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REPORT FROM THE 18TH CONFERENCE OF THE SCIENTIFIC AND TECHNICAL COMMITTEE – ACCREDITED LABORATORIES

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Quality control in the entire laboratory process is the basis of the reliability of laboratory testing. That is why it is important that, in addition to the awareness of the implementation of continuous control of the total process of laboratory testing, constant education on this topic is held. The Society of Medical Biochemists of Serbia (SMBS), knowing the importance of maintaining continuous education, has traditionally organized the First Category Seminar, the 18th Conference of the Scientific and Technical Committee of Accredited Laboratories, for the 18th time. The seminar was held within the framework of the Unified Association of Serbia for Quality (JUSK), which is a significant logistical support of SMBS for this meeting. SMBS has been a member of JUSK for many years, and the continuity of annual gatherings under the auspices of JUSK speaks of their quality.

The main objectives of the program are set in relation to familiarity with terminology and concepts related to quality assurance of the pre-analytical, analytical and post-analytical phases of the work process in a medical biochemical laboratory, familiarization with the process of quality control and management in laboratories specific to the primary, secondary and tertiary level of health care, understanding internal and external quality control procedures, as well as testing the laboratory's capabilities, familiarization with the challenges and potential of new diagnostic tools in molecular diagnostics, familiarization with the basics of implementation and management of Point-of-Care testing in routine laboratory and non-laboratory practice, and familiarization with the concept of risk management in the laboratory process.

The first lecture was given by Bojana Pavlović, specialist in medical biochemistry, from the Center for Medical Biochemistry of the University Clinical Center of Serbia. She elaborated the importance of quality indicators of the pre-analytical phase of laboratory testing. Also, she showed which quality indicators were monitored over time as part of the project of the International Federation for Clinical Chemistry and Laboratory Medicine »Model of Quality Indicators« which was implemented in the polyclinic diagnostics laboratory. In this way, it is possible to assess critical procedures and improve them, prevent errors and apply corrective measures, all with the aim of improving the overall performance of the medical laboratory.

The second speaker was Ivana Vujatov, specialist in medical biochemistry, EuSpLM, the Head of the Jugolab Health Institution, Institute for Laboratory Diagnostics, Novi Sad, Serbia. Her talk was about the importance of conducting external quality control, presenting the results of a competence assessment of a private laboratory. The lecture contributed to the understanding of the interpretation of external quality control reports. In addition, it presented the procedures needed to be implemented in order to correct any deviations.

The third lecture was given by Dr. Danijela Ristovski Kornic, EuSpLM. Dr. Ristovski Kornic is a specialist in medical biochemistry and the -Head of the Department of Laboratory Diagnostics, Pančevo Health Center, Serbia. The lecture presented the experience of a health care institution of the primary level of health care in the conditions of the SARS-CoV-2 pandemic. She presented the challenges faced by her team regarding the control of the examination process as well as the entire diagnostics of the health center. She also presented an example of an adequate organization of her service, which enabled the work under intense pressure and successfully maintained the quality of laboratory testing.

The fourth lecture was given by specialist in medical biochemistry Jasna Bjelanović, EuSpLM, from the Center for Medical Biochemistry, University Clinical Center of Serbia, Belgrade, Serbia, where she is the Head of the laboratory department at the Clinic for Digestive Surgery, University Clinical Center of Serbia. The lecture presented the basics of quality assurance in the hematology laboratory, which refers to all stages of the testing process and is defined by the international and national guidelines and regulative. She emphasized the importance of continuous compliance with the rules of good laboratory practice and conscientious follow-up of quality control guidelines, which is a condition for identifying priorities in quality improvement and encouraging focus on preventive and corrective steps in the hematology laboratory. Application of special quality control techniques such as moving average, and assessment of the quality of the testing process using the six-sigma concept, can significantly improve the quality of testing in the hematology laboratory.

The fifth lecture was given by Ass. Prof. Jelena Munjas, from the Department of Medical Biochemistry, University of Belgrade-Faculty of Pharmacy. Although the lecture was based on the issue of molecular diagnostics and specific PCR tests, Prof. Munjas showed that micro-RNA molecules also have the potential to be important diagnostic tools even in routine conditions. Of course, under the condition of established quality control of the total laboratory testing process. And in the case of specific molecular diagnostic tests, it is imperative to standardize both the analytical and the extra-analytical phase of the testing process. Only in this way is it possible to ensure that these potential biomarkers, represent reliable evidence of a pathological process in the body, but can also be used as a significant therapeutic tool.

The sixth lecturer was Ass. Prof. Neda Milinković, specialist of medical biochemistry, EuSpLM, from the Department of Medical Biochemistry, University of Belgrade-Faculty of Pharmacy. Prof. Milinković presented the basic requirements needed to successfully implement and manage Point-of-Care testing (POCT). She emphasized the importance of knowing the specific requirements for POCT testing and explained the importance of its accreditation, as well as the conditions that must be met for the end

Lecturers and chairpersons of the 18th conference of NTK-Accredited Laboratories (from left to right): Dr Iva Perović-Blagojević, Ass. Prof. Neda Milinković, Jasna Bjelanović, Dr Danijela Ristovski Kornic, Ass. Prof. Snežana Jovičić, Prof. dr Nada Majkić Singh, Dr Vera Lukić, Prof. dr Svetlana Ignjatović, Prof. dr Ana Ninić, Ivana Vujatov and Bojana Pavlović

result of this kind of testing to be clinically reliable and legally justified.

The penultimate lecture was given by Dr Iva Perović Blagojević, specialist in medical biochemistry, EuSpLM, from the Department of Laboratory Diagnostics, Clinical Hospital Center »Dr. Dragiša Mišović Dedinje«, Belgrade, Serbia. Dr. Perović Blagojević explained in detail the importance of the Interpretive Comments as well as the professional obligation of medical biochemists in understanding and applying them. In addition to the basic interpretation of laboratory reports, interpretive comments can significantly increase the clinical significance of the laboratory result and assist the physician in the final care of the patient. Although they are classified in the post-analytical process of examination, in fact they refer to and include the situations of both the pre-analytical stages and the stages of testing and analyzing itself. Although there are no universal guidelines regarding the use of interpretative comments, ISO standard 15189 states that the laboratory report should include them where necessary, indicating the importance of using interpretive comments in routine work.

Although at the end, but most importantly, the concept of risk management in laboratory processes was presented. The last lecture was presented by Ass. Prof. Snežana Jovičić, specialist in medical biochemistry, EuSpLM, from the Department of Medical Biochemistry, University of Belgrade-Faculty of Pharmacy, Belgrade, Serbia. Prof. Jovičić emphasized that risk assessment and the implementation of an adequate control plan guarantee the responsibility of laboratory expert. In this way, medical laboratories ensure that the results of their analytical processes are of appropriate quality, reliable and accurate in accordance with the capabilities of the methods and technology in use. Developing a quality control plan requires an understanding of the total testing process. That is why it is important to identify weaknesses and potential deficiencies in each individual phase of testing. In this way, it is possible to prevent errors that may occur as well as damage that may be caused to the patient himself.

This conference has finally reached adulthood and, in its essence, it has reached the maturity of international meetings. Also, with this meeting, new higher-level tasks were set for each subsequent meeting, both for the participants and the organizer, which we hope will be achieved.