## 13th EFLM SYMPOSIUM FOR BALKAN REGION

Laboratory Medicine Management: Leadership Skills for Effective Laboratory

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Society of Medical Biochemists of Serbia

Thirteen years ago, European Federation for Clinical Chemistry (EFLM) appointed Belgrade and the Society of Medical Biochemists of Serbia as the organizer of educational symposia for clinical chemists and laboratory medicine professionals of the Balkan region. These annual symposia have been organized with great success in the twelve previous years, always covering the topics of the greatest current interest in the field of clinical chemistry and laboratory medicine. In this manner, this years' EFLM Symposium for Balkan Region entitled »Laboratory Medicine Management: Leadership Skills for Effective Laboratory« successfully fulfilled high expectations set thirteen years ago. The 13th EFLM Symposium for Balkan Region was held on 21 and 22 September, and organized under the auspices of the International Federation of Clinical Chemistry and Laboratory Medicine (IFCC), Balkan Clinical Laboratory Federation (BCLF), Ministry of Education, Science and Technological Development of Serbia and Ministry of Health of Serbia.

During the two-day Symposium, eminent foreign and local experts introduced participants to the latest developments in the management in laboratory medicine, leadership skills of laboratory medicine professionals, laboratory medicine planning, organization and strategy, medical laboratory accreditation and competence, and laboratory medicine environmental health and safety. Also, the optimization of the post-analytical phase, economy of consolidation and decentralization of medical laboratories, how to use laboratory information system and manage laboratory data, and also how to implement economic evaluation of laboratory testing were elaborated. Experiences regarding accreditation process and total quality management were discussed, with the accent on the balance between the accreditation process and patient safety, possible errors and risks in sample collection, and how to register frequent preanalytical incidents, and efficiently manage unexpected events and accidents. Special attention was given to laboratory reports form, its categorization and actions, as well as to the use of statistics in laboratory practice.

The 13th EFLM Symposium for Balkan Region opened prof. Sverre Sandberg, the EFLM President, with the reminder of the role and current developments in the EFLM. The welcoming word of the Symposium President prof. Nada Majkić-Singh followed, when the participants were introduced with the Society of Medical Biochemists of Serbia's activities and the contents of the previous symposia. The first session of the Symposium was dealing with types of medical laboratories and strategy. In the first part, the word was about the role of laboratory medicine in the evolution of medical practice. Prof. Paul Collinson (St George's Medical School, London, UK) was the first speaker, and his inspiring talk was dedicated to laboratory medicine faced with the evolution of medical practice. Since laboratory medicine is an integral part of medical practice, medical practice usually lead laboratory medicine, but equally laboratory medicine can be the standard setter and innovate and develop to support or extend clinical medical practice. Prof. Collinson presented examples for the initiative of laboratory medicine in treatment monitoring, in the introduction of new tests, in responsiveness to new treatment strategies which utilize testing in novel ways, and in its response to the appearance of new diseases. Prof. Ivan Brandslund (Health Science Faculty, University of Southern Denmark, Hospital Lillebaelt, and Veile County Hospital, Denmark) followed with his lecture that elaborated principles of leadership in clinical laboratories, based on the European Foundation for Quality Management Excellence model mixed with a personal experience of what is necessary and helpful.

In the second part of the first session, the issues in leadership and management in clinical biochemistry were discussed. Dr Per Jorgensen (Copenhagen

University Hospital - Rigshospitalet, Denmark) analyzed the influence of the rapid scientific and technological advancements that increase the diagnostic possibilities and change the interfaces among the various specialties of laboratory medicine, the increase of the demands for laboratory tests with demographic changes with a growing elderly population, the increased complexity of the health care systems and the more well-informed patients that call for improved clinical pathways, the change of the modern European countries from »production societies« towards knowledge and innovation societies« that increases the need for integration of research into daily clinical work, as well as the need for a quicker integration of new knowledge into clinical practice. The lecture about the optimization of the post-analytical phase of prof. Sverre Sandberg (University of Bergen, Norway) followed. Prof. Sandberg elaborated this topic from the main features of post analytical phase - verification of results, reflex/reflective testing, report forms, reference limits, reference change values, how to comment test results and report critical results, to the post-post analytical phase, which is usually outside the direct influence of laboratory health persons. The focus was on how laboratory professionals should work with the post-analytical phases to secure a sensible use of laboratory and clinical resources.

