trajectory, evolving from an open, community-oriented model to a structured referral-based system integrated within the pediatric hospital network. Across documents, a marked increase in crisis presentations was observed — particularly behavioral dysregulation, acute emotional distress, and safety-related episodes. The COVID-19 pandemic notably intensified demand, highlighting systemic vulnerabilities and reinforcing the necessity of specialized child and adolescent emergency mental health care. **Conclusions:** Child and Adolescent Psychiatric emergency services are pivotal for acute risk management, diagnostic clarification, and early intervention. Strengthening these services through increased resources, multidisciplinary training, and coordinated care pathways is essential to ensuring timely, equitable, and developmentally informed mental health support for children and adolescents.

KEYWORDS: History of Medicine; Child and Adolescent Psychiatry; Child and Adolescent Psychiatric Emergencies

INTRODUCTION

The recognition of psychopathology in childhood and adolescence is relatively recent in the history of medicine. Until the mid-20th century, emotional and behavioral problems in children and adolescents were often understood as transient manifestations of development, sometimes interpreted as moral issues or viewed through the lens of adult psychopathology, without a specific nosological framework. It was mainly during and after the Second World War that greater scientific and social concern regarding the mental health of children and young people emerged, driven by the need – and perhaps curiosity – to understand the emotional impact of trauma, family disruption, and profound social transformations, which were predictable consequences of the war.

In this context, a new specialty focused on child and adolescent psychopathology began to emerge, initially designated Child Neuropsychiatry, gradually evolving into Child and Adolescent Psychiatry as an autonomous specialty with its own models of assessment, intervention, and organization of care. Internationally, the field progressed from informal and fragmented responses to structured systems integrated into hospital and community networks, encompassing inpatient, outpatient, and emergency services. In Portugal, this process was consolidated with the formal establishment of the specialty in 1983 and the founding of the Portuguese Association of Child and Adolescent Psychiatry in 1989, both representing decisive milestones in the organization of differentiated care [1,2].

Recent data indicate that more than one third of mental health disorders begin before the age of 18 [3,4], currently representing one of the leading causes of morbidity in childhood and adolescence and frequently giving rise to crisis situations requiring urgent assessment and intervention [4]. According to the World Health Organization, suicide is among the three leading causes of death in adolescence [5]. Child and Adolescent Psychiatric Emergency Services thus emerged in response to the need for rapid risk assessment, initial diagnostic clarification, crisis containment, and safe therapeutic orientation, within contexts often marked by intense distress experienced by the child or adolescent and their family. Internationally, a sustained increase in demand for these services has been observed, particularly among adolescents, reflecting not only greater visibility of psychological distress in this age group but also increased social and institutional awareness of the importance of mental health [6].

The Child and Adolescent Psychiatric Emergency Service of Oporto is part of this broader historical movement. Established in 1992 within a reference pediatric hospital, it was the first structured Child and Adolescent Psychiatric Emergency Service in Portugal and has played a central role for more than three decades in responding to psychiatric crises among the child and adolescent population of the Northern region of Portugal [6–8]. Its evolution has accompanied institutional, organizational, and even conceptual transformations within the specialty.

The aim of the present article is to analyze the historical development of the Child and Adolescent Psychiatric Emergency Service of Oporto, contextualizing its emergence, describing its organization and evolution since its inception, and reflecting on its current clinical and public health relevance.

MATERIALS AND METHODS

A historical-descriptive and reflective study was conducted, based on the review and analysis of multiple documentary and bibliographic sources related to Child and Adolescent Psychiatric Emergency Services in Portugal, with particular emphasis on the Child and Adolescent Psychiatric Emergency Service of Oporto.

The sources included institutional and regulatory documents concerning the organization of Child and Adolescent Psychiatry Emergency Services, national mental health legislation and policy documents, national publications on child and adolescent psychiatric emergencies – namely studies conducted in Oporto over recent decades (1997, 2008, 2019) – as well as studies examining the impact of the COVID-19 pandemic on this service. International standards and guidelines, particularly those issued by the International Association for Child and Adolescent Psychiatry and Allied Professions (IACAPAP), were also reviewed, along with historical and organizational information derived from clinical testimonies obtained through interviews and institutional communications.

The methodology consisted of documentary analysis, with chronological organization of historical data and synthesis of key milestones in the development of the service under study. Published epidemiological and clinical data were analyzed descriptively, allowing identification of the main reasons for emergency presentations and changes in patient profiles over time.

Interpretation of the findings was framed within the broader evolution of the specialty and associated social and institutional transformations, integrating a clinically grounded reflection supported by existing literature.

This study did not involve the collection of individual clinical data nor access to confidential or identifiable patient information; therefore, formal informed consent procedures or ethics committee approval were not required.

RESULTS

Historical development of the Child and Adolescent Psychiatric Emergency Service of Oporto

The Child and Adolescent Psychiatric Emergency Service of Oporto began its activity in March 1992 at Hospital Maria Pia, several months after the closure of all Child and Adolescent Mental Health Centers in the country, which were subsequently integrated into pediatric hospitals. At the time of its creation, the Department of Child and Adolescent Psychiatry in Oporto was under the direction of Dr. Jorge Mira Coelho. Initially, the service operated on weekdays, following the pediatric emergency department schedule (8:00 a.m.–24:00 p.m.), with on-call psychiatric coverage from 4:00 p.m. onward, and direct access to the Child and Adolescent Psychiatric Emergency Service was permitted.

In the early years, psychiatric assessments of children and adolescents in crisis were conducted within the same physical space as the general pediatric emergency department. Only in March 1997 did the service acquire a dedicated consultation room, representing a first step toward functional autonomy and improved conditions for specialized clinical assessment. Despite early structural limitations, the establishment of the emergency service enabled the development of an organized and differentiated response to psychiatric crises in the population, which until then had often been managed in a fragmented manner within outpatient settings [7].

Organizational and functional evolution of the service

Between 1992 and 2006, the Child and Adolescent Psychiatric Emergency Service functioned as part of the pediatric emergency department at Hospital Maria Pia, operating under an open-access model for the community. In October 2006, following the integration of Hospital Maria Pia into the Oporto Hospital Center, the Urgent Care Unit (Unidade de Atendimento Urgente – UAU) was created, marking a significant structural change: the service transitioned to a referral-based model. Under this model, only patients referred by physicians from pediatric emergency departments, primary care services, or other public or private medical settings are seen.

Between 2006 and 2015, the UAU operated at Hospital Magalhães Lemos, physically separated from other pediatric specialties – a situation described as unfavorable from the perspective of care integration. Nonetheless, it became established as the only Child and Adolescent Psychiatric Emergency Service in the Northern region of Portugal, providing urgent care to children and adolescents up to 18 years of age from that geographical area, operating daily between 8:00 a.m. and 8:00 p.m. [6].

On July 1, 2015, the UAU was transferred to the Northern Mother and Child Center (Centro Materno Infantil do Norte – CMIN), where it continues to operate. This integration strengthened collaboration with Pediatrics and contributed to increased safety and continuity of care, while maintaining the service as a regional reference within the National Network of Child and Adolescent Psychiatry Emergency Services.

Caseload over time

Analysis of studies published over recent decades demonstrates a progressive increase in demand for Child and Adolescent Psychiatric Emergency Service in Oporto, particularly among adolescents. Between July 1996 and July 1997, 573 emergency episodes were analyzed; during this period, 57.4% of patients were aged between 11 and 18 years, with a slight predominance of females after puberty [7].

In 2008, analysis of 975 emergency episodes revealed an increase of nearly 50% compared to the 1997 study, maintaining the predominance of adolescents, particularly females aged 14 to 17 years. The most frequent reasons for emergency presentation were suicidal behaviors and behavioral disturbances, which together accounted for approximately half of all observed episodes [8].

In 2016, a total of 1,136 emergency episodes were recorded, corresponding to 926 patients, of whom 81.1% were adolescents, again with female predominance. The most frequent referral reasons were behavioral disturbances and anxiety symptoms, together

accounting for approximately 49.6% of episodes. During this period, a reduction in hospitalization rates was observed, suggesting improved effectiveness of outpatient responses and continuity of support through crisis consultations [6].

Across studies, the emergency service consistently functioned as an entry point into the National Health Service for children and adolescents experiencing psychological distress, playing a role in regulating referrals to Child and Adolescent Psychiatry outpatient care while simultaneously providing a timely response in crisis situations.

Impact of the COVID-19 pandemic on Child and Adolescent Psychiatric Emergencies

The COVID-19 pandemic represented a significant milestone in demand for child and adolescent psychiatric emergency care. A recent study analyzing emergency episodes at the UAU between March 2019 and May 2021 showed that during the first lockdown period (March to May 2020), there was an approximately 48% reduction in admissions compared to the same period in 2019. This phenomenon, also described internationally, has been attributed to fear of contagion and consequent avoidance of healthcare services [9].

In contrast, following the lifting of the first lockdown measures, a marked increase in demand for child and adolescent psychiatric emergency care was observed. Between March and May 2021, the number of emergency episodes increased by approximately 98% compared to the same pre-pandemic period in 2019. During this phase, there was an increase in episodes related to suicidal ideation, non-suicidal self-injury, and eating disorder behaviors [9].

DISCUSSION

The results presented demonstrate a consistent and progressive evolution of the Child and Adolescent Psychiatric Emergency Service of Oporto, closely aligned with the development of the specialty itself and with broader social, institutional, and epidemiological transformations over recent decades. Since its establishment in 1992, this service has responded to a growing need for structured assessment and intervention in psychiatric crises during childhood and adolescence.

Historical analysis shows that the implementation of child and adolescent psychiatric emergency care in Oporto occurred at a time when recognition of child and adolescent psychopathology was still consolidating within the national context. The transition from an initial open-access model integrated within pediatric emergency services to a specialized referral-based system reflects progressive clarification of emergency criteria and improved articulation across levels of care. This evolution enabled optimization of resources, enhanced clinical safety, and improved continuity of care, without compromising access for situations requiring timely intervention.

Caseload analyses over time reveal a sustained increase in emergency episodes, particularly among adolescents. This trend is consistent with national and international literature and does not appear to directly reflect a proportional increase in severe psychopathology, but rather a convergence of factors including greater awareness among families and healthcare professionals regarding mental health problems, lower tolerance for emotional distress, and persistent difficulties in timely access to specialized outpatient care. The progressive reduction in hospitalization rates following emergency episodes observed in more recent studies suggests improved capacity for crisis containment and therapeutic guidance within emergency settings, as well as reinforcement of intermediate responses such as crisis consultations.

The predominance of referrals related to behavioral disturbances, anxiety symptoms, and suicidal or self-injurious behaviors underscores the clinical complexity of cases seen in child and adolescent psychiatric emergencies. These presentations often reflect prolonged emotional distress that becomes exacerbated at specific developmental stages or in response to precipitating factors, requiring specialized assessment capable of integrating individual, familial, and contextual dimensions. In this regard, Child and Adolescent Psychiatric Emergency Services play a central role in risk assessment, diagnostic clarification, and implementation of appropriate care plans, including referral within the mental health care network [10].

The COVID-19 pandemic unequivocally reinforced the relevance of these services. The initial decrease in emergency utilization followed by a sharp increase after the lifting of lockdown measures [9] suggests a worsening of emotional distress among children and adolescents following prolonged social isolation, disruption of routines, and limited access to outpatient mental health care.

Overall, these findings support Child and Adolescent Psychiatric Emergency Services as a

structural component of the child and adolescent mental health care network. Beyond immediate crisis response, these services facilitate specialized assessment, risk management, and appropriate referral, contributing to the reduction of unnecessary hospitalizations and promotion of earlier, more effective interventions.

LIMITATIONS

This study has several limitations that should be considered when interpreting its findings. Its historical-descriptive and reflective design, based primarily on documentary analysis and previously published data, does not allow for causal inferences or hypothesis testing. The caseload analysis relies on studies conducted in different time periods with varying methodologies and organizational contexts, limiting direct comparability over time.

Some historical information is derived from clinical testimonies and institutional communications, which may be subject to recall or interpretative bias. Additionally, the study focuses on a single service, without systematic comparison with other child and adolescent psychiatric emergency services in Portugal or integration of multicenter data, thereby limiting generalizability and comparative analysis of different organizational models.

Finally, the assessment of the impact of the COVID-19 pandemic reflects a relatively recent period, precluding comprehensive evaluation of its long-term consequences on demand and organization of pediatric mental health emergency care.

CONCLUSION

The Child and Adolescent Psychiatric Emergency Service of Oporto represents a paradigmatic example of the evolution of child and adolescent mental health care in Portugal. Its history reflects the progressive recognition of childhood and adolescent psychopathology and the need for structured responses to psychiatric crises, integrated within hospital and community care networks.

The analyzed data demonstrate a sustained increase in demand for these services. Accumulated experience over more than three decades highlights the essential role of Child and Adolescent Psychiatric Emergency Services in risk assessment, therapeutic orientation, and articulation with outpatient and community care, functioning as a true safety net for children, adolescents, and their families.

The impact of the COVID-19 pandemic further reinforced the need for robust, accessible, and well-integrated Child and Adolescent Psychiatric Emergency Services capable of responding to abrupt fluctuations in demand and contexts of heightened emotional vulnerability. Maintaining and strengthening these services through specialized human resources, continuous training, and clear referral pathways constitutes a clinical and public health imperative.

