

## MIHAIL MANICATIDE – THE MENTOR AND FOUNDER OF ROMANIAN PEDIATRICS

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### ABSTRACT

Professor Mihail Manicatide is one of the coryphaei of Romanian medicine, whose contribution to the development of the Romanian medical sciences places him amongst the great personalities, school founders like: Nicolae C. Paulescu, Victor Babes, Ion Cantacuzino, Gheorghe Marinescu etc. Founder of the Romanian school of pediatrics by creating the Pediatrics Schools of Iasi and Bucharest, founder of scientific pediatrics as an approach to child pathology, where the laboratory and clinical research are a natural combination, author of the first pediatrics and child therapeutics treatises, will establish in 1929 the Romanian Society of Pediatrics, a science forum that encapsulates the whole pediatrics thought and practice. Student and disciple of the great scholar that was Victor Babes, knowledgeable of the French and German school of pediatrics through their great personalities, Mihail Manicatide will abide by the principles of honesty, devotion and full dedication to the mission he assumed. A convinced follower of preventive medicine, he managed to imprint the social aspect of the pediatric practice, essential for quality medicine, and he had numerous initiatives in the field of child protection. Unfortunately, posterity rarely evokes his true value and importance, for this reason we fulfill a duty of honor by presenting him at his true dimension.

**Keywords:** Mihail Manicatide, pediatrics, research, school

### INTRODUCTION

It's not always that the new generations properly preserve the memory of those who created and left lasting accomplishments to posterity, open paths to progress and welfare and, why not, alleys of its persistence. The history that these generations, in their succession, create, needs to handle from time to time the reclamation of personalities or moments that, because of the vicissitudes of the time, were either forgotten or, deliberately or not, undervalued or even passed over in silence, hoping that the passage of time will erase them from memory. (1)

We are amongst the peoples whose history abounds with such situations, making Gabriel Marcel's statement that *"if there was no hope that history could right the wrongs of the past, one of its reasons to exist would disappear"*, applicable in our case also. This is why some highly valued personalities in our science and culture suddenly disappear, their place being, if not usurped by epig-

ones, then recalled only circumstantially, but often eluded intentionally. This happened to N.C. Paulescu and Grigore T. Popa (2), and it also seems to happen to the great doctor and scientist Mihail Manicatide, founder of the Romanian School of Pediatrics, founder of scientific pediatrics in Romania and promoter of the social view on child's place and fate from the perspective of the present and the future, who, suddenly in 1938, with his retirement, sees his clinic shut down and he practically vanishes from academia. So that the tendency to overlook the place and role of this great personality in founding and developing the above mentioned fields, barely mentioning them in passing, only facilitates the path to oblivion (3).

It is not accidental that we evoke this personality, because he appears in the 19<sup>th</sup> century, when Pediatrics starts to delimit itself as science at the same time with the introduction of the causality principle in the approach to human pathology (Lancereaux and Paulescu) (4) and of the older observation that

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child pathology has particularities that distinguish it from the adult pathology. Until the second half of the 19<sup>th</sup> century child pathology was a bad extrapolation of the adult pathology, as a result of the apprehension that, in fact, the child is nothing but a miniature adult\*.

The existence of a pathology representative for children, especially in terms of infectious diseases whose bacterial or viral etiology will be discovered gradually, the particular way of disease manifestation in children, the gravity and rapidity of its evolution generated by the specific response modalities of a growing organism, will shock the scientific world and will create the necessary conditions for the delimitation of pediatrics as science (5).

A crucial influence, especially on the socio-political factors, will come from the extremely high infant mortality, three times higher in urban areas (compared to rural areas), especially at the outskirts of big cities, among disadvantaged social groups and among institutionalized children, areas where the mortality used to exceed even 50%.

Thus, the investigation of the English Parliament in 1871 and France's Rousell law in 1874, will point out the dramatism of the situation and the devastating impact on the demographic indicators necessarily imposing decisive actions that would protect this population segment, decisive for any nation's future, and especially for those nations where the industrialization was growing fast (2,5). In this context, the great medical centers will create structures with beds intended for children where medical learning will be formed around child pathology.