The second session was dedicated to laboratory medicine planning and organisation. The evolution of the medical laboratories in France in the light of economics, managerial and architectural challenges were analyzed by prof. Bernard Gouget (Counsellor for Public Health at the Fédération Hospitalière de France). The role of laboratory information system (LIS) in laboratory medicine through an experience and practical examples was presented by dr Vera Lukić (Laboratory Department at the Railway Healthcare Institute, Belgrade, Serbia), who evaluated advantages of using LIS, and discussed further possibilities in its use. Laboratory data management and the wide range of possibilities of using the large amount of information produced by laboratory information systems, the use of queries performed into the laboratory and clinical databases, and the appropriate analytical approeach were presented by dr Sne ana Jovi ić (Center for Medical Biochemistry, Clinical Center of Serbia, Faculty of Pharmacy, University of Belgrade, Serbia). Prof. Nataša Bogavac-Stanojević (Faculty of Pharmacy, University of Belgrade, Serbia) discussed the implementation of economic evaluation of laboratory testing. The most appropriate tool for quantitative assessment of the economic value of laboratory testing are cost-effectiveness (CEA) and cost-utility (CUA) analysis. However, recently emerged the multicriteria decision analysis which allows comparison of diagnostic strategies in terms of benefits, opportunities, costs and risks. All analysis are constructed to identify laboratory test that produce the greatest healthcare benefit with the resources available.

The third session was dedicated to the medical laboratory accreditation and competence. In this session, total quality management and accreditation were discussed. First, prof. Matthias Nauck (University of Greifswald, Germany) presented the benefits and experiences with the EFQM (European Foundation for Quality Management) Excellence Model for Medical Laboratory.

Prof. Mario Plebani (School of Medicine, University of Padova, Italy) followed with his talk about the ISO 15189 accreditation in the sense of navigation between quality management and patient safety, and its last version oriented on process approach with detailed division with clearly defined requirements. Prof. Plebani elaborated the benefits of accreditation are standardization of all processes. responsibility of each member of team, personal policy, demonstrability of results, systematic evaluation of suppliers, better communication with partners. The accreditation of laboratories improves facilitation of accurate and rapid diagnostics, efficiency of treatment and reduction of errors in the laboratory process. This system of standard procedures has the aim to improve the quality and patient safety, through the verification of examination procedures for imprecision, trueness and diagnostic accuracy, and for estimating measurement uncertainty. Also, the role of quality indicators (QIs) as a fundamental requirements of the ISO 15189 was discussed.

Prof. Tomáš Zima (First Faculty of Medicine, Charles University and General University Hospital Prague, Czech Republic) continued with the lecture about accreditation system, process and benefits for laboratories. He stressed that the benefits of accreditation are standardization of all processes, responsibility of each member of team, personal policy, demonstrability of results, systematic evaluation of suppliers, better communication with partners. The accreditation of labs improves facilitation of accurate and rapid diagnostics, efficiency of treatment and reduction of errors in the laboratory process.