This history is not confined to the past; it asserts itself as a living present and a challenge for the future, underscoring the importance of ensuring urgent, safe, and humane mental health care for children and adolescents. Investment in mental health at early stages of life remains a fundamental pillar in promoting long-term well-being.

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C 5.4. COMMUNICATION – FULL ARTICLE

The Pioneers of Urology in Porto

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ABSTRACT: This article explores the emergence and consolidation of urology as a distinct medical specialty in the city of Porto, within the broader institutional development of hospital care and medical education in northern Portugal. Beginning with the historical context of the Hospital de Santo António and the Medical-Surgical School of Porto, the study highlights the progressive differentiation of urological practice from general surgery during the late nineteenth and early twentieth centuries. Particular attention is given to the contributions of key figures who shaped the discipline locally. Carlos José de Azevedo Albuquerque is identified as a pioneering surgeon whose early work on urinary tract endoscopy demonstrated a level of technical and scientific advancement comparable to contemporary European practice. The article also examines the institutional role of Roberto Frias, the first professor responsible for the teaching of Clinical Urology after the creation of the Faculty of Medicine of Porto in 1911, despite not being a specialist in the field. The subsequent development of the specialty is analyzed through the career of Óscar Moreno, who received specialized training in Paris and later established dedicated urology services at the Hospital de Santo António, significantly improving clinical practice and teaching conditions. By tracing these trajectories, the study illustrates how the institutionalization of urology in Porto resulted from the interaction between individual initiative, international influences, and local healthcare structures, contributing to the modernization of Portuguese medical practice in the early twentieth century.

KEYWORDS: Urology, History of Medicine, Porto, Medical Education, Portugal

HISTORICAL AND INSTITUTIONAL BACKGROUND

The care of the sick and the needy in the city of Porto dates back to the beginnings of the Portuguese nation and of the town itself, which was granted a Royal Charter in 1123. Since the Middle Ages, the city had dozens of hostels and charitable care centres, but the first major hospital only emerged in 1605, when the Albergaria de Roque Amador was replaced by the D. Lopo de Almeida Hospital [1,2].

With the growth of the city, this new hospital quickly proved insufficient to treat the expanding population, which led to the creation of the Santo António Hospital. Its first stone was laid on 15 July 1770, and it received its first patients on 18 August 1799. The construction of the hospital faced major financial difficulties and, by 1824, only about half of the original project had been completed [1,2,3].

On 25 June 1825, by decrees of Costa Cabral, the Royal School of Surgery of Porto was created, leading to the integration of the surgeons of the Santo António Hospital into the staff of this institution, which operated in the north wing of the hospital. Owing to inadequate teaching conditions, it was always the ambition of the

Medical-Surgical School to have its own facilities, which was achieved in October 1883, when the school moved to a building located opposite, on the grounds of the former Convento do Carmo. Despite this, it continued to occupy some wards of the Santo António Hospital, a situation that persisted until the inauguration of the São João Hospital on 24 June 1959 [1,2].

In Portugal, the specialty of Urology was only recognised after the establishment of the Republic in 1910, being officially instituted by the Decree-Law of 22 February 1911, which reorganised higher education and transformed the Medical-Surgical Schools of Lisbon and Porto into Faculties of Medicine. This decree already included the existence of a chair of Clinical Urology. The new Faculty of Medicine of Porto continued to operate in the facilities of the former Medical-Surgical School [4,5].

Thus, although formal teaching of Urology in Porto was only established in 1911, with the creation of the Faculty of Medicine and the corresponding chair, urological pathology had received considerable attention from its physicians since the beginning of the Medical-Surgical School. Numerous surgical interventions were performed and described, and urological topics were frequently addressed in doctoral dissertations.

THE EMERGENCE OF UROLOGY IN PORTO

Several names stood out during this period, with publications mainly dedicated to hypogastric lithotomy [6]. However, the surgeon who definitively demarcated Urology from General Surgery in Porto was Carlos José de Azevedo Albuquerque, with the publication in 1903 of a remarkable treatise of around six hundred pages on endoscopy of the urinary tract. In this work, he described with great clarity urinary pathology, diagnostic methods and several personal studies, demonstrating that, in the last quarter of the nineteenth century, what was best known at European level was already being practised in Porto [6].

Azevedo Albuquerque was born on 7 August 1874, on Fogueteiros street, in the heraldic house of his parents, currently the headquarters of the Cooperativa Artística Árvore. He graduated from the Medical-Surgical School of Porto on 14 January 1903 [7]. In his inaugural dissertation, entitled *Endoscopia do Aparelho Urinário: Urethroscopia, Cystoscopia, Catheterismo Cystoscópico dos Ureteres,* he defended the value of clinical observation and the importance of the modern endoscopic method in the study of diseases of the urinary tract, recognising that "...such an exploration may be carried out through the natural passages, by manoeuvres relatively harmless to the patient... but the endoscopic method is not limited to simple visual inspection of the state of the urethra and bladder; it allows the exploration to be taken further and provides better conditions for the study of diseases of the ureters and kidneys... Initiating and testing an absolutely new method, which includes different instruments, of more or less delicate construction and technique, I did not spare detailed descriptions, even if tedious, so that the manoeuvres might be properly performed, which from the outset must be conducted rationally" [8].

Among the many relevant aspects of his work, particular note should be made of the 15 cases of study and treatment of the kidney and ureters carried out up to 1901, the publication of which is remarkable at a time when ureterorenoscopy was not yet developed [6].

This surgeon achieved great national renown and was appointed Head of Clinic of the chair of Clinical Surgery of the Medical-Surgical School in a session of the School Council on 12 March 1907. He unofficially began teaching Urology to fifth-year medical students, a role he maintained until 1911 [7].

The creation of the Faculty of Medicine of Porto in 1911 led to the establishment of the chair of Clinical Urology. The School Council entrusted its teaching to Professor Roberto Frias, in accumulation, as he was already the holder of the chair of Clinical Surgery. It should be noted that this professor had already been providing theoretical and practical teaching on diseases of the kidneys and urinary tract for several years at the former Medical-Surgical School.

It is observed that the chair of Urology remained vacant due to the absence of a specialist, with teaching ensured by Roberto Frias and his assistants Carlos Fortes, Sebastião Lopes and João Couto Nobre. Strangely, the most notable surgeon in the field, Azevedo Albuquerque, was not invited to assume the chair of Urology, which constituted a significant gap in securing a qualified lecturer.

This fact becomes even more enigmatic given that, in 1910, Azevedo Albuquerque had been invited by Roberto Frias to operate on urological patients at the Ordem da Lapa. However, with the implementation of the Faculty of Medicine in 1911, Azevedo Albuquerque abandoned teaching and subsequently his medical career itself, retiring to Condeixa-a-Nova. There he married the great-granddaughter of the Count of Podentes and came to reside in the Palace of the Counts of Podentes, which

remains the property of the family to this day. According to some colleagues, these decisions may have resulted from the diagnosis of a renal tumour.

CONSOLIDATION OF THE SPECIALTY IN THE TWENTIETH CENTURY

Roberto Belarmino de Rosário Frias (1853–1918), a native of Goa, where he completed his secondary education in 1870 and attended the course in Theology at the Diocesan Seminary, returned to Portugal to continue theological studies at the University of Coimbra. However, he chose to study Law and later Medicine. Faced with family disapproval, the allowance that financed his studies was suspended, leading him to settle in Porto, where he graduated from the Medical-Surgical School of Porto. He completed his degree with the inaugural dissertation *O Crime: Apontamentos para a Sistematização da Criminalidade* (1880)[7,9].

He continued his training in the hospitals of Paris, London and India, a country where he lived between 1882 and 1887 and where he taught for two years at the Goa Medical School. He was appointed demonstrator lecturer of the surgical section by decree of 26 May 1887, taking office on 15 July of the same year. In 1895 he was promoted to substitute lecturer and, in 1898, to full lecturer of the 5th chair, Operative Medicine, transferring in the same year to the 9th chair of Clinical Surgery. In 1890 he was also appointed auxiliary lecturer of the Physical-Chemical Sciences at the Industrial and Commercial Institute of Porto, becoming full lecturer of the 8th chair, Mineralogy and Geology, in 1905 [7].

He went down in history as the first professor of the clinical chair of Urology, which he taught between 1911 and 1916, despite not being a urologist.

In 1916, due to illness – having contracted typhus during his clinical practice – Roberto Frias requested his replacement from the Council of the Faculty of Medicine of Porto, suggesting the name of Óscar Moreno.

Óscar Moreno (1878–1971), a native of the parish of Vitória in Porto, attended the Medical-Surgical School and, in 1906, left for Paris, where he worked at the Hospital Necker and in the Venereology services of the hospitals of Saint-Louis, Ricord and Saint-Lazare, obtaining his specialisation in Urology there. It was during this period that he prepared, with Léon Ambard, his thesis *Exploração Funcional dos Rins*, presented in 1911 and approved with the grade of 20 values [10,11,12].

Óscar Moreno repeatedly complained about the deficiencies of facilities and equipment, stating that "... the teaching of Urology was for many years carried out within the Hospital de Santo António, in cramped premises belonging to other services and without dedicated equipment, obliging me to make daily use of the most basic urological material from my own private arsenal...". In 1925, the Mesa da Santa Casa created special Urology services within the hospital grounds, allowing for the proper installation of outpatient specialty services and better teaching conditions [13].

Thus, contracted by the Board of the Santa Casa da Misericórdia, Óscar Moreno created, in 1925, at the Santo António Hospital, a consultation service for special Urology services, of which he became director. He served as director of the Urology and Venereology Service for 29 years, retiring in 1948 after 32 years as a professor at the Faculty of Medicine. He died in Porto on 16 April 1971, remaining in history as the first director of the Urology Service and as a central figure in the progress of Urology in the city of Porto.

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SPECIAL ISSUE

2nd LUSO-GALICIAN CONGRESS ON THE HISTORY OF MEDICINE | **DOI:** https://doi.org/10.57849/ulisboa.fm.jscml.Supl.10044.2026

JORNAL DA SOCIEDADE DAS CIÊNCIAS MÉDICAS DE LISBOA

C 5.5. COMMUNICATION – ABSTRACT

The Evolution of Spine Surgery

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ABSTRACT: The evolution of Spine Surgery has been shaped by centuries of progression towards a highly advanced, image-guided, minimally invasive and microscopic techniques. Early foundations were laid by ancient civilizations, namely by the Egyptian Smith Papyrus, who first recognized spinal injuries. The 19th century marked the birth of modern Surgery with the advent of anesthesia, antisepsis and radiography, enabling simple spinal decompression procedures. At the beginning of the 20th century, spinal fusion was introduced for deformity and infection, while mid-century innovations in instrumentation, biomechanics and microsurgery transformed spinal stabilization and decompression. The late 20th century brought important technological breakthroughs, including CT and MRI, and the introduction endoscopic procedures that improved diagnostic accuracy and promoted reduced morbidity. Early in our century, the advancement of navigation systems, robotics and artificial intelligence have revolutionized precision and safety in Spine Surgery.

In the near future, emerging technologies, such as augmented reality or artificial intelligent-based approaches, and regenerative medicine promise a new era of personalized, data-driven spinal care. The evolution of spine surgery continues to promote innovation aimed at optimizing outcomes, preserving motion and enhancing quality of life.

KEYWORDS: Spine surgery; History of surgery; Spinal instrumentation; Minimally invasive surgery; Surgical innovation

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JORNAL DA SOCIEDADE DAS CIÊNCIAS MÉDICAS DE LISBOA

E1 ORAL PRESENTATION – ABSTRACT

Tracing Ancient Therapies: The Use of Silver and Mercury

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ABSTRACT: Knowledge of health and disease in past populations relies partially on the study of therapeutic practices. When available, such information is mainly derived from contemporary documentary and iconographic sources, which do not allow to determine whether these practices were effectively applied to specific individuals. The present study aims to identify possible treatments involving silver and mercury in children.

A total of 100 individuals, dated between the 17th and 19th centuries, and aged between 0 and 11 years at death, exhumed from the Convent of São Domingos (1241–1834) in Lisbon, were analysed using a portable X-ray fluorescence (pXRF) device. Of these, 97 individuals presented traces of silver and 26 of mercury. Both elements showed similar concentrations in the cranium and long bones. Silver concentrations decrease with age at death, whereas mercury levels showed no variation in relation to age.

Some individuals exhibited macroscopic lesions compatible with diagnoses of scurvy, rickets, or syphilis. Considering that this Convent was located near the Royal Hospital of All Saints, it is plausible that these children may have received medical care. Silver was used in the treatment of conditions such as gastroenteritis, gonorrhoea, syphilis, or neonatal ophthalmia, while mercury was employed in the treatment of syphilis, fevers, pediculosis, and as a laxative, sedative, or paediatric analgesic, among other uses. Maternal ingestion of these substances, or their transmission through wet nursing, also constitutes a plausible hypothesis.

As the applied technique does not involve bone destruction, it proves to be particularly promising for the study of therapeutic practices in the past.

KEYWORDS: 17th and 19th centuries, Convent of São Domingos, Lisbon, Mercury, pXRF, rickets, Royal Hospital of All Saints, scurvy, Silver, syphilis.

