SIX DECADES OF THE CHAIR OF INTERNAL MEDICINE AT THE MEDICAL FACULTY IN SKOPJE

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Abstract
The chair of internal medicine in Republic of Macedonia was created in 1947. The Department of Internal Medicine (CIM) is the most numerous at Skopje’s medical faculty (currently 56 members). According to the archive material from the first session of the Scientific Teaching Council of the Faculty of Medicine (17.03.1947), Mr Mario Krmpotic (Professor of Internal Medicine) was proposed as the first Director of the Internal Clinic (1947). For reasons unknown, Mr Krmpotic never came to Skopje to accept the post. As a consequence of this fact, the real founder of the CIM was the Russian Professor Alexandar Ignjatovski (1875–1955). Mr Ignjatovski was elected as the first Director of the Clinic for Internal Medicine in 1948 for a period of 4 years (1948–1952). At the same time, he was the first Chief of the CIM in Skopje (Macedonia). Dr D. Arsov was elected as the first Assistant Professor of Medicine in 1947, and second (and last) Director of the Clinic for Internal Medicine (1952–1974). For the same period (22 years) he was Head of the CIM. Dr D. Arsov sequentially and successively became first associated and then ordinary professor of medicine in the years 1951 and 1958.

The regular activities of the CIM are as follows: 1) Undergraduate education for students (Clinical Investigation, Internal Medicine, Clinical Pharmacy) in general medicine, dentistry, geriatrics, urgent and family medicine (ECKTS); Undergraduate education for nurses, speech therapists, physiotherapists, radiologists (high /three year/ nurses School, ECKTS); 2) Postgraduate education (candidates for specialisation in internal medicine, infectology, anaesthesiology, neurology and surgery; 3) Continual medical education (a traditional morning scientific meeting on Thursdays, 08h; weekly meetings of all internal medicine subspecialists); Scientific meetings, symposiums, congresses of former internal medicine associations (cardiology, pulmoallergology, gastroenterology, nephrology, haematology, rheumatology, endocrinology and toxicology); 4) Publishing activities in the national journals (Macedonian Medical Review, Journal of Macedonian Medical Science, Acta Physiologica, Medicus); 5) Decision-making: the Head of CIM regularly collaborates with the subspecialities of internal medicine by means of a coordinated body for all questions related to educational purposes in clinical investigation and internal medicine.

Key words: Chair of internal medicine, development.

The Foundation
Prof. Dr. A. Ignjatovski (1875–1955)
Ignjatovski (1875–1955). He had been secretary to the famous Professor Ivan Pavlov, well known to the world because of his experiments on conditioned reflexes. He was elected as an Assistant Professor of Medicine at 30 years old (1905) in Petersburg (Russia), Associate Professor of Medicine in Odessa, Russia (1908) and Professor of Medicine (Warsaw, Poland, 1912). He was a co-worker with Professor Metchnikoff in 1913 in Paris, France (the discovery of phagocytosis). Two years later, Mr Ignjatovski was elected Professor of Medicine in Berlin (Germany, 1915), and finally, as Emeritus Professor of Medicine, he came to Belgrade (Yugoslavia) to found the Serbian CIM (1922).

Mr Ignjatovski was elected as the first Director of the Clinic for Internal Medicine in 1948 for a period of 4 years (1948–1952). At the same time, he was first Chief of the CIM in Skopje (Macedonia).

As a scientific worker, Professor Ignjatovski was deeply involved in the investigation of atherogenesis (1904) and tuberculin immunogenicity with disease transmission (1905).

He was author of the major medical work covering all aspects of internal medicine entitled: *Clinical Semiotics and Symptomatic Therapy of Internal Diseases* (in 5 vols, two Russian and one Serbian edition). Later, coming to Skopje, he wrote a famous work: *An Introduction to Internal Medicine* (3 vols, 1600 pages, in Serbian, 1952–54) as the first textbook of medicine published under the patronage of the Ss Cyril and Methodius University (UKIM).

**The period of Acad. Dimitar Arsov**

Mr Dimitar Arsov was born in Kriva Palanka (Macedonia, 1908). He studied medicine in Paris (France, 1926–1932) under Professors Vaquez, Albaud, Bernard and Hillamond. He presented his doctoral thesis entitled "Spontaneous Pneumothorax in Patients with Typhus" in 1936 (Paris, France). Coming to Macedonia, he worked as a part-time doctor in the Railway and Military hospital (1936–1941). During the years of the Second World War (1941–44) he worked as a doctor in the internal department and, at the same time, he was head of the chest division (Skopje). He worked in the internal department (State hospital) and became its Head for the period 1944–1947. In 1948 the internal department became the clinic for internal medicine with the arrival of Prof. Ignjatovski from Belgrade (1948). Mr D. Arsov sequentially and successively became Assistant, Associate and Ordinary Professor of Medicine in the years 1947, 1951 and 1958. In 1961, he was elected as Doctor *honoris causa* in Besançon (France). He became a regular member of the Macedonian Academy of Sciences and Arts in 1967 (from its foundation) with his introductory lecture "Psychosomatic diseases".