It is practically the time when pediatrics as science is born, the first specialised treaties emerge, authored by renowned European personalities like: Otto Heubner, Adalbert Czerny, Wolfgang Pfaundler, Pierre Andre Nobecourt, Ernst Moro, Heinrich Finkelstein, Robert Debre, Marcel Lelong, Guido Fanconi, Gaston Variot, Julien Huber, etc. (5)

In this context, Mihail Manicatile, who came back after training in these medical centers, lays the foundation for the Romanian pediatric science and

education, first in Iași in 1899 and then in Bucharest in 1920. We must point out that, both in Iași and Bucharest, there had already been put in place centers with beds for treating children, but they were supervised by nonspecialists or doctors without a medical degree. Therefore, in Iasi the Infantile Clinic was supervised only by professors Bejan and V Imerval (both specialized in other fields), and in Bucharest the Children's Diseases Clinic, which had been open since 1864 (among the first in Europe), was under the successive supervision of the following doctors: Gh. Athanasovici, M.G. Obedenaru, Al. Boicescu, D. Sergiu, N.C. Thomescu (6).

## BIOGRAPHICAL DATA

Mihail Manicatile is born on November 7, 1867, in Giurgiu, into a family of Macedonian Romanians that settled here after a Balkan journey imposed by the vicissitudes of the time.

He will go to Sf. Sava Highschool of Bucharest, then he will study medicine at Carol Davila Faculty of Medicine, Bucharest, graduating in 1893 with the doctoral thesis "**The Anatomopathological Study of the Liver**" under the supervision of the great scholar Victor Babes. His inclination towards research will dominate his entire activity and will bring him closer to Victor Babes who was known as the greatest bacteriologist and anatomopathologist of his time, thus becoming a graduate assistant in his department. Together with the illustrious scholar, he will carry out studies regarding pellagra, epidemic cerebrospinal meningitis, serotherapy in pertussis and diphtheria.

In 1895 he will obtain by competition, from the Romanian state, a grant to Paris to study children's diseases at the clinics of professors Jaques Josef Grancher, Victor Henry Hutinel and Antoine Bernard Marfan (top clinics at the time), and for neurological pathology in children at professor Peulard's clinic. He will meet Pierre Nobecourt with whom he will team up and will be quoted in his treaties (6,7).

Between 1897 and 1889 he works in Rudolf Wirchoff's laboratories and in the infantile clinics of Otto Heubner, Adalbert Czerny and Wolfgang Pfaundler (that also quotes him in his treaties), where he will perfect his training and continue his research. Charismatic and highly educated, communicative, with a native inclination towards gentleness and charity, he will become during his Berliner period the leader of the students that were studying here in his capacity as President of the Society for the Romanians in Berlin (8).

\*The history of pediatrics has three major stages: **1. The empirical stage**, that extends in time from Antiquity to the 18<sup>th</sup> century, dominated by clinical observation (bouquet of symptoms), **2. The anatomo-clinical stage**, where the clinical description associates the anatomopathological and histopathological observation and analysis (1800-1890) and **3. The modern stage: etio-pathogenical and social**, starting with 1890 and until the present day, when the diagnostic and therapeutic approach is carried out on etiological, patho-physiological, biochemical and imaging bases, and the child will be considered also from the medico social aspect, fully stating the civil and legal rights.

In 1899 he is named Pediatrics professor at the Infantile Clinic of the Faculty of Medicine of Iasi where he will lay the foundation for Iasi's pediatric education, simultaneous with an intense research activity, doubled by an extremely active participation in children's social problem. He will work in Iasi until 1920, when he will be called to Bucharest to lay the foundation of the pediatric education, continuing with his research exactly in the same way as at the Faculty of Medicine of Iasi (9).

His prodigious teaching, scientific and socio-professional activity can be divided in two significant stages: the Iasi stage, 1899-1920, and the Bucharest stage, 1920-1938.