2nd LUSO-GALICIAN CONGRESS ON THE HISTORY OF MEDICINE | **DOI:** https://doi.org/10.57849/ulisboa.fm.jscml.Supl.10028.2026

JORNAL DA SOCIEDADE DAS CIÊNCIAS MÉDICAS DE LISBOA

E2 ORAL PRESENTATION – FULL ARTICLE

Early Background of Mermaids: From Myth to Science

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ABSTRACT: Mermaids – enigmatic beings that are half human and half fish – can be traced back to the Neolithic period, which spanned approximately 10,000 BC to 2,000 BC during the worship of the Mother Goddess. Understanding this historical context can shed light on the medical and cultural connections surrounding these creatures. This essay examines compelling evidence of mermaids from Bronze Age civilisations, particularly in Assyrian-Babylonian, Hindu, and later Graeco-Roman cultures, as well as their representation in medieval bestiaries. It also discusses a connection between mermaids and a rare congenital malformation known as sirenomelia or caudal regression syndrome in modern medical classifications. The study is based on medical observations and research conducted from the 16th century onward, which began to identify congenital malformations among so-called "monsters", as science shed new light on ancient myths.

KEYWORDS: Mermaids, Sirenomelia; Caudal regression syndrome; Monsters; History of Mythology, Medical and Cultural Anthropology

INTRODUCTION

This essay explores the connection between fish-human beings and sirenomelia, framed within the context of medical observations and research on congenital malformations in human infants. Sirenomelia is a rare condition characterised by the fusion of the legs, as well as abnormalities in the genitourinary and gastrointestinal systems, lumbar-sacral spine anomalies, and agenesia or atresia of the kidneys. The condition affects males more frequently than females, with an incidence ratio of approximately 2.7:1. While the exact prevalence is unknown, it is estimated to occur in about 1 in 60,000 to 100,000 births.

MATERIALS AND METHODS

We examined depictions of fish-human creatures from the Neolithic period onward and consulted historical, mythological, and iconographical sources, as well as medical reports on sirenomelia dating back to the 16th century. Historically, such conditions have been labeled "monsters" – a term derived from Latin meaning "to show" or "to warn," often interpreted as divine punishments or warnings against nefarious events .

The earliest Fish-Goddesses

The earliest artistic expressions of Homo sapiens, dating back 120,000 years, mark the emergence

of symbolic thought used to convey knowledge. Understanding their role in early societies is essential. Representations of women are more common than those of men, highlighting the significant role of women in these cultures.

Enigmatic figures of mermaids are prominent in the Neolithic cult of the Mother Goddess, which existed between 10,000 and 3,000 BC across various cultures worldwide. Several animals were associated with her, with fish symbolising the Goddess's uterus as the source of life and fertility. During the Epipaleolithic and Mesolithic periods (around 10,000 BC), the Fish Goddess was revered as the Mistress of Life and Death, embodying generative and nurturing forces. Archaeological excavations in various locations have uncovered traces of her cult, linked to symbols representing her renewing womb or the egg, which signifies the source of life. Neolithic art also showcases rare malformations, such as duplications of the head, including conditions like Parapagus Dicephalus (double heads) and Diprosopus (facial duplications). These depictions indicate an awareness of congenital malformations. One of the earliest examples of a Fish Goddess was discovered near Trento, Italy, dating back to approximately 7000 BC. This artefact, known as the Venus of Gaban, is a bone sculpture depicting a human upper body with the abdomen and legs represented as a fish tail. (Fig. 1)

Fig 1. Venus from Gaban. Neolithic goddess statuette from the Gaban shelter (front and back). Trento, Italy, dated ca 5000-4700 BC. Picture by Paolo Chistè/Laboratorio Bagolini, Università di Trento. Form Benedetti et alii (2012). Science Museum. Trento. Italy.

At the end of the Calcolitic (3500-2300 BC) in the Oriental states, a region encompassing ancient Mesopotamia, there was an acceleration of mental progress, leading to the invention of writing systems, such as Sumerian cuneiform and Egyptian hieroglyphs. In India, a similar development occurred.

With the rise of male warrior dominance during the Bronze Age, masculine and warrior symbolic values gradually replaced the feminine worldview. Even as the patriarchal ideology gained ground, faint traces of the Mother Goddess and her realm of feminine deities and rituals managed to survive. In 1919, William Crook's meticulous and thorough research traced vestiges of surviving cults and rituals of the Mother Goddess in the Bronze Age (c. 3200-900 BC). The archaeological complementary findings leave no doubt about the existence of a former gynaecocracy. However, feminine deities became more slender and were often depicted as the wives of the emerging male gods, reflecting the growing dominance of male figures in society (Fig. 2a). A representation similar to the previous one is a surviving vestige of the Mother Goddess iconography. (Fig. 2b).

This figure from the Indus Civilization, Pakistan, dating from 3000-2500 BC, also possibly provided some of the earliest prototypes for mermaids in later mythologies. This image takes us to the pathological anatomy books, since, although embelished, it recalls sirenomelia or mermaid syndrome as hypothesised by the German gynaecologist Christian Friedrich Schatz (1841-1920). (Fig. 2c).

Congenital malformations in the Assirio-Babilonian culture

Magic was a fundamental aspect of early societies in their pursuit to uncover the secrets of the supernatural world. The Babylonians and Assyrians established early centres of magic based on astrology, hepatoscopy, and the registration of human and animal congenital malformations, which they interpreted as birth omens due to their rarity and the weight of their significance in foreshadowing the future of the royal family. They established rules and structured systems that significantly influenced later traditions, including those of Graeco-Roman authors as well as Jewish and Arab cultures, thereby creating a profound and enduring legacy. The series *Šumma Izbu* (*If a malformed fetus)*, recorded on clay tablets from the library of Ashurbanipal (reigned 669–631 BC) but dates

Fig. 2a – Seated Mother Goddess. Terracotta sculpture. 3000–2500 BC. Indus civilization, Mehrgarh style, Pakistan (Baluchistan). Metropolitan Museum of Art, New Yorl. Accession Number: 2001.305.

Fig. 2b – Seated Mother Goddess. Terracotta sculpture. 3000–2500 BC. Indus civilization, Mehrgarh style, Pakistan (Baluchistan). Metropolitan Museum of Art, New Yorl. Accession Number: 2001.306.

Fig. 2c – Sirenomelia in Schatz, F. 1901, p. 12, fig. 8.

from at least 2000 BC, constitutes the earliest catalogue of human and animal malformations in human history. Many of these descriptions correspond with common congenital disabilities, including conjoined twins, possibly conveying the earliest written record of sirenomelia. These records from cuneiform tablets were translated into English by the Assyriologist Morris Jastrow (1861-1921):

"If a woman gives birth to a bird or a fish-being, the rule of the king will prosper, and the gods will return to the land."

While most malformations were seen as negative, this particular one is considered a good omen, possibly because it retains connections to the beneficial worship of the Mother Goddess. These traits may have influenced later myths featuring mermen. The emerging patriarchal narratives in various cultures often drew inspiration from symbols associated with the Mother Goddess, transforming these symbols into ideologies that favored male dominance. This cultural shift was instrumental in shaping mythological figures like the first merman. Among the notable figures in the earliest pantheon of Sumerian-Assyrian deities is Ea (known as Oannes in Greek), the sea god. (Fig. 3a). Additionally, Oannes, or Bel, is represented alongside two fish gods on an Assyrian carnelian cylinder from Sir William Ouseley's collection (1767-1842). (Fig. 3b).

Mermen and Mermaids in the Greek Mythology and the Middle Ages

Merman appear in Greek mythology as sea gods or monsters, as depicted on a Greek limestone pediment fragment from c. 300 BC from Tarento, South Italy. (Fig. 4a) Sirens (or mermaids) appear more frequently as birds with human features in Greek mythology than as half fish-human creatures, as depicted on a Greek terracotta bowl from Boeotia, dating to the mid-6th century BC: (Fig. 4b)

During the Middle Ages in Europe, mermaids take full shape as half human-half fish creatures, as depicted in medieval bestiaries. A notable example is a miniature created between 1230 and 1240, which reflects their Greek misogynist origins. Like in the Odyssey where their appearance is not described, mermaids were portrayed as beautiful and alluring but also dangerous to men, as depicted on a manuscript from the British Library: (Fig. 5)

Fig. 3a – The sea-god Ea (Oannes in Greek). Illustration from Brockhaus and Efron. Jewish Encyclopedia (1906—1913).

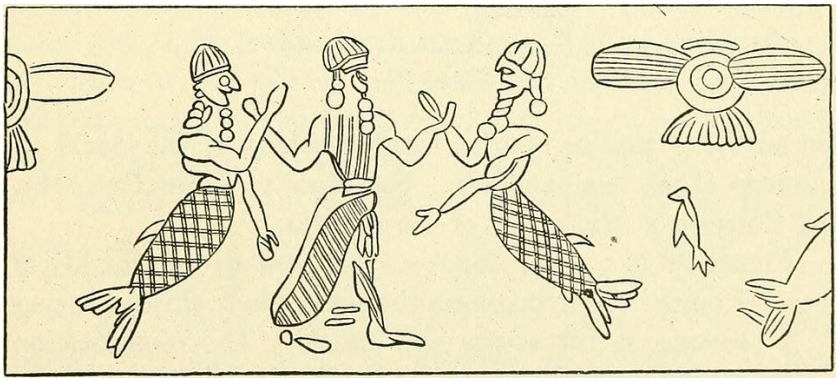


Fig. 3b – Oannes or Bel and two fish gods. Assyrian carnelian cylinder. Collection of Sir William Ouseley. In Inman. 1922, p. 67.

Fig. 4a – Sea god- Greek limestone pediment fragment from c. 300 BC. Tarento, South Italy. Metropolitan Museum of Art, New York. Object Number:1992.11.1.

Fig. 4b – Siren. Greek terracotta bowl from Boeotia (Greece). Mid-6th century. Metropolitan Museum of Art, New York. Object Number 51.11.9.

Fig. 5 – Mermaid and sailors protecting themselves from her alluring chant. Medieval manuscript. British Library. Accession number: Harley 4751, f.47v.

"A Siren, portrayed with a fish's tail like a mermaid, lulls sailors to sleep with her song. One sailor stops his ears with his fingers to avoid hearing her."

Mermaids and medical science

In 1542, the physician Nicholaus Rocheus (active in mid-16th century) made a remarkable discovery on a stillborn child. He identified a malformation that resembled the figure of a mermaid. This finding not only brought the mermaid from the realm of myth into the fields of medicine and natural sciences but also represented a significant shift in how myths could be interpreted through a scientific lens. Rocheus, inspired by the mythical figures of sirens or mermaids, named this malformation as sirenomelia (of which there are various forms, depending on the degree of limb fusion). His description reads as follows:

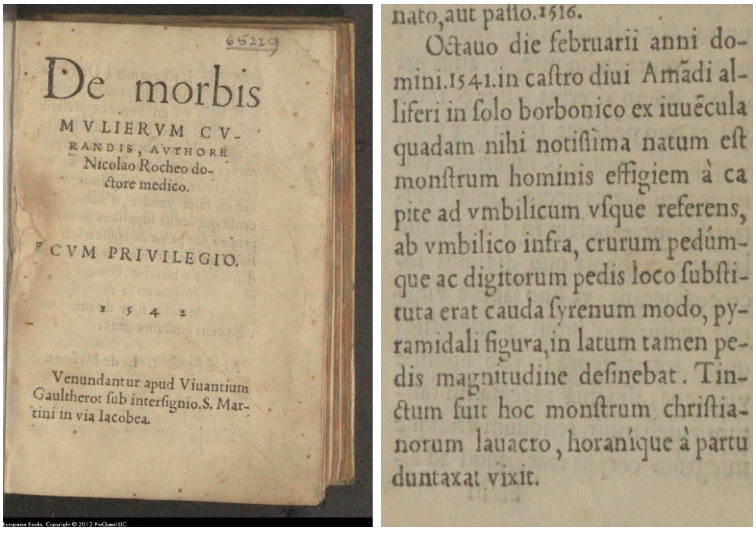
"On the eighth day of February in the year of our Lord, 1541, in the castle of the noble Amadi of Allifer in the Bourbon country, from an unknown provenance, a monster was born, resembling a man from the head to the navel, ***and from the navel below, with a tail like a mermaid, in the place of legs, feet, and toes, in the shape of a pyramid, but as wide as the size of a foot.*** *This monster was baptised and lived only for an hour after birth."*

("Octauo die februarii anni domini.1541.in caſtro diui Amãdi alliferi in folo borbonico ex iuuẽcu quadam nihi notiſiima natum eſt monſtrum hominis effigiem à capite ad vmbilicum vſque referens, ***ab vmbilico infra, crurum pedúmque ac digitorum pedis loco ſubſtituta erat cauda ſyrenum modo, pyramidali figura, in latum tamen pedis magnitudine definebat.*** *Tinaum fuit hoc monſtrum chriſtianorum lauacro, horaníque à partu duntaxat vixit.")* (Fig 6a, Fig. 6b)

Étienne Geoffroy Saint-Hilaire (1772-1844) was a French zoologist, anatomist, and teratologist, recognised as a significant figure at the Muséum National d'Histoire Naturelle in Paris. He made noteworthy contributions to comparative anatomy, palaeontology, and embryology, earning him great respect in the scientific community.

Interestingly, his contemporaries honoured him with a publication featuring him on the cover, with a thoughtful expression and his left hand resting on his chin. He holds some books in his left hand, and beneath them lies a sculpture of the Greek goddess Artemis from Ephesus, notable for its rows of multiple breasts, which have often been interpreted as inspired by ectopic breasts. (Fig. 7) This sculpture exemplifies how mythological figures were subject to teratological and symbolic interpretations, illustrating the intersection of art, mythology, and medical symbolism in ancient religious contexts.

