

From genes to environment: the V SISMEC National Congress

From 16th to 19th September 2009 the V National Congress of the Italian Society of Medical Statistics and Clinical Epidemiology (SISMEC) took place in Pavia.

The challenge of the congress “From genetics to environment: the role of Medical Statistics and Clinical Epidemiology” was to increase the knowledge about the role of genetic and environmental factors as causal factors of several pathologies. It is more and more important the need to develop new methodologies of design and analysis of data in completely new contexts, focusing on the role of disciplines such as medical statistics and clinical epidemiology.

Two were the main features of the congress: its multidisciplinarity and the presence of young people and researchers, all well-qualified and motivated.

Before the official opening of the congress, on 16th September, a satellite workshop entitled **Health Technology Assessment** was organized by Giovanni Corrao (University of Milan Bicocca) and Annarita Vestri (University of Rome) jointly by the Italian Association of Epidemiology (AIE) and the Italian Society of Hygiene (SItI) and coordinated by Gianluca Baio (University of Milan Bicocca) and Gian Luca Di Tanna (University of Rome). The aim of the workshop was to give an overview of health technology assessment (HTA) and of its applications and tools. The HTA methodology was treated from an epidemiological and public health point of view, and the main methodological aspects were presented.

A large number of young researchers attended and appreciated the three tutorial courses that were organized especially for them

The biostatistician in the ethical committee: problematic aspects, coordinated by Dario Gregori (University of Padua) and Simona Villani (University of Pavia) focused on the problems encountered by the biostatistician who faces critical aspects of observational and experimental studies; discussing real research protocols.

Introduction to Genetic Epidemiology, coordinated by Luisa Bernardinelli (University of Pavia) was dedicated to those who are approaching this field for the first time. The course gave the conceptual basis of genetics, genetic epidemiology and bioinformatics.

An introduction to causal inference in epidemiology, coordinated by Rino Bellocco (University of Milan Bicocca) and Lorenzo Richiardi (University of Turin), introduced the basics of causal theory and showed how epidemiologic concepts and methods could be framed within this general theory. The course strived to formally define causal concepts such as causal effect, counterfactual outcomes and confounding, to identify the conditions required to estimate causal effects and to use graphical and analytical methods that provide estimates that can be endowed with a causal interpretation.

We remembered Michela Ballardini, a young biostatistician prematurely disappeared who actively participated in the society life, by awarding the best posters of the congress. A poster commission, composed by Gabriella Serio (University of Bari), Patrizio Pasqualetti (AFAR; Rome) and Antonella Zambon (University of Milan Bicocca), evaluated all posters presented and selected the best four of them from researchers younger than 35 years. The winners (Francesca Bravi from Milan, Virginia Ferretti from Pavia, Francesca Foltran from Turin, Sara Viviani from Rome) presented their works in plenary session.

The congress was formally opened in the evening of 16th September in Palazzo San Tommaso.

Many academic and political authorities gave their greetings during the opening ceremony recognizing the role of medical statistics. Immediately after, Paul Burton (Department of Genetic Epidemiology, Leicester University) gave a seminal lecture entitled **Population-based biobanks: size, quality and harmony all matters!**

On the morning of 17th September invited speakers from Italian and foreign universities presented methods and applications in the session **New perspectives of genetic epidemiology**, while in the afternoon three parallel sessions were successfully carried out by chairmen and speakers in the field of general and clinical epidemiology, statistical methodology, and health planning.

The day after, 18th September the session was dedicated to environment, and invited speakers from research institutions, universities and health authorities presented methods and applications in the session **New perspectives of environmental epidemiology**. In the afternoon three parallel sessions were successfully carried out by chairmen and speakers in the field of general and clinical epidemiology and statistical methodology.

Saturday morning (19th September) was devoted to the round table **Ethical problems in genetic studies** organized by Alessandra Marinoni (University of Pavia) with the participation of multidisciplinary experts from medical, ethical, theological and juridical fields.

Thanks to the scientific committee, the sponsors and all colleagues and the participants, the congress was successfully carried out.

I wish to thank the University of Pavia where I arrived 20 years ago and in that year I participated as a student to the II congress of the society which collected teachers and researchers in Medical Statistics and Clinical Epidemiology. It is an honour nowadays to act as a president of this society.

Cristina Montomoli
SISMEC President