**The Iasi stage** starts when he is named Assistant Professor of the Faculty of Medicine, he will organize and teach the classes and the practical training rigorously, based on his prior experience in France and Berlin with the great medical personalities of the time. Just like his mentor Victor Babes, whose ideas he shared especially in the light of the pathology of the child, a significant part of his activity will take place in the laboratory, and the results will be seen in his valuable works, thus laying the foundation of scientific pediatrics.

He will succeed in making pediatrics a distinct branch of the medical sciences in our country, starting with the morphophysiological particularities of the growing child, this way demonstrating that the child is not a miniature adult but a distinct morphophysiological entity. The scientific side of his activity will address mainly the specific topic of contagious infectious diseases, which dominated the pathology of the child at the time causing a devastating infant mortality, among which the most frequent were diphtheria (with 50% mortality), typhoid fever, infantile paralysis (poliomyelitis), tetanus, tuberculosis, malaria, pyocyanic infections (6).

His greatest accomplishments, known through the specialized press of the time, are: **serotherapy used for the diphtheria epidemic** in the villages from the Siret, Botosani and Suceava areas, a therapy method that reduces mortality from 50 to 16% during the 1894 campaign, **in 1898 he is the first in Europe to describe Koplick's sign** after its publishing in the U.S. by the American doctor Henry Koplickas "*a new sign for the early diagnosis of measles*", and in 1900, together with Victor Babeș, publishes an extensive **study on pellagra and its remedies**. In 1902 he publishes the work **The Microbe and the Serotherapy in Pertussis** (called by him the Z microbe), which receives an award from the Romanian Academy, and is quoted by No-

becourt and Pfaundler in their treatises. In 1908 he describes the first Fliatov-Dukes disease epidemic in Romania, known in the literature as fourth disease (6).

Concomitantly with his didactic and research activity, Mihail Manicatide will carry out an intense socio professional work. Thus, impressed by the extremely high infantile mortality rates, he publishes between 1900 and 1902 a series of studies related to natality, morbidity and infantile mortality, showing the direct correlation of these indicators with the socio-economic conditions of the population, with the poor hygiene and the health education that was almost absent, offering at the same time practical solutions to solve these deficiencies. In his whole activity, he will focus especially on the preventive side of the medical work that could be done through vaccination and prophylactic measures (6).

To the same extent, the social issue was a constant concern, inducing the still valid postulate that one cannot talk about quality pediatrics without improving the social issue. He states in his studies that, for example, the infantile mortality among illegitimate children, raised in private and charitable institutions, is three times higher than in the case of children raised by the family, consequently he will militate and will succeed in imposing their taking over by the state, through setting up orphanages and children's homes administered by doctors "**because otherwise the results are deplorable**". So that, starting from the actual realities of his time, he proposes a special protection regime for mother and child through social measures and setting up an institution with that purpose, an idea materialized 40 years later, through founding the Emilia Irza Institute for Mother and Child Protection (today "Prof. Dr. Al. Ruscescu"), and even a specialized directorate with the Ministry of Health, institutions that today, unfortunately, have lost their place and sense.

In the same context, he will propose establishing nurseries (residential centers for children) for working persons, at the same time stating the specific requirements that they have to meet. He establishes, for the first time in Iasi, human milk banks for motherless children, centers that were functional until the 70's.

In 1903 he extends the Infantile Clinic capacity by building a floor over the right wing of the Sfântul Spiridon Hospital (4 wards with 40 beds), and between 1905 and 1908 he convinces the hospital's management and the local authorities to build a new hospitals with pavilions (4 pavilions) intended



for patients with contagious diseases, adults and children (Izolarea Hospital), that he managed in its first years, this way laying the clinical-scientific foundations, in Iasi, of the infectious-contagious pathology in a period when the epidemic typhus, typhoid fever, cholera, malaria, diphtheria, constituted the actual pathology (7).

Finally, another important accomplishment during his teaching activity was his preoccupation with helping the auxiliary staff, especially the nurses, succeeding in establishing the Institute for Nursing which he also administered as professor and dean. In 1919 he will be part of the academics selection committee for the newly established Faculty of Medicine of Cluj, appointing Professor Titu Gane for the pediatrics department, the one who will become the founder of the Romanian infant care, school that will later extend to all the university centers.