Etienne's son, Isidore Geoffroy Saint-Hilaire (1805-1861), is regarded as the founder of teratology. He coined the term "teratology," derived from the Greek


De morbis
MVLIERVM CV-
RANDIS, AVTHORE
Nicolao Rocheo do-
ctore medico.
CVM PRIVILEGIO.
1542
Venundantur apud Viuantium
Gaultherot ſub interſignio S. Mar-
tini in via Iacobea.

nato, aut paſſo. 1516.
Octauo die februarii anni do-
mini. 1541. in caſtro diui Amãdi al-
liferi in ſolo borbonico ex iuuẽcula
quadam nihi notiſſima natum eſt
monſtrum hominis effigiem à ca
pite ad vmbilicum vſque referens,
ab vmbilico infra, crurum pedúm-
que ac digitorum pedis loco ſubſti-
tuta erat cauda ſyrenum modo, py-
ramidali figura, in latum tamen pe-
dis magnitudine deſinebat. Tin-
ctum fuit hoc monſtrum chriſtia-
norum lauacro, horaníque à partu
duntaxat vixit.

Fig. 6 (a) and 6 (b) – Rocheus, N. 1542. De morbis mulierum curandis. Paris: V. Gaultherot. Titelpage and detail of p. 203.

words téras (meaning "sign sent by the gods") and logos (meaning "speech" or "discourse") and published the treatise *Histoire générale et particulière des anomalies de l'organisation chez l'homme et les animaux* between 1832 and 1837. His work was a collaborative effort involving physicians and veterinarians who sent him malformed specimens of both humans and animals for identification and description. Additionally, he developed the first classification system for congenital malformations. Within this system, he described conditions such as symeles monstrosities and sirenomelia, related to ancient depictions of mermaids or sirens.

He described various forms of symeles:

"Of all the monsters in this family, symeles are those that deviate least from the standard type: it is in them especially that the pelvis is always more or less imperfect and deformed in symeles. It is constantly very narrow and elongated, the pubic bones being incomplete and directed downwards, and sometimes touching at the back, near their articulation with the ileum, as well as at their symphysis, which gives the upper opening of the pelvis the shape of a figure eight. These modifications of the pelvis, the median tendency of the two limbs, are the most manifest and appear in the simplest form."

He further described the anomalies of pelvic organs and sirenomelia as the most severe and rare form:

"*Although the various symeles monstrosities have never been distinguished from one another, and the name "siren" could not therefore be specifically attributed to the form I am about to discuss, it can be said to belong to it in a special way, and that it has already received the sanction of usage. The monsters of this group are indeed those that the ancient authors almost all called sirens, by a a comparison whose accuracy cannot be denied: for we will find in them almost exactly the mixed and bizarre forms that Homer and Ovid lent to their sirens, and which Horace recalled in this oft-quoted verse: "Desinit in piscem mulier formosa supernè."* (The beautiful woman above ends up as a fish.·)

He provided drawings of five types of symeles, distinguished by the fusion of the legs and the presence or absence of abdominal and pelvic organs, including agenesis or atresia. One of these types is known as sirenomelia (Fig. 5). Notably, the infant in the drawing is male (Fig. 8)

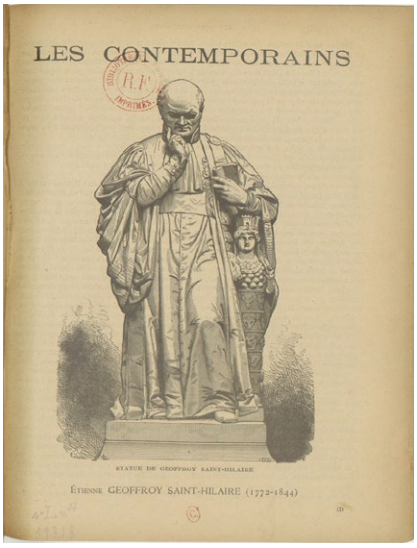


Fig. 7 – Statue of Etienne Geoffroy Saint-Hilaire (1772-1849) by Elias Robert (1821-1874), 1857 in Fulgence Girard. Le Monde illustré n°19, p. 4, le 15/08/1857.

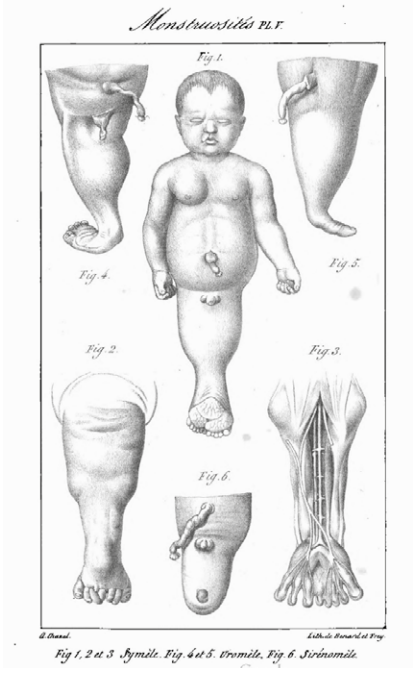


Fig. 8 – Symeles and sirenomelia in Saint Hilaire, I. G. 1837. Tome 3. Planche V.

August Förster (1822-1865), a physician and a professor of Pathological Anatomy at Würzburg University, in the chapter focusing on conditions such as deficiency, atrophy, and abnormal smallness of the lower extremities, followed Saint Hilaire's descriptions, with minor changes in terminology, describing sympus, sympodia, and siren formation. He added more related cases and the illustrations of Figures 4 and 8–15 on Plate X. It's notable how fig, 1 resembles the Venus from Gaban from Fig.1 . (Fig. 9)

In our time, the condition was called "syndrome of caudal regression" by pediatric surgeon Bernard Duhamel with 5 types. Type 5 represents the most extreme form of this condition. Most reported cases have resulted in the infants dying shortly after birth due to visceral anomalies that are incompatible with life.

Tamene et al. documented a unique case of a child with Type I sirenomelia, the mildest form, who survived for 11 months and underwent successful separation of the lower limbs, as well as perineal reconstruction.

Cases of sirenomelia are featured in Portuguese and foreign Anatomy Museums. (Fig. 10)

CONCLUSION

The connection between mermaids and sirenomelia is clear, highlighting the significance of studying congenital malformations and suggesting that this condition may have influenced the myth. The anomalous and curious have undoubtedly captivated human curiosity since early times, ultimately leading to the knowledge we now recognise as science. As stated by the physicians George Milbry Gould (1848-1922) and Walter Lyttle Gould and Walter Pyle (1871-1921):

Truly it has been said, facts are stranger than fiction. In monstrosities (…), we seem to catch forbidden sight of the secret work-room of Nature, and drag out into the light the evidences of her clumsiness, and proofs of her lapses of skill, — evidences and proofs, moreover, that tell us much of the methods and means used by the vital artisan of Life, — the loom, and even

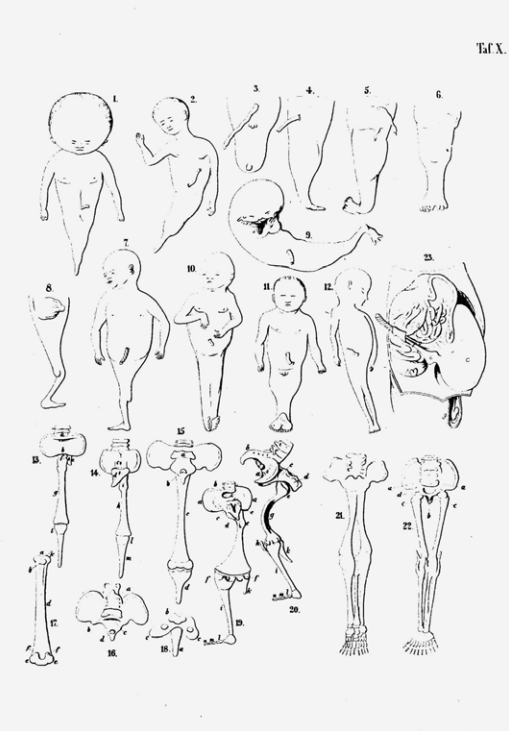


Fig. 9 – Sympus, sympodia, and siren formation. In Förster, A. 1865, Tafel X.

Fig. 10 – A: Sirenomelia. Museum of Anatomy. Faculty of Medicine, University of Porto. Photo credit José Paulo Andrade; B: Sirenomelia. RSU Anatomy Museum. Riga, Latvia. Photo credits: Ieva Libiete.

the silent weaver at work upon the mysterious garment of corporeality.

In our day the taste seems to be insatiable, and hardly any medical journal is without its rare or unique case, or one noteworthy chiefly by reason of its anomalous features. A curious case is invariably reported, and the insertion of such a report is generally productive of correspondence and discussion with the object of finding a parallel for it.

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JORNAL DA SOCIEDADE DAS CIÊNCIAS MÉDICAS DE LISBOA

E3 ORAL PRESENTATION – FULL ARTICLE

Egas Moniz and his Time

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ABSTRACT: Egas Moniz was a prominent figure in the portuguese medicine and politics in the first half of the 20th century. His activity as a physician reached its peak in two major developments: cerebral angiography in 1927 and the surgical treatment of certain psychoses (leucotomy) in 1935. In the political arena, he held important positions as ambassador to Madrid, Minister of Foreign Affairs, and finally president of the Portuguese delegation to the Versailles Peace Conference. In this work, we present the environment in which he grew up and studied, while also revealing some of his personal tastes and interests.

KEYWORDS: Egas Moniz, angiography, leucotomy, Peace Conference in Versailles, Avanca

Early Life and Education

António Caetano Abreu Freire Egas Moniz (1874-1955) was born in the small village of Avanca, in a rural region of central Portugal: Estarreja, Aveiro, by the Atlantic coast.

He belonged to a family of petty rural aristocracy, economically decadent, of the type still predominant in Portugal in the second half of the 19th century, adherents of a conservative regime under strong influence of the Catholic Church.

His paternal grandfather had been a military commander in the so-called liberal fights for the absolutist faction in which the two brothers, heirs to the throne of Portugal, confronted each other: D. Miguel, defender of an absolutist regime, and D. Pedro IV, defender of constitutional rights of the French model, who would emerge victorious in 1834, after about six years of armed conflict.

On the other hand, his uncle and godfather, who was responsible for his primary education, was a priest and viewed with sympathy the young man's embrace of ecclesiastical life.

He then pursued secondary studies at the College of São Fiel near the town of Fundão, run by Jesuit priests, which was a top-level educational institution, distinguished in its scientific and humanistic components.

At this school, Egas Moniz's youth was overshadowed by several family tragedies. The most smashing was the death of his 16-year-old sister, a victim of tuberculosis.

Here, he had a definitive crisis of faith, as he neither understood nor accepted that an omniscient and benevolent God would allow his sister to pass away, still in early adolescence, without sins, while lapsed sinners continued to live with impunity.

Throughout his academic career at the University of Coimbra, he continued to lose close family members, eventually finishing his studies alone.

After graduating, he married the woman who would be his lifelong companion, Elvira, and began his path towards a doctorate, followed by a competitive examination for a professorship at the University of Coimbra.

For academic purposes, he presented the works "Sexual Life - Anatomy" and "Sexual Life - Pathology" (1901-1903), daring topics for the time, even in academic circles, but which he would publish in successive commercial editions over 30 years, becoming an editorial success with 18 editions.

Political Career and Academic Development

Right after graduating, he began his political career, being elected deputy to the monarchist national assembly in January 1900.

During the following years, he managed to reconcile politics in Lisbon with teaching at the University of Coimbra and attending some periods at the Neurology Clinic of the Salpêtrière in Paris.

In 1911, with the establishment of the republican regime and the creation of the Universities of Lisbon and Porto, he founded the clinic and university chair of neurology at the Santa Marta University Hospital in Lisbon.

He maintained political activity, with some interruptions, reaching its peak between 1918 and 1919 when he served as ambassador in Madrid, followed by that of Minister of Foreign Affairs, ending with the presidency of the Portuguese delegation to the Peace Conference in Versailles.

After resigning from these positions in March 1919 due to the political turmoil in Lisbon, he subsequently abandoned active politics, dedicating himself to clinical practice and teaching.

Scientific Achievements and Medical Legacy

Following his withdrawal from active politics in 1919, Moniz entered the most productive phase of his scientific career, which led to the development of cerebral angiography (1927) and, later (1935), to the surgical treatment of certain psychoses (leucotomy), work that earned him the Nobel Prize in Physiology or Medicine in 1949, shared with the Swiss physiologist Walter Hess.

During his time in Paris, he associated with the great names of French neurology, who were also prominent figures in world neurology, especially Joseph Babinski, with whom he was a close friend.

In the Parisian environment, he honed his taste for the most refined cuisine, becoming a true gourmet. To that end, he had the good fortune to frequent the home of Joseph Babinski, where his brother Henry held sway, being a renowned master of French cuisine with published works.

Cultural Interests and Historical Context

Egas Moniz never left his homeland, Avanca, always showing it great affection. He rebuilt the old family home, the "Casa do Marinheiro" (sailors House) and spent the months of August and September there.

In Avanca, he always fought for its progress. Thus, he developed, with some friends, a dairy industry that would be incorporated into the well-known Nestlé company and which remains active to this day.

It was also his love for his homeland that led him to become close to the work of the writer Júlio Diniz (1839-1871), the greatest exponent of Portuguese Romanticism.