The last, fourth session in its first part was dealing with the laboratory medicine environmental health and safety. Prof. Svetlana Ignjatović (Faculty of Pharmacy, University of Belgrade; Centre for Medical Biochemistry, Clinical Centre of Serbia) focused on the form of laboratory reports, its categorization and actions. Dr Herbert Stekel (General Hospital Linz, Austria) made a review of possible errors and risks in sample collection, like the correct identification of the patient, the time of sampling, the sample volume, the use of additives, and – last but not least –the time of transportation and the information given to the laboratory. Dr Zorica Šumarac (Centre for Medical Biochemistry, Clinical Centre of Serbia) presented experience with forming the register of frequent

pre-analytical incidents, and efficient management of unexpected events and accidents. This part of the fourth session ended with the review of efficient management of unexpected events and accidents within laboratory medicine by prof, Duško Mirković (Faculty of Pharmacy, University of Belgrade; Centre for Medical Biochemistry, Clinical Centre of Serbia). In the second part, dr Ciprian-Valentin Mihali (»Vasile Goldis« Western University of Arad, Romania) presented his work on nanoparticles and other pollutants emitted by apartment heating appliances fuelled, as an important public health issue. The Symposium was closed with the talk of prof. dr Jelena Kotur-Stevuljević (Faculty of Pharmacy, University of Belgrade, Serbia) on the use of statistics in laboratory practice and its connection to university teaching.

The special lecture was prepared by the students of medical biochemistry of the Faculty of Pharmacy, University of Belgrade, organized in the Team of Medical Biochemistry Students, Belgrade Pharmacy Students' Association. Their representatives, Ana or ević and Tamara Stamenić, presented their view on laboratory medicine management and leadership for effective laboratory, in an original and refreshing way.

The central event of the 13<sup>th</sup> EFLM Symposium for Balkan Region was the presentation of the

Honorary Diploma of the Society of Medical Biochemists of Serbia, as the highest recognition presented to foreign colleagues, for promoting Clinical Chemistry and Laboratory Medicine in Europe and globally, and for significant contribution to the work and development of the Society of Medical Biochemists of Serbia. It was awarded, so far, to Prof. Victor Blaton, Prof. Stoian Daney, and Prof. Simone Zerah. On this occasion, the Honorary Diploma was awarded to the distinguished professor Mario Plebani for his huge activity and great contribution to the development and improvement of Clinical Chemistry and Laboratory Medicine at the national and international level, as well as for his contribution to the work and development of the Society of Medical Biochemists of Serbia.

The 13th EFLM Symposium for Balkan region, with over 200 participants from Balkan and European countries, fulfilled the high expectations defined during the previous ones. The presence of distinguished lecturers gave very high recognition and prestige to this Meeting, which influences the development of clinical chemistry and laboratory medicine in the Balkan region and strives to focus on the new data in the field of laboratory medicine. This is the opportunity to thank them and all the participants for another successful symposium.



Sverre Sandberg, EFLM President addresses ton the Symposium participants



Symposium lecturers: Sverre Sandberg, Nada Majkić-Singh, Bernard Gouget, Snežana Jovičić, Vera Lukić, Nataša Bogavac-Stanojević, Paul Colinson, Ivan Brandslund



Zorica Šumarac and Mario Plebani. Receiving SMBS Honorary Diploma



N. Majkić-Singh and Z. Šumarac with Mario Plebani



Dragana Negovanović, introducing Makler workshop



T. Zima, M. Plebani, S. Ignjatović, M. Nauck



Poonam Rao presenting GEM Premier 5000



Vera Lukić, Ciprian-Valentin Mihali, Jelena Kotur-Stevuljević



Ana Đorđević and Tamara Stamenić, Pharmaceutical Faculty students presenting lecture »NEXT Generation Leaders«



Nada Majkić-Singh with Ana Đorđević i Tamara Stamenić



Ana Đorđević and Tamara Stamenić with student colleagues



Z. Šumarac, M. Stojanov, M. Žarković, N. Majkić-Singh after presentation Prof. M. Stojanov book



Symposium lecturers: D. Mirković, Z. Šumarac, H. Stekel, S. Ignjatović



Participants from Clinical Centre of Serbia: Z. Šumarac, S. Jovičić, B. Lugić, N. Maksić, B. Žugić