**Bucharest stage**, starts in 1920 when he is called to Bucharest to lay the foundation of the pediatric education at the Carol Davila Faculty of Medicine. Here he will also manage the Clinic for Children's Diseases that started its activity in 1864 (among the first clinics in Europe), but managed by doctors without university degrees (quoted above). Just like in Iasi, he also starts here a pioneering activity, accomplishing, through hard work and personal example, to have a high level teaching and scientific activity focused mainly on tuberculosis in children, digestive diseases, nervous system diseases, nutrition disorders, constitutional and endocrine diseases.

He says faithful to his first passions and to his first teacher, Victor Babes, and he describes in 1925 a new infectious disease, "exanthem subitum", today known as the sixth disease, whose etiology is known to belong to a herpes virus (the herpes virus hominis type 6). In 1928 he will write the first **Pediatric Pathology and Infantile Therapeutics Treaty**, and in 1932 he will publish the **Infantile Medical Pathology Treaty** that together will form the foundation of the Romanian pediatric education up until 1960-1970 when the treaties of Alfred Rusescu, V. Petrescu Coman and Mircea Geormaneanu appear.

At his initiative and after several attempts he will succeed on March 19, 1929, to found the **Romanian Society of Pediatrics** with his magazine (**Romanian Journal of Pediatrics**) through the call to all the pediatricians in the country, most of them students from Iasi, Bucharest and Cluj. These two moments will mark the evolution of Romanian pediatrics as science especially as Mihail Manicatile was part of the editorial board of the French pediatrics magazine (*Revue Francaise du Pediat-*

*rie*), that was published in Strasbourg under the supervision of Professor Paul Rohmer and to which he contributed constantly.

He will lead the society until his retirement in 1938, when his clinic will be shut down for its reorganization and relocation, the Pediatrics Department being divided in two: the Infant Care department, headed by Professor Titu Gane, recently come from Cluj, and the Infantile Pathology department headed by Lecturer Alfred Rusescu, trained at his school. Professor Manicatile will present his last paper in 1939 at the convention in Berlin, named "**Drying milk through pulverization – a way to feed children during summer**", then being overshadowed.

His disciple, Alfred Rusescu, trained at his school, ascending fast: assistant professor between 1927 and 1931, reader in 1930 and lecturer in 1931, will not show the due respect to his teacher, casting him away from any activity. He will also forget (until opportune) N.C. Paulescu's contribution to his education, because at this great scholar's recommendation he will intern between 1922 and 1926 at the Notre Dame de Perpetuel Secours Hospital in Paris where Paulescu had impressed the medical and scientific world through his accomplishments\*\* (4). Not to mention the deliberate omissions that he does in his book "From the History of Romanian Pediatrics" published in 1975 (3).

Finally, in 1940 Alfred Rusescu will receive the title of Professor of Pediatrics, in 1942 he will establish the "Pediatrics"\*\*\*\* magazine and will actively militate for the development of the pediatric education, of its facilities, of faculties of pediatrics in all the university centers, for establishing the Institute for Mother and Child Protection (a coordinating forum of the national pediatric activity under the communist regime) and even for a specialized directorate with the Ministry of Health. Many of these ideas were Mihail Manicatile's who had a rich experience from his Iasi stage, another reason to eliminate him.

Thanks to his political statute, Alfred Rusescu will manage to put into practice these objectives, like in the case of C.I. Parhon, Ion Nitescu, Grigore Benetato, Nicolae Gh. Lupu or Daniel Danielopolu (3). He will prove to be a good and inspired continuer (not founder) of the pediatrics school of Bucharest and of the modern scientific pediatrics,

\*\*We mention that this hospital, in honor and gratitude for Paulescu's contribution to the medical science and practice of the time, will award two scholarships to Romanian doctors Based on his recommendation, situation that will continue until 1940, even after Paulescu's death (1931).

\*\*\*Later became Romanian Journal of Pediatrics.

managing by involving his team to write six books and publish over 400 scientific works. In the new post-war political orientation, Mihail Manicatide will not even find his honorary place as creator of school and founder of Romanian scientific pediatrics, not to mention his statute as internationally recognized scientist.