In fact, the writer spent several periods, in the last years of his short life, in the village of Ovar, near Avanca, where he sought rest and healthy air in his fruitless struggle against tuberculosis, which would defeat him at the age of 31.

Júlio Diniz described in his works, especially in "As Pupilas do Senhor Reitor" (1866), the rural environment and the characteristics of the population of the Ovar region, which were the same as that of neighboring Avanca.

Thus, who better than Júlio Diniz, with his sensitivity and mastery, to describe and praise these aspects so dear to Egas Moniz?

For this reason, the Portuguese neurologist, who was born 3 years after the writer's death, dedicated himself to the study of his life and work, as if seeing himself reflected in it.

His investigations included contact with survivors who lived with the writer, and he also collected, together with the family, unpublished works, mainly from his adolescence and early adulthood. This collection resulted in a book of over 600 pages, which constitutes the most complete biography of Júlio Diniz.[1]

A somewhat surprising aspect is the fact that the book was published in 1924, a time of multiple activities in which Egas Moniz divided his efforts between directing the University Clinic of Neurology and the research that led to the discovery of cerebral angiography.

1 *Júlio Dinis e a sua obra. Egas Moniz Livraria Civilização – Editora, Porto 1924

Political environment post-war in Portugal

After leaving Versailles and returning to Portugal (1919), he faced an extremely unstable political situation that would culminate in the establishment of the "Estado Novo" (New State), under the direction of Salazar, with whom he had to live for the rest of his life.

Egas Moniz's political past always provoked the aversion of the Salazar regime, causing resistance to the development of his Neurology Service and the lack of support he always suffered for his scientific work.

Despite this, he was respected for his medical and intellectual work, but with some detachment, which also included many colleagues who coexisted well with the status quo.

More than 150 years after his birth, he remains a recognized figure in the international medical community. While leucotomy is now of interest as a reference in the history of psychiatry, angiography is currently undergoing new developments with its application in vascular pathology, particularly in the treatment of the acute phase of some cerebrovascular accidents.

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JORNAL DA SOCIEDADE DAS CIÊNCIAS MÉDICAS DE LISBOA

E4 ORAL PRESENTATION – FULL ARTICLE

Evolution of Stomatology through the Museum of Dentistry of Catalonia

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ABSTRACT: Background and objectives: From ancient Greece we have inherited the first texts written by physicians who passed on their knowledge of pathologies affecting the oral region. The aim of this work is to highlight the continuity in the transmission of dental knowledge within medicine. **Materials and Methods:** The material for this text has been obtained from previous publications by the author, which demonstrate the contribution of stomatology and stomatologist physicians, and relate it to the items catalogued in the Museum of Dentistry of the College of Dentists and Stomatologists of Catalonia. **Results:** There are two parallel paths in oral health care between medicine and dentistry. Physicians and surgeons have always contributed their knowledge of oral pathologies as part of the overall set of human diseases. The development of stomatology took shape at the Stomatological Institute of Barcelona and at the Hospital of the Holy Cross and Saint Paul in Barcelona, until the teaching of stomatology was established at the Complutense University of Madrid and, years later, at the University of Barcelona. **Conclusions:** There were periods of interaction between medicine and dentistry from the second half of the 19th century onward, with alternating phases until the present day, when dentistry has become part of the Health Sciences. Portugal, along with some European countries such as Belgium, continues to uphold the tradition of stomatology at a high level.

KEYWORDS: History, Stomatology, Dentistry Museum, Catalonia

BACKGROUND AND OBJECTIVES

The health of the earliest settlers was in the hands of those who stood out most due to their ability to dominate the group, and their therapeutic tools were none other than intuition and empiricism. Over time, the settlers organized and defended themselves. When the group had an army engaged in combat, they needed someone capable of treating wounds and diseases. In *History of Spanish Military Health* (Barcelona, 1994), José María Massons describes how physicians and surgeons accompanied the troops, prepared to act, even to extract teeth. Physicians first and surgeons later would follow a line of progressive advancement based on the study of diseases and their relationship with the oral cavity. They possessed extensive knowledge of the oral cavity.

MATERIALS AND METHODS

The material for this text was obtained from previous publications by the author, which demonstrate the contribution of stomatology and stomatologist

physicians, and relate it to the items catalogued in the Museum of Dentistry of the College of Dentists and Stomatologists of Catalonia.

RESULTS

Hippocrates: In *Aphorisms,* he addresses disorders resulting from tooth eruption. In *Epidemics*, he describes a suborbital abscess and a case of gangrene of the mouth with destruction of the palatine bone, collapse of the nose, and ocular complications. In *Joints*, he describes the temporomandibular joint and its dislocation. Mandibular fractures are classified according to displacement, and he recommends restoring the joint using different types of retention: dental ligatures and leather bandages. Regarding dental therapy, he discusses the fixation of loose teeth using a gold wire attached to adjacent teeth.

Avicenna: In *The Canon*, he describes dental anatomy and physiology. He gives advice on avoiding the mistake of extracting the wrong tooth and recommends performing extractions with great care to prevent mandibular fractures and the spread of infections. He dedicates a chapter to dental prophylaxis, recommending rubbing the teeth with rose oil before bedtime. He also describes an original toothpaste made of salt, roasted or not, mixed with honey.

Galen: He believed that teeth received their nerves from the brain and that caries were caused by a corrupt humor. For pain, he recommended hot applications and, if pain persisted, drilling the tooth and inserting appropriate remedies through the opening using a probe. If this failed, extraction became necessary, requiring the precise application of a mixture of pyrethrum and vinegar to loosen the tooth so it could be easily removed, using forceps or even fingers. Professor Dr. Amélia Rincón illustrates the thumb and index finger as the first forceps on the cover of her book *History of Medicine*.

Arnau de Vilanova: In "*Breviarium Practicae",* he explains that toothache sometimes originates from a cerebral defect caused by cold humors. Rahola reviewed, in the Archives of the Crown of Aragon, a 15th-century printed volume compiling his works. From the medical section, there are two books on cosmetics – *De ornatu mulierum* and *De decoratione* – from which recipes are extracted to whiten teeth and color and strengthen gums. In *Regimen sanitatis ad regem Aragonum,* he states that upon waking, it is necessary to clean and rub the teeth, as dirt causes halitosis. To keep teeth healthy, he recommends cleaning them twice a month with wine in which thyme root has been boiled.

Guy de Chauliac: The Inventory or Collection of Surgery, or *Chirurgia Magna*, is divided into seven books. Book IV deals with aphthae; Book V explains mandibular fractures; and Book VI addresses diseases other than ulcers, such as those affecting the tongue and teeth, and describes the various stages of caries: pain from cold and heat, spontaneous pain, and pustules on the gums.

However, there was another non-medical approach that in the Middle Ages generally had very low social recognition. These practitioners acted as itinerants, known as "money hunters". They performed juggling and sleight-of-hand shows to attract audiences to their barber-surgeon trade, carrying out minor cures and selling a universal remedy – the "Universal Panacea" – which may have contained cocaine. Among their skills was tooth extraction, although patients sometimes died.

During the 14th century, under the reign of King Peter III "the Ceremonious" (1319–1387) of the Crown of Aragon, the specialty of the *Mestre Caxaler* appeared: Master of the Jaw or Molar. This was a period of intellectual optimism and confidence in human capabilities. Cities emerged, General Studies were created, and Thomas Aquinas influenced the intellectual world by synthesizing Aristotelianism and Platonism. These practitioners had no regulated studies, only practice, but they had to pass a qualification test. Their professional activities included cleaning teeth, treating pain, and performing extractions, sometimes combined with bloodletting. They also used empirical procedures, some of which were later scientifically validated.

Parallel Path (18th–19th Centuries)

A new period began in the 18th century with the creation of Colleges of Surgery to train surgeons for the Navy. Three types of qualifications were awarded: Latin Surgeons, Vernacular Surgeons, and Bloodletters. Bloodletters represented the first step toward professionalization, moving from empiricism toward formal study and regulation. This century marked the renaissance of dentistry, parallel to surgical advances, driven largely by European influence, particularly from French and Italian professionals.

From this point onward, a duality emerged: Stomatology versus Dentistry. The profession followed two parallel paths – physicians and surgeons with academic training, and bloodletters with empirical backgrounds. In 1875, a true attempt at regulation occurred with the creation of the title of Dental Surgeon. Later, at the turn of the century, the title of Odontologist was established, followed by the creation of formal schools and hospital-based teaching.

From Stomatology to the New Dentistry

With Spain's entry into the European Economic Community, the official degree in Dentistry was created. Laws enacted in 1986 and 1994 structured the dental health professions, marking a complete transformation of oral health education and practice. The shift from stomatology as a medical specialty to dentistry as an independent degree represented a significant change in both training and professional qualification.

Corollary

From an empirical standpoint, dentistry followed two parallel paths – medical and dental – reaching high levels of technological development. Whether physicians or not, dentists have consistently sought to belong to the health sciences, maintaining mixed professional titles such as dental surgeon in the United States and Europe, or medical dentist in Portugal.

CONCLUSIONS

There were periods of interaction between medicine and dentistry from the second half of the 19th century to the present day, during which dentistry became integrated into the Health Sciences. Portugal, along with some European countries such as Belgium, continues to preserve the tradition of stomatology at a high level.

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JORNAL DA SOCIEDADE DAS CIÊNCIAS MÉDICAS DE LISBOA

E5 ORAL PRESENTATION – ABSTRACT

The Admission of Surgeons in the Line Regiments of the Portuguese Army: From 1763 to 1816

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ABSTRACT: The Author reviews the admission procedures for Surgeons-Majors (Cirurgiões Mores) and Assistant-Surgeons (Cirurgiões Ajudantes) of the Line Regiments, regarding credentials evaluation and assessment exams, types of contracts, as well as the evolution of their training, careers and status in the 53 years in question, using various documentation from the Military Historical Archive (in particular the Record Books of the Military Hospitals Department and Regiments) and Agendas and Almanacs from the Army Library, among other sources.

Of different origins, in the middle of the eighteenth century his training was, in most of the surgeons of the Line Regiments, insufficient, to the point that the Count of Lippe assumed: *"Os capitaens devem contentar-se do Cirurgião, que segue a sua Companhia, se fizer a barba aos Soldados todas as vezes, que for preciso; se tomar grande cuidado dos feridos, e enfermos; se conservar na sobordinação que deve; e encher com exatidão as obrigaçoens do seu lugar".*[1] During this period, the surgeon's assistants were «*fatura*» of the surgeon-major[2], that is, he was the one who hired them and paid them for a certain period of years, and it was also he who fired them for incompetence or other justified reason. Consulting the Master Books of the Regiments we find, at the end of the eighteenth century, several assistants hired for periods of 3, 4 or 6 years, as well as some dismissed by the surgeon-major for being unskilled, *"ignorantes na arte da cirurgia e sangria"*[3] or *"mal aplicados e mal conduzidos"*[4] . The surgeon-major of a Regiment, at the time of the Count of Lippe, earned the salary of lieutenant, being graduated to lieutenant in 1805. In that year, it is presumed that the surgeon's assistant was equivalent to 1st sergeant.

The episode in national history that stands out in this period is known as the "French Invasions", and the author demonstrates their importance in the progressive technical requirements in the incorporation of these facultatives, with the creation of the Board Examination of Military Surgeons, thereby increasing the prestige of the class (starting with the proposal of graduation of the surgeon-major to captain and the assistants to lieutenant, in 1810). The

author reproduced on slides, from the *"Relação dos cirurgiões aprovados e reprovados 1810-1813"*[5] , several records of examinees – some approved, others failed (of which several came to be reexamined and approved with distinct careers), others who dropped out – from different origins: from the army and the navy, including sergeants and enlisted men, or civilians.

Later on, from 1816, by British influence (Beresford), army surgeons had increasing institutional preponderance over the physicians since Regimental Hospitals began to be implemented.

In this context, it is not insignificant to note their expressive representation among the founders of the Society of Medical Sciences of Lisbon, in 1822, and of the Royal Schools of Surgery of Lisbon and Porto, in 1825.

KEYWORDS: Surgeons-Majors, Assistant-Surgeons, Admission and Careers, Line Regiments, Portuguese Army

1 "The captains must be content with the Surgeon, who follows his Company, if he shaves the Soldiers as often as necessary; if he takes great care of the wounded and the sick; to keep it in the over-ordination it should; and to fill with exactness the obligations of his place".

2 "«bill»" of the surgeon-major.

3 "ignorant in the art of surgery and bloodletting".

4 "Poorly applied and poorly conducted".

5 "List of approved and disapproved surgeons 1810-1813". AHM, PT/AHM/DIV/1/14/008/08

POSTERS

SPECIAL ISSUE

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JORNAL DA SOCIEDADE DAS CIÊNCIAS MÉDICAS DE LISBOA

P1. POSTER

125 Years Evolution of Portuguese Military Field Medical Equipment

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KEYWORDS: Military Medicine, Field Hospitals, Equipment and Supplies

INTRODUCTION: The medical materials and equipment used in portuguese field hospital deployment infrastructure have different characteristics from those typically used in so-called fixed hospital infrastructures, with desirable characteristics being robustness, compactness, portability, safety, tactical capability, and all-terrain capability.

OBJECTIVE: The objective is to compare the evolution that some of the field medical equipment used by the Portuguese Army has undergone over the last 125 years.

METHODOLOGY: Illustrative comparison of the evolution of materials used in field medical support, as described in 1900, and those currently existing in the Portuguese Army Medical Task Force.