He was first elected as an Assistant Professor of Medicine in 1947, and second (and last) as Director of the Clinic for Internal Medicine (1952–1974). Over the same period (22 years) he was Head of the CIM. After the retirement of Prof. Ignjatovski, Acad. Arsov remained as the unique person charged with teaching internal medicine (theoretical and practical) to the new generations of medical students and young doctors (1952–1958). The young teaching nucleus of the CIM was created between the years 1959 and 1965, and more than 100 specialists in internal medicine were promoted from 1952 to 1974.

Academic Arsov, meeting the needs of the time, was a successful writer of many medical books devoted to medical teaching (for nurses, doctors and students of medicine and dentistry). I would like to mention the following textbooks:

1. Internal Medicine for Nurses’ Colleges (1957);  
2. Review of Infectious Diseases for Medical Students (1961);  
3. Review of internal diseases, Reumathology, 1st vol. (1963);  

Acad. Arsov produced many useful publications covering all the fields of internal medicine, but he was especially involved in the treatment of many diseases (rheumatoid arthritis, hyperfunctional spleen, acquired heart faults) with infinitesimal doses of adrenaline. Acad. Arsov died 1974 (Skopje).

The movements in the Department of Internal Medicine in the first two decades

At the beginning of 1947, a group of young, clinically oriented doctors were employed at the Clinic for Internal Medicine (Skopje) and most of these were accepted later as assistant professors for internal medicine. Amongst them, the following doctors were taken into consideration: R. Percinkovski, P. Davcev, I. Tadzer, A. Angelkovski, L.
Kirovski, R. Bakalinov and D. Roglev. Four years later (1951), four other doctors were welcomed to the CIM (J. Nedelkovski, S. Mironski, Lj. Kotevski and Dr. Hrisoho). In 1952, the CIM was ceded to Mr D. Arsov, and Prof. Ignjatovski left to create the Chair of Infectious Diseases. Two other doctors (I. Tadzer and A. Angelkovski) left the CIM in the next two years (1952, 1953), one of them to create the Chair of Pathologic Physiology and Nuclear Medicine (later Acad I. Tadzer). In 1953, two newly qualified doctors, R. Percinkovski and P. Davcev, became specialists in internal medicine and Assistant Professors. Five years later, the same persons (R. Percinkovski, P Davcev) were promoted to Associate Professors (1958). A few years later (1962–63) Drs J. Nedelkovski, S. Mironski, Lj. Kotevski and D. Hrisoho were elected as Associate Professors.

The beginning of teaching activity and differentiation

The first introductory lecture in internal medicine was given in October 1949 by Prof. Ignjatovski. The teaching of internal medicine was crucial to new medicine in Macedonia and to the state, and consequently six of the twelve semesters were devoted to the study of internal diseases (7th to 12th). In June 1952 the first examination for the title Specialist in Internal Medicine was held successfully (Prof. A. Ignjatovski, Prof. G. Muratovski and Assoc. Prof. D. Arsov).

In the next years few (1955–63), Prof. D. Arsov promoted differentiation in internal medicine, following the modern trends. He created the basis of national Cardiology, involving more and more young doctors in this field of medicine (e.g. Associate Prof. R. Percinkovski, Assistant Prof. T. Stojcevski, Dr. A. Bozinovski and Dr. S. Serafimovska). Rheumatology was directed by himself (Prof. D. Arsov) and Dr B. Guecva. Gastroenterology was guided by Associate Prof. P. Davcev and Assistant Prof B. Vanovski. Pulmology was directed by two other doctors (Associate Prof. Lj. Kotevski and Assistant Prof. G. Sivevski). Nephrology, as a newer area of internal medicine, was entrusted to Associate Prof. D. Hrisoho and Assistant Prof. G. Masin. Two other doctors, Associate Prof. J. Nedelkovski and Assistant Prof. S. Apostolova were in charge of Haematology (treating the diseases of liquid tissue and monocyte-macrophage system). Endocrinology (medical treatment and educational activity) was directed by Associate Prof. S. Mironski, Assistant Prof. A. Plaseski and Dr. M. Macali. Clinical Toxicology, Emergency Internal Medicine and the Out-patient Department were conducted by Associate Prof. G. Angov, Assistant Prof. G. Georgievski and Dr. B. Popovski. The last area of integrated internal medicine was the Department of Clinical Chemistry under the leadership of Associate Prof. R. Hrisoho.