A distinguishing characteristic in Professor's Manicatide behavior was his endless love for children (he himself a father of two children) reason that made him militate for children's rights to life and health (8). He was a strong supporter of the prophylactic principle, starting with the mandatory vaccines until rules for food, public and social hygiene, starting from the premise that before illness and social shortcomings the most vulnerable part of the population is the child (9).

The laboratory research was constant, to the same degree as his affection towards sick children, that he treated with the same devotion in the clinic, at children's houses or wherever they were, initiating and actively participating in numerous field activities, (modality that we continue until the 90's) through his famous team excursions (10). Regarding this aspect, Dr. Alexandru Manolescu (one of his contemporaries) wrote: *“Mr. Manicatide walked the muddy roads, being the sole individual from the rank of doctors that knew from experience the obscure prose of the countryside and not from poetries sang by minstrels”* (11).

He was a full and honorary member of the Societies of Biology, Pediatrics, Pathological Anatomy and Medicine History. He published 80 specialty articles, most of them clinical and laboratory studies, especially in the field of infectious contagious pathology and he supervised 40 doctorates.

## FINALLY

Trying to systemize his activity, we will say that he is among the most prolific personalities of the Romanian medical science, scientifically, didactically, professionally and socially, thus:

1. He founded the Pediatric Schools of Iasi (1899) and Bucharest (1920).
2. He is the founder of the scientific pediatrics by bringing academic exactness to clinical and laboratory research.
3. He published 80 studies and researches in the field of pediatrics and infectious contagious pathology in children.
4. He published numerous press articles on medical social issues and he supervised 40 doctorates.

5. He wrote the first pediatrics and pediatric therapy treaties (the Pediatric Pathology and Infantile Therapeutics Treaty, 1928, and the Infantile Medical Pathology Treaty, 1933) in our country.
6. He established the Romanian society of Pediatrics (1929).
7. He described the exanthem subitum (later known as the sixth disease).
8. He described the first Filatov-Dukes epidemic in Romania (fourth disease).
9. He described the bacillus Z as etiologic agent of pertussis (later named *Bordetella pertussis*) and introduced serotherapy in this disease's treatment.
10. He introduced the anti-diphtheria serum for the treatment of diphtheria, the mortality dropping this way from 50% to 16% in the 1894 campaign.
11. He founded and headed the “Izolarea” Infectious contagious Diseases Hospital in Iasi.
12. He founded and headed the Institute for Nurses, which would later become the Sanitary Technical School.
13. He established orphanages and children's homes, as care institutes headed by doctors.
14. He is the one to establish the nursery with a specific way of functioning (residential centers for children).
15. He established the “lactarium” – a human milk bank.

Unfortunately, he is only seldom and in passing mentioned, without underlining his immense medical and social pioneering work with respect to children. Even his student, Alfred Rusescu, who was trained at his school (as it is mentioned above), will not fully acknowledge his merits, and his students even less so. Here's a paragraph from a reverential article dedicated to his mentor (Alfred Rusescu A/N), published by Valeriu Popescu in 2009, in the Romanian Journal of Pediatrics: **“Alfred Rusescu converted our country's pediatrics from an empirical specialty (?) at the beginning of this century (the 20<sup>th</sup> century A/N) into an active, scientifically exact subject, with numerous academics, that honors the medical education and the pediatric care of our country”** (12), as an example of posthumous gratitude for the one that was the continuer, completely forgetting Mihail Manicatide, *the one that was the actual founder and father of the Romanian pediatrics, laying its foundation as a school, science and social approach.*

Let us only mention that another of his students trained in Iasi, Professor Ion Nicolau, will establish

in Bucharest the School of Fundeni, another prestigious scientific and teaching center (later extended by Professor Gheorghe Goldis), and Professor Emil Hurmuzache (also trained in Iasi) will lay the foun-

dition of the School of Pediatrics of Timisoara, later extended by Professor Luis Turcanu, another student of the School of Iasi.

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