RESULTS: In 1900, Cunha Bellem, in his book, "Le Matériel Sanitaire de L' Armée Portugaise", demonstrated interest in Field Medical Support, valuing the development of military medical materials and equipment. The figures in the Table I illustrate a comparison of some equipment from that time, which was used during World War I, with the ones used currently in the Portuguese Army Medical Task Force.

CONCLUSIONS: In the illustrative comparison, we can understand how some equipment has evolved over time. In tents, there was already a concern for the existence of windows for ventilation and light entering. In the medical equipment, many similarities can be seen, despite the evident changes in the type of materials used (from wood, iron, canvas and leather, it evolved to the use of plastic, stainless steel, aluminum, carbon fiber, synthetic fibers). The major modifications were in the means of vehicle evacuation and the use of container-type structures for the projection of field medical support.
In the recent context of war in Europe, investment in new materials and equipment for military field medicine continues to make sense.

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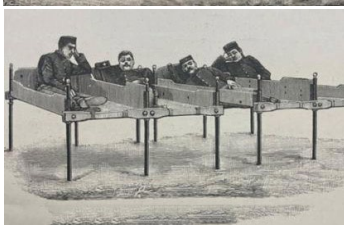
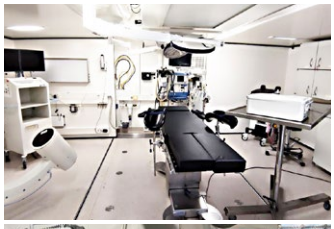
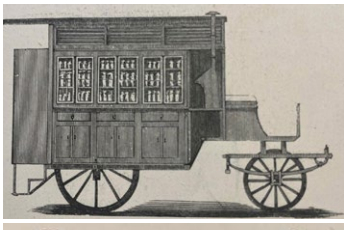
TABLE I. Comparison of field medical equipment: early 20th century (1900) and the current Portuguese Army Medical Task Force.

	PORTUGUESE MILITARY FIELD MEDICAL EQUIPMENT	
	1900	Currently
Hospital tent		
Fixed stretchers		
Surgical stretcher		
Organizing materials		
Bag/Backpack		
Pharmacy		
Wheeled stretcher		
Ambulance		

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JORNAL DA SOCIEDADE DAS CIÊNCIAS MÉDICAS DE LISBOA

P2. POSTER

Insights into Prehistoric Amputations: Surgical Procedures with Medical Purposes?

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KEYWORDS: Prehistoric Surgery, Amputation, Paleopathology, History of Medicine

AMPUTATION DURING PREHISTORY AND IMPLICATIONS

Evidence shows that limb amputation has a much deeper history than traditionally assumed. For decades, the earliest secure examples were thought to date to the Neolithic[1]. However, recent discoveries push the emergence of successful surgical amputation back into the Late Pleistocene (ca. 31,000 years ago). Among others, reliable cases show clean sectioning of bone, structured healing, and absence of infection—indicators of advanced medical knowledge. In addition to later examples from the Holocene, this suggests that prehistoric communities possessed anatomical understanding, effective wound care, and social structures capable of supporting long-term disabled individuals with complex caring behaviour earlier than previously recognized by the History of Medicine.

Prehistoric handprints may also represent finger amputations (Cosquer Cave, France).

Oldest amputation. Extracted from *Maloney et al. (2022)*

LIMITATIONS

Despite its significance, prehistoric amputations remain difficult to study. First, they are extremely rare, limiting comparative analyses and broader interpretations. Second, bone loss due to taphonomic processes (e.g., soil erosion or animal gnawing) can mimic the absence of a limb, requiring careful contextual assessment to avoid misidentification. Third, extensive healing obscures diagnostic features: as bone remodels, cut marks may be erased, preventing identification of anthropic intervention. Finally, determining the cause of an amputation remains challenging. Surgical removal, traumatic injury, infection, and punitive mutilation can produce similar skeletal signatures. These limitations suggest that each case must be analysed individually, combining palaeopathological, contextual, and comparative approaches.

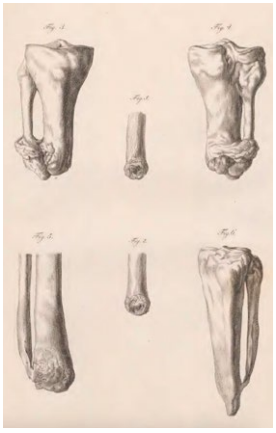
FUTURE DIRECTIONS

Improving our understanding of prehistoric amputations requires advancing methodological and experimental approaches. High-resolution micro-CT allows distinguishing taphonomic damage from remodelling patterns. Comparative reference datasets drawn from historical medical cases will strengthen diagnostic criteria as a necessary referential framework.

Additionally, controlled experiments using replica prehistoric tools on human corpses can replicate amputation techniques and toolmark signatures, providing critical baselines for interpreting archaeological modifications on bone surfaces. These approaches may aid in differentiating accidental trauma from intentional surgery.

As these methods expand, future work will move beyond isolated case studies toward a systematic understanding of early medical practices, enabling accurate identification of prehistoric surgical interventions and their implications for the History of Medicine.

Historical framework



Amputations. Extracted from *Museum anatomicum,* E. Sandifort, 1793

Key prehistoric cases

Left ulna (Ro73-7291) from Roc de les Orenetes (Spain), a potential amputation. The bone and radiological imaging (X-ray and micro-CT) show bone remodeling and no signs of active infection (image after Moreno-Ibáñez et al., 2024).

Experiments

Experimental simulations of prehistoric surgical procedures and observed cut marks (down-right).

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FUNDING

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P4. POSTER

Medicine: A Milestone in the Military Press

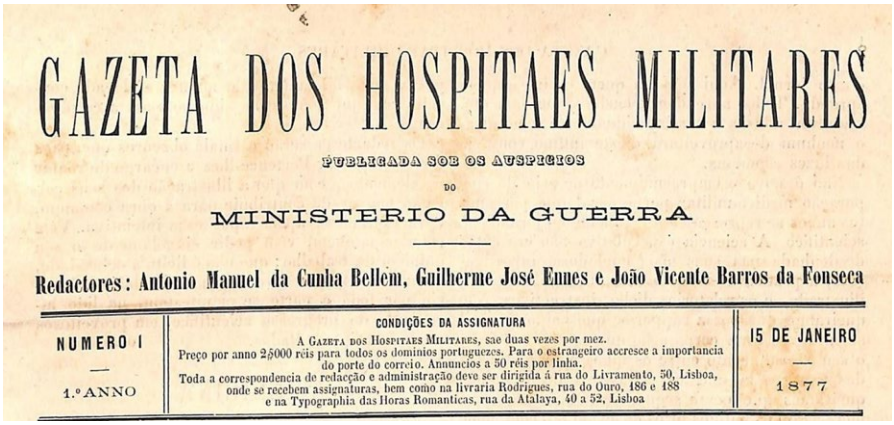
André Albuquerque[1], **Rute Baptista**

[1] Biblioteca do Exército, Portugal

KEYWORDS: Military medicine; Military medical press; History of medicine; Portuguese Army; Army Library collections

MILITARY MEDICAL PRESS
COLLECTION IN BIBLIOTECA DO EXÉRCITO

22 Identified collections	Approximately **450** copies	More than **75.000** pages	Publications since **1854**



GAZETA DOS HOSPITAES MILITARES

PUBLICADA SOB OS AUSPICIOS DO MINISTERIO DA GUERRA

Redactores: Antonio Manuel da Cunha Bellem, Guilherme José Ennes e João Vicente Barros da Fonseca

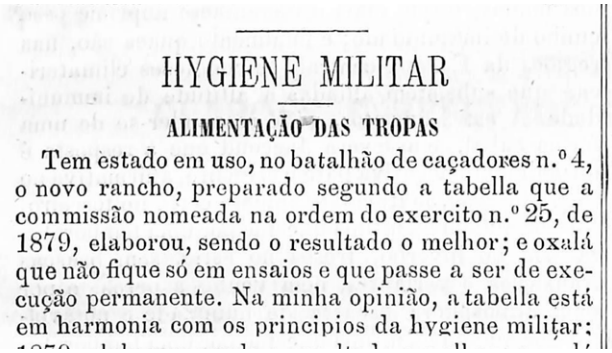
NUMERO 1 — 1.º ANNO

CONDIÇÕES DA ASSIGNATURA

A Gazeta dos Hospitaes Militares, sae duas vezes por mez.
Preço por anno 2$000 réis para todos os dominios portuguezes. Para o estrangeiro accresce a importancia do porte do correio. Annuncios a 50 réis por linha.
Toda a correspondencia de redacção e administração deve ser dirigida á rua do Livramento, 50, Lisboa, onde se recebem assignaturas, bem como na livraria Rodrigues, rua do Ouro, 186 e 188 e na Typographia das Horas Romanticas, rua da Atalaya, 40 a 52, Lisboa

15 DE JANEIRO — 1877

Fig. 1 – ***Gazeta dos Hospitaes Militares***, a newspaper published fortnightly between 1877 and 1882 by the Ministry of War, to disseminate scientific progress and best practices in the field of military medicine and health.



HYGIENE MILITAR

ALIMENTAÇÃO DAS TROPAS

Tem estado em uso, no batalhão de caçadores n.º 4, o novo rancho, preparado segundo a tabella que a commissão nomeada na ordem do exercito n.º 25, de 1879, elaborou, sendo o resultado o melhor; e oxalá que não fique só em ensaios e que passe a ser de execução permanente. Na minha opinião, a tabella está em harmonia com os principios da hygiene militar;

Fig. 2 – In: ***Gazeta dos Hospitaes Militares,*** nº 105, Year 5, 15 may 1881, p. 98. [Army Library: shelf mark 1017/B]

Fig. 4 – ***Revista Portuguesa de Medicina Militar,*** a medical-scientific publication, from the 1953-1995 period, with the objective of diffusing works on military medicine and pharmacy; medical, surgical and specialized clinics; clinical notes; medical and paramedical chronicles.

Fig. 3 – ***Anais do Hospital Militar de Luanda,*** a scientific publication from the 1971-1974 period, with the purpose of disseminating the activities of the Military Health Service and the Armed Forces.

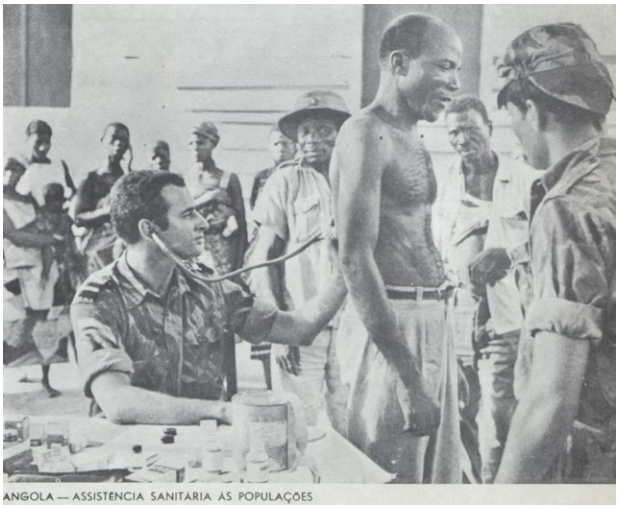
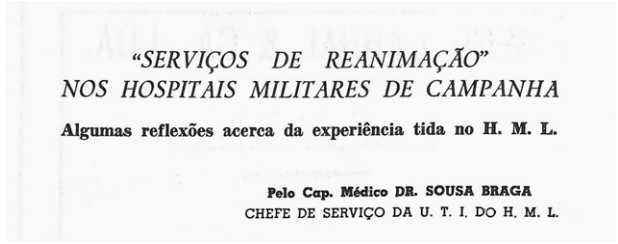


Fig. 5 – **Military Medical Service in the field.** During the Portuguese Colonial War, healthcare professionals from the Armed Forces provided care, vaccines, and assistance to local populations.



"SERVIÇOS DE REANIMAÇÃO"
NOS HOSPITAIS MILITARES DE CAMPANHA

Algumas reflexões acerca da experiência tida no H. M. L.

Pelo Cap. Médico DR. SOUSA BRAGA
CHEFE DE SERVIÇO DA U. T. I. DO H. M. L.

Fig. 6 – In: ***Anais do Hospital Militar de Luanda,*** nº 2-3, vol. IV, 1974, p. 8-14. [Army Library: shelf mark 14687]

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P5. POSTER

Reynaldo dos Santos' Legacy in Portuguese Art: Interdisciplinarity

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[2] Director of the Urology Service – HFAR-PP

KEYWORDS: Reynaldo dos Santos; History of Medicine; Portuguese Art; Interdisciplinarity

I. INTRODUCTION: BRIDGING SCIENCE AND CULTURE

Reynaldo dos Santos (RS) (1872–1970) was a figure defined by intellectual interdisciplinarity, uniquely integrating a distinguished medical career with profound cultural scholarship.

Medical Eminence: Distinguished in Urology, Radiology, and Vascular Surgery.

Cultural Authority: His influence transcended medicine, establishing him as an unavoidable reference in Portuguese historiography and art criticism.

Institutional Roles:

- Founder/President, National Academy of Fine Arts (1937–1967).
- Founder, Portuguese Academy of History (1932).
- President, Lisbon Academy of Sciences (1964–1967).

Intellectual Milieu: Actively associated with leading contemporaries, including Almada Negreiros, Aquilino Ribeiro, Jaime Cortesão, and Raul Brandão.