In the years 1959–1965, more and more doctors were employed in the internal medicine subspecialties. For instance, in the cardiology department (Dr. L. Srinovski, Dr. Z. Sajkov), in gastroenterology (Dr. Bidikov), in pulmology (Dr. B. Josifovic), in nephrology (Dr. M. Polenakovic), in haematology (Dr. N. Markovic), in rheumatology (Dr. Lj. Caparoski), and in endocrinology (Dr. K. Petrovski). Most of the above-named doctors were later promoted to be professors at the Skopje School of Medicine. Finally, in 1975–1976, the door to internal medicine was wide open to more young doctors developing the above-mentioned subspecialties of Internal Medicine in modern areas of medical knowledge and teaching.

The modern era

The CIM is the most numerous and prominent in the Skopje Faculty of Medicine:

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<th>Previous teaching staff (70)</th>
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<td>Actual teaching staff (131)</td>
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<td>3. Deans of MF</td>
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<td>7. Assoc. professors</td>
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<td>8. Assist. professors</td>
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<td>9. Masters of Science</td>
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<td>10. Doctors of Science</td>
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<td>11. Invited speakers: Professors J. Dausset (Nobel laureate), T. Drücke (honoris causa), J. Bernard, J. S. Cameron, W. Reiser, Andreani, Schönekes, Ph. Lang, Cl. Abbou, V. Ogrenovski</td>
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Three former members of MASA came from the CIM (Prof. D. Arsov, Prof. I. Tadzer, Prof P. Davcev), and current members are Prof. M. Polenakovic and Prof V. Serafimovski.

Pro Rectors from the CIM: Prof D. Hrisoho and Prof M. Gavrilovski.

The Vice Deans of the Faculty of Medicine (Skopje) who have come from the CIK: Prof. P. Davcev, Prof. R. Percinkovski, Prof. Lj. Kotevski, Prof. D. Hrisoho, Prof. M. Polenakovic, Prof. T. Stojceski, Prof. V. Bidikov, Prof. M. Gavrilovski, Prof. M. Neskovski, Prof. N. Ivanovski, Prof. M. Zanteva-Naumovska and Prof. Lj. Georgievskia-Ismail.


The CIM actually unites the practical teaching activity of all the named subspecialities issuing from the former Clinic for Internal Medicine (1974–2009) in pavilion buildings (most of them restored). The theoretical teaching is carried out in the communal teaching rooms (amphitheatres in the old building and the modern Cardiology and Paediatrics Clinic) or in the clinical libraries.

Regular activities of the CIM
- Undergraduate education for students (Clinical Investigation, Internal Medicine, Clinical Pharmacy) in general medicine, dentistry, geriatrics, urgent and family medicine (ECKTS).
- Undergraduate education for nurses, speech therapists, physiotherapists, radiologists (high /three years/ Nurses’ School, ECKTS).
- Postgraduate education (candidates for specialisation in Internal Medicine, Infectology, Anaesthesiology, Neurology and Surgery.
- Continuing medical education (traditional morning scientific meetings on Thursdays, 08h; weekly meetings of all internal medicine subspecialities).
- Scientific meetings, symposiums, congresses of (former) internal medicine associations (cardiology, pulmological, gastroenterology, nephrology, haematology, rheumatology, endocrinology and toxicology).
- Decision-making: the Head of CIM regularly collaborates with subspecialities of internal medicine by means of a coordinating body for all questions relating to educational purposes in internal medicine.

Published books
- For medical teaching (students, nurses, doctors)
  1. Elementary Internal Medicine for Dentistry Students (D. Arsov).
Six decades of the chair of internal medicine

REFERENCES

1. Triseset godini od osnovaneto na klinikite pri Katedrata za interna medicina, UKIM, MФ, Skopje, 2005)

2. Clinical Gastroenterology with Semiotic Principles (V. Serafimoski).
5. Clinical Toxicology (G. Piljovski).

1. Monographs 58 items

1. Co-authors in national publications

1. Co-authors in foreign publications
2. Echosonography in Clinical Medicine (V. Serafimoski, JAZU, Zagreb, Croatia, 1980).

REFERENCES
Prof. Kočo Chakalaroski

Acad. Bojan Šoptrajanov