II. FOUNDATIONAL SCHOLARLY CONTRIBUTIONS

RS's extensive scholarly output focused primarily on the history of Portuguese art, centered around his seminal work: ***Oito Séculos de Arte Portuguesa*** (Eight Centuries of Portuguese Art).

ARCHITECTURE AND STYLE

Monographic Studies: Authored detailed works on the Cathedrals of Lisbon, Évora, and Coimbra, and comprehensive analysis of Regional Architecture (Churches and Chapels).

Monastic Provenance: Investigated the historical origins of the Monasteries of Alcobaça and Batalha, and monuments like the Churches of

Santa Clara and São Francisco (Santarém) and Santa Iria do Olival (Tomar).

Manueline Focus: His primary research focus was the Manueline Style.

- Key Attribution (1922): Identified Francisco Arruda as the architect of the Tower of Belém.
- Maritime Art: Published a major treatise in 1952 on art related to the Maritime Discoveries.

SCULPTURE AND DECORATIVE ARTS

Comprehensive Analysis: Published *Sculpture in Portugal*, analyzing ornaments, capitals, statuary, and *presépios* (e.g., Machado de Castro's nativity scenes).

Emphasis on Funerary Art: Gave particular attention to tomb sculpture, exemplified by the tombs of D. Pedro and Dona Inês at Alcobaça.

Stylistic Research: Studied the Indo-Portuguese Style and, with D. Irene Quilhó dos Santos, investigated Portuguese Goldsmithery and Faience (16th and 17th centuries).

III. CRITICAL DISCOVERIES AND ATTRIBUTIONS

RS's work led to crucial findings concerning the provenance and authorship of major Portuguese artworks.

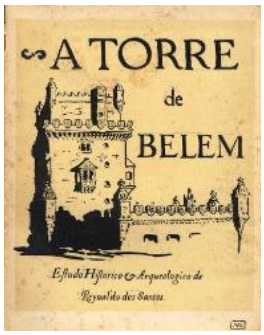
Pastrana Tapestries (1915): Jointly with José de Figueiredo, discovered the Pastrana tapestries – attributed to Nuno Gonçalves's circle – which depict the taking of Arzila. Note: The circumstances under which these large 15th-century Flemish works left Portugal remain an ongoing historical enigma.

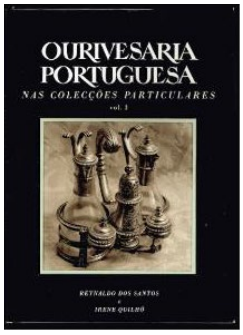
Álvaro Pires d'Évora (1921): With Virgílio Correia, identified the altarpiece *Our Lady with the Child and Musician Angels* in Pisa, significant for bearing the painter's unique Portuguese signature.

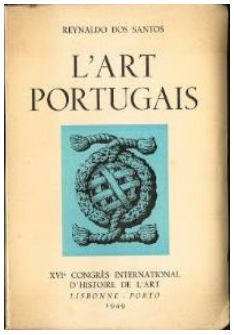
Nuno Gonçalves: Dedicated meticulous scholarly inquiry to the painter and the highly debated Panels of the Adoration of St. Vincent.

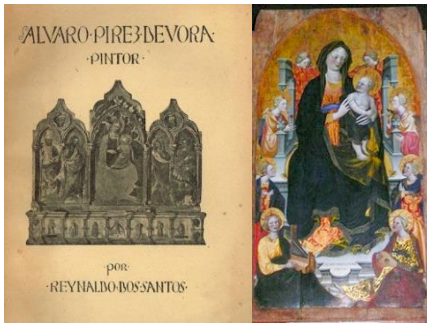
IV. CONCLUSION

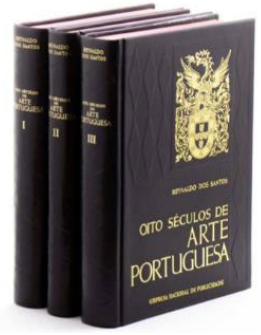
Reynaldo dos Santos successfully synthesized high-level scientific practice with authoritative cultural investigation, leaving an enduring and multi-faceted scholarly legacy that reshaped the understanding of Portuguese art history.











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P7. POSTER

History of Palliative Care: From Charity to the Science of Care

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KEYWORDS: Palliative Care; History of Medicine; End-of-Life Care; Medical Ethics; Humanization of Care

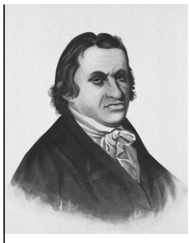
I. INTRODUCTION

The emergence of modern hospitals shifted care from the family setting to highly technical and specialized environments, reinforcing a certain degree of institutional paternalism. This movement fostered a new way of looking at dying, involving patients, families, professionals, and society, and paved the way for the development of palliative care as an ethical and humanized response to the end of life. We propose to recall the individuals and institutions that most contributed to the evolution we know today in this field.

II. HISTORICAL MILESTONES

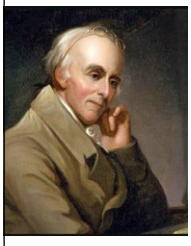
Francis Bacon (1561–1626), one of the founders of Modern Science, was a pioneer in linking physicians responsible for the care of terminally ill patients. He proposed principles of Palliative Medicine, arguing that dying in peace is a source of happiness, and introduced the term "euthanasia" into the English language as a synonym for a good physical and psychological death.

Thomas Browne (1605–1682) and Theophile Bonet (1620–1689) were two physicians who, through their example, advocated for medical care for incurable patients.



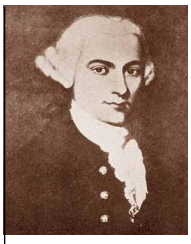
Samuel Bard (1742–1821) wrote the first treatise on medical ethics in the United States. He demonstrated a profound humanization of care for terminally ill patients and advocated the training of new graduates in this field.

John Gregory (1724–1773) considered the fourth dimension of medical practice to be a good death, but left this dimension unexplored.



Benjamin Rush (1746–1813) believed in the existence of a contract between the physician and the patient in which the subject was human life. He advised against declaring incurability and instead encouraged the preservation of hope.

John Ferrier (1761–1815) advocated minimizing pain and promoting absolute rest for the patient, and condemned cruel practices of stimulation.



Thomas Percival (1740–1804) published *Medical Ethics,* an ethical code guiding physicians' conduct that influenced subsequent ethical codes and future medical associations.

Thomas Gisborne (1758–1846), a medical ethicist, condemned all forms of medical paternalism that conceal the truth and emphasized the importance of a physician's presence alongside a clergy member in patient care.

Robley Dunglison (1798–1869) demystified the terror associated with death through physiological knowledge. It was the physician's duty to guide the patient toward euthanasia, or a good death.

Alfred Worcester (1858–1951) was a strong advocate of the physician–patient relationship and one of the leading proponents of undergraduate education in palliative care.

Walter Alvarez (1884–1978) published *Care for the Dying.* He highlighted the value of palliative care, lamented the lack of attention to this field in medical literature and practice, and criticized the excessive focus on curative medicine.

Elisabeth Kübler-Ross (1926–2004), during hospital rounds, is renowned for her work *On Death and Dying,* which sought to raise awareness of and promote understanding of the emotional needs of terminally ill patients (through writings, lectures, seminars, and accredited courses).

Edward Heyman (1904–1974), in his work *You Are Standing at the Bedside of a Patient Dying of Untreatable Cancer,* presented the essential components of care for terminally ill patients.

Cicely Saunders (1918–2005), the first physician dedicated to palliative care with experience in hospital centers. She was the founder and first Director of St. Christopher's Hospice.

"The care of the dying demands all that we can do to enable patients to live until they die. It includes the care of the family, the mind, and the spirit as well as the care of the body."

III. CONCLUSIONS

For centuries, patients had little voice, and many end-of-life decisions were made paternalistically. However, some professionals consistently advocated for the importance of patient information and autonomy.

The evolution and internationalization of palliative care have brought a profound shift from medicine focused solely on disease to a person-centered approach. Understanding this journey helps us promote a more humane and responsible healthcare.

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P8. POSTER

The Pedagogy of Hygienism in Santiago de Compostela (1891–1923)

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[2] BA in Geography and History and MA in European Medieval Studies.

KEYWORDS: hygiene, cleanliness, pedagogy, poverty, schooling.

1. INTRODUCTION

The social distinction derived from adopting, or failing to adopt, hygienic behaviors deepened the divide between social classes. The upper classes assumed the responsibility of instilling proper habits. In Santiago, this process took place in private schools connected to the economic kitchen.

2. OBJECTIVES

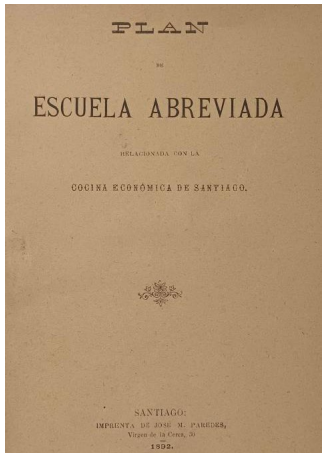
Clarify the role of education in promoting hygienic behaviors and assess its impact.
Identify the model implemented in Compostela and the pedagogical methodology applied.

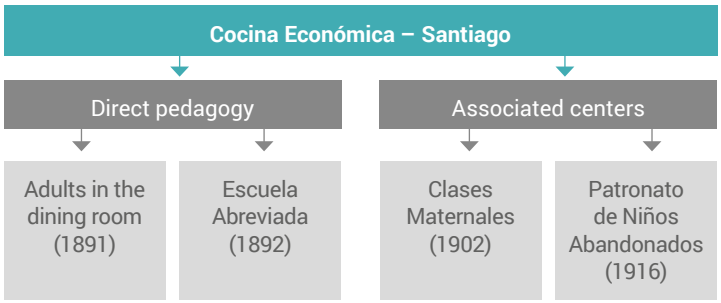
3. METHODOLOGY

Data collected from USC Historical Archive, Diocesan Historical Archive and Economic Kitchen Archive.

4. RESULTS

The emergence of private educational initiatives at the end of the nineteenth century played a key role in spreading habits of cleanliness and hygiene among laborers and the poor. Most of these initiatives were linked to the Cocina Económica de Santiago from 1891 onward.





Constructivist methodology (Pestalozzi and Froebel):

Arrangement of materials: The *Escuela Abreviada* included among its equipment a heated bath, sponges, towels, and washbasins. To learn how to use them, children first had to become familiar with these items and grow accustomed to their presence. The same occurred years later in the *Clases Maternales*, which introduced toilets at a time when most private homes lacked them.

Guided use: Teachers not only modeled proper behavior but accompanied students as they practiced hygienic techniques. The *Clases Maternales* dedicated time before meals to going to the public fountain and teaching proper handwashing. Instruction also covered the use of utensils and table clearing. Childcare guidance for first-time mothers was included: newborn hygiene and proper feeding.

Establishment of routine: Continuous repetition, gradual withdrawal of teacher support, and explanations on the sanitary benefits and social implications of hygienic practices.

Generalization: Once hygienic behavior was established, students were encouraged to transfer these habits to their family environment.

Positive reinforcement: Annual awards were given to those who stood out for personal and domestic cleanliness.

Second phase:

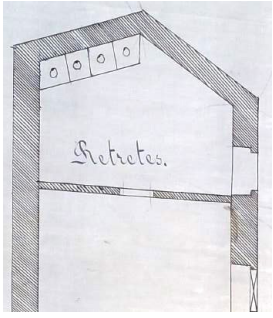
Mandatory application to avoid regression, the Patronato de *Niños Abandonados* prohibited entry to anyone who did not observe proper bodily and clothing hygiene, installing a washroom at the classroom entrance. Some schools created their own "little clothing rooms," where students could periodically replace worn garments.

5. CONCLUSIONS

Private pedagogical and charitable initiatives in turn-of-the-century Compostela instilled the importance of personal and communal hygiene as a means of improving health and quality of life.

Through the planning of specific teaching strategies, the behavior of the lower and working classes was progressively shaped.

Growing social concern for hygiene and cleanliness led these topics to be incorporated as subjects of study, taught according to new learning theories, unlike public schools, still anchored in outdated models.



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P9. POSTER

The XV International Congress of Medicine (Lisbon, 1906)

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KEYWORDS: History of Medicine; International Medical Congresses; Portugal; Miguel Bombarda

The XV International Congress of Medicine took place in Lisbon in April 1906, succeeding the previous meeting held in Madrid in 1903. Its organization in Portugal was largely due to the determination of Professor Miguel Bombarda, professor at the Escola Médico-Cirúrgica de Lisboa and a prominent political figure.

The International Congresses of Medicine began in Paris in 1867 and were held every three years in several cities across Europe and the United States. The last congress took place in 1913. These meetings were considered the most important international medical gatherings of their time, particularly in Europe.

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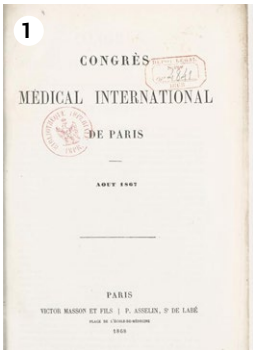
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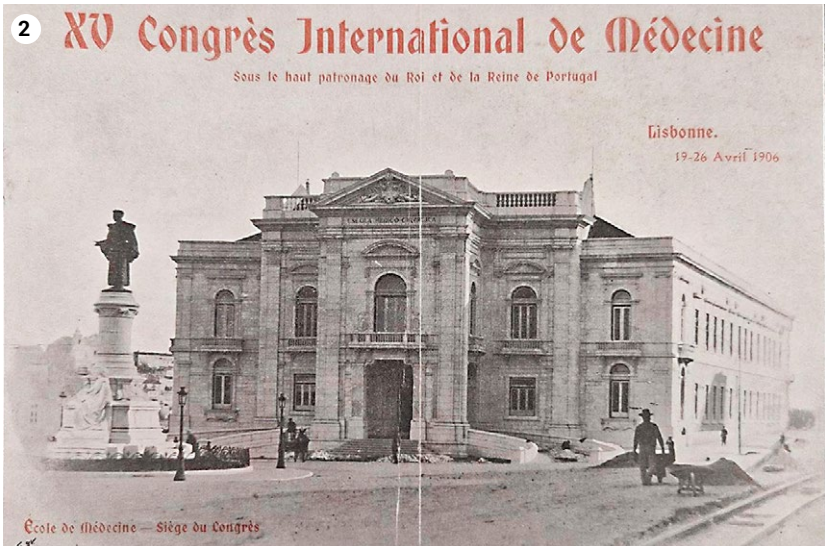

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1. Title page of the proceedings of the International Medical Congress, Paris, August 1867 (published in 1868) .

2. Illustrated plate from the official programme of the XV International Congress of Medicine (Lisbon, 1906), showing the École de Médecine, congress venue.

3. Miguel Bombarda (1851–1910), promoter of the XV International Congress of Medicine

4. Congress participant medal of the XV International Congress, designed by the French neurologist and sculptor Paul Richer (1849–1933).

5. Projections Room, a hightly successful innovation.

6. Committee of ladies in charge of accompanying the wives of the congress participants. (They themselves were wives of the organizers of the Congress)

7. Openning Ceremony of the XV Congress presidid over by the Portuguese Royal Family. (April, 19 - 1906). Sociedade de Geografia de Lisboa (The Lisbon Geographical Society).

8. Over 2000 delegates participated, coming from almost all over the world. Including several Nobel Prize laureates.

9. Professor Miguel Bombarda received several honors for the excellence and success of the Congress. He was assassinated at his office by a mentally ill person on October 3, 1910.

The XV International Congress of Medicine marked a turning point in Portuguese medicine, fostering international contacts and opening the way to modernity.

After the Lisbon Congress in 1906, two more meetings were held, in Budapest in 1909 and in London in 1913. The next congress was planned for Munich in 1917, but the outbreak of the First World War prevented its realization, dictating its end. At the same time, the rapid development of Medicine made it increasingly difficult to encompass all areas within a single triennial event. It was the end of an era.

SPECIAL ISSUE

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JORNAL DA SOCIEDADE DAS CIÊNCIAS MÉDICAS DE LISBOA

P10. POSTER

The Old and Rare Books Collection: A Treasure of Medical History at the Faculty of Medicine, University of Lisbon

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KEYWORDS: Old and rare medical books; Medical heritage collections; History of medicine; Faculty of Medicine of the University of Lisbon; Vesalius.

CONTEXT

Over the years, Library of the Medical School of the University of Lisbon (FMUL) has incorporated the personal collections of physicians and professors associated with the School, who made a significant contribution to medical education by donating their personal libraries. Of particular importance is the collection bequeathed by the physician Simão José Fernandes, a distinguished bibliophile, in the mid-nineteenth century. This collection can be identified by an ownership stamp on the title pages of several hundred volumes.

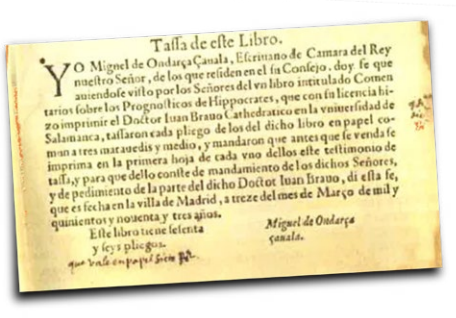
THE OLD AND RARE BOOKS

The collection consists primarily of works in the medical sciences by Portuguese and foreign authors, leading figures of their respective periods, such as Andreas Vesalius, Herman Boerhaave, Bernardo Santucci, Pedro Dufau, Soares Franco, Francisco José de Almeida, and Jacob de Castro Sarmento, among others. These are complemented by numerous editions of works from the Hippocratic Corpus, as well as writings by Galen, two of the earliest known treatise writers in the medical art.

Among the most valuable items in the collection is a copy of the second edition (1555) of *De humani corporis fabrica* by Andreas Vesalius. One of the founding figures of modern anatomy, Vesalius produced anatomical representations and descriptions of the human body which, nearly five centuries later, continue to impress for their scientific rigour. These images are far closer to modern anatomical atlases than to the medieval representations to which they are chronologically nearer.

THE PAST IN THE PRESENT

The Library is committed to increasing the visibility of this historical heritage of FMUL, thereby promoting the memory of medical education and of the institution itself. To this end, it relies on new information and communication technologies, which provide invaluable support in the preservation and dissemination of this heritage. The Library's website, under the section "Digitised Collections", offers open access to a selection of digitised works.



Taſſa de eſte Libro.

Yo Miguel de Ondarça Çanala, Eſcrimano de Camara del Rey nuestro Señor, de los que reſiden en el ſu Conſejo, doy fe que auiendole viſto por los Señores del vn libro intitulado Comentarios ſobre los Pronoſticos de Hippocrates, que con ſu licencia ha imprimir el Doctor Iuan Brauo Cathedratico en la vniuerſidad de Salamanca, taſſaron cada pliego de los del dicho libro en papel coman a tres maraudis y medio, y mandaron que antes que ſe venda ſe imprima en la primera hoja de cada vno dellos eſte teſtimonio de taſſa, y para que dello conſte de mandamiento de los dichos Señores, y de pedimiento de la parte del dicho Doctor Iuan Brauo, di eſta fe, que es fecha en la villa de Madrid, a treze del mes de Março de mil y quinientos y nouenta y tres años.

Eſte libro tiene ſeſenta y ſeys pliegos.

Miguel de Ondarça Çanala.

"Old books exert a strange fascination for me - their smell, their feel, their history; wondering who might have owned them, how they lived, what they felt."

Lauren Willig

Hippocrates: Between Myth and Reality

For historians of medicine, the so-called *Corpus Hippocraticum*, comprising some seven dozen works, should not be attributed to a single author bearing this name and originating from the Greek island of Cos. Tradition has attributed to this figure the foundations of medical rationalism and, when in medical schools around the world students read, for the first time, a version of his oath with minor adaptations to the original text, they also pay tribute to the Greek genius. Among the various works of the aforementioned *Corpus*, the Library–CDI holds a copy of the *Hyppocrates Luzitano*, or *Aforismos of Hyppocrates*, translated from latin Francisco Daniel Nogueira.

HIPPOCRATES, c. 460–377 BC. FMUL: RES. 2119.

At the Beginnings Of Modern Anatomy. *De Humanis Corporis Fabrica*

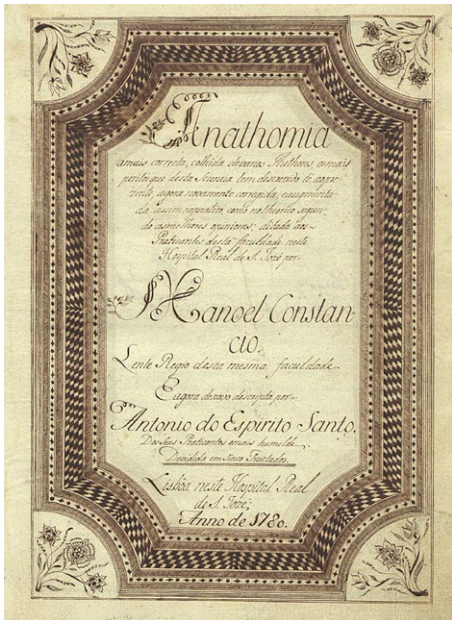
Among the most valuable items is a copy of the second edition (1555) of *De humani corporis fabrica* by Andreas Vesalius. Vesalius produced anatomical representations and descriptions of the human body which, nearly five centuries later, continue to impress by their scientific rigour and bear a far closer resemblance to modern anatomical atlases than to the medieval representations to which it is chronologically closer.

VESALIUS, Andreas, 1514–1564. FMUL: IA/RES. 339.

A Journey into Eighteenth-Century Medical Education

Among the many works of interest, one may also find an eighteenth-century medical sebenta, entirely handwritten, which provides privileged insight into the medical teaching of the period and into the lessons delivered by its masters. It is the only known surviving copy and was reproduced in facsimile several decades ago.

CONSTÂNCIO, Manuel, 1725–1817. FMUL: RES. 2647.



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P11. POSTER

On the Use of Physical Therapies: The Holo-Electron Violet Radiation Device

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KEYWORDS: Physical therapy devices; Violet radiation; Electrotherapy; Medical instrumentation history; Therapeutic technologies

INTRODUCTION

The use of physical means for therapeutic purposes is an inexhaustible area, in general technically simple and relatively cheaper than pharmacological therapy. It is therefore clearly attractive.

Violet radiation is part of the visible light spectrum, ranging from 400 to 450 nm in wavelength, located between ultraviolet A (315 to 400 nm in wavelength) and blue light proper (450 to 480 nm wavelength) (Verhoeven, 2017) (Figure 1). However, these values are not absolute, and some recommendations place the beginning of the violet light range at 380 nm (Sliney, 2016), which makes the identification and separation of radiations more difficult.

THE EQUIPMENT

The Holo-Electron device manufactured by Émile Michel, purchased, according to the proof of purchase, on 14 May 1947 by *Mademoiselle* Yvonne Mollard, for 4,802.50 French francs, was designed for the application of Violet Rays (Figure 2). From the personal collection of one of the authors (JLAG), the equipment, which is on display at the *Memórias da Saúde* Museum, Faculty of Health Sciences, University of Beira Interior, shows signs of wear and tear, but is otherwise in good condition (Figure 3).

In addition to the generator, it includes a visually appealing set of probes, in multiple shapes, with designs suited to the areas of application.

The brochure accompanying the equipment (Figure 4), is not, curiously, in ordered sequence, beginning with chapter XIV, suggesting that there should be additional texts. Interestingly, the booklet does not provide any information on the type of radiation used, other than the generic terms 'violet light' and 'high frequency,' which prevents its physical characterisation. It emphasizes the interest and efficiency in sports activities, where it promotes 'muscle re-education, stimulates vital forces, and regenerates the entire body'. The treatments, for individual and autonomous use, are adjustable via a timer button (Figure 5) that sets the option according to the therapeutic indication.

DISCUSSION

In France (the country of origin of the equipment), after the publication of Nicolas Tesla's work on high-frequency currents, there were different proposals for their use as therapeutic agents. In the 19th century, *franklinisation* (electrostatics), *galvanisation* (direct currents), *faradisation* (variable currents from magnetic and dynamoelectric sources, and later generated by induction coils), and *darsonvalisation* emerged (Brenni, 2010).

Many devices have been introduced, but, perhaps because they never obtained scientific evidence to support their use, they were successively abandoned.

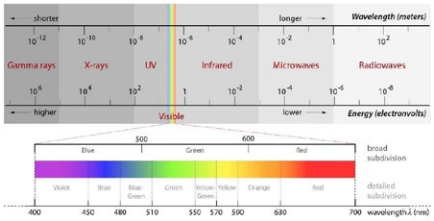

Figure 1

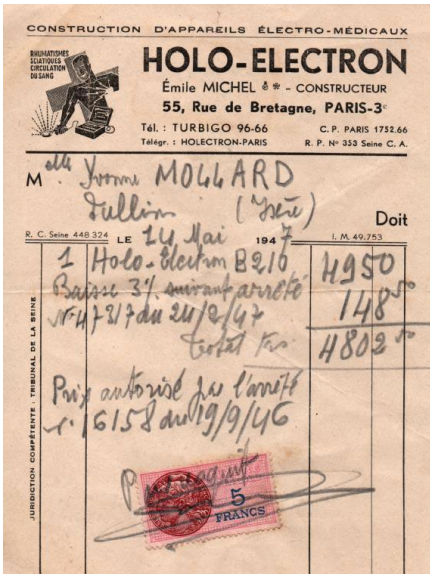

Figure 2

Figure 3

Figure 4

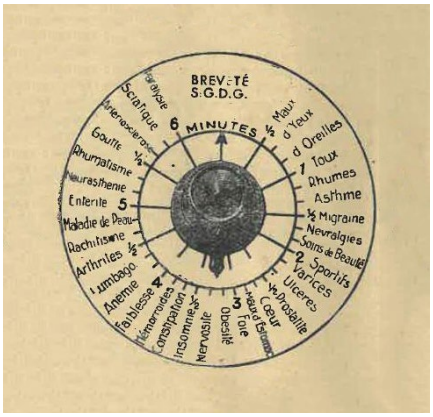

Figure 5

The use of blue light *(latu sensu)*, like many other areas of therapy, is controversial. The greatest difficulties arise from energy definitions, given the variability of intensities and the too many different options in terms of wavelengths, turning difficult their clinical evaluation.

From a clinical perspective, presently it appears to be useful in situations that show resistance to conventional treatments, for example in dermatology, but which carry potential, albeit unproven, risks. Violet light is currently used for teeth whitening, where its effectiveness has been scientifically documented (Kobayashi et al., 2021).

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