Reflections and challenges from the 4th SISMEC National Congress

The 4th National Congress of the Italian Society of Medical Statistics and Clinical Epidemiology (SISMEC) was held at the La Casa del Sorriso Congress Centre in Monreale (Palermo) from the 19th to the 22nd of September 2007.

This choice of location was not random. In recent years, medical statistics has found an environment extremely conducive to its academic, scientific and cultural growth. However, this flourishing has been characterised by a marked regional heterogeneity. While some regions in northern Italy have numerous chairs of medical statistics (a subject fundamental in the training of clinicians and many health professionals), biostatistics divisions in many pharmaceutical companies and in some hospitals and clinical research institutions, and professionals working in biostatistics and epidemiology in local health units and in ethics committees, these professional disciplines are almost completely unrepresented in southern Italy, particularly in Sicily. There is thus a clear need, in these areas, for scientific and cultural commitment to the development of a discipline whose main objective is to guide clinicians, public health operators and health researchers towards an evidence-based approach. This is why the SISMEC board chose Sicily as the location for its 4th National Congress.

On Wednesday, 19th September, before the official opening of the congress, a satellite workshop was held, entitled **Pharmacoepidemiology: Between Public Health and Clinical Research**. This event, sponsored by the Italian Pharmaceutical Agency (AIFA), was organised jointly by the Italian Society of Pharmacology and AIFA. Many important academics and professionals from local services and the regulatory agency participated in the workshop, which provided a unique opportunity to get an update on the interdisciplinary initiatives aimed at increasing the use of epidemiological methods in many important areas. These initiatives include surveillance and post-marketing studies of the intensity, mode and appropriateness of pharmaceutical prescription and utilisation in the population and analyses of the cost-benefit profiles of pharmacological treatments in non-experimental clinical practice conditions.

In a parallel session, the congress hosted a short course, **Causal Models in Epidemiology**, directed by Rino Bellocco (University of Milan Bicocca and Karolinska Institute). Juni Palmgren (Karolinska Institute and University of Stockholm) and Bellocco himself discussed the counterfactual theory and presented some of the latest methodological developments in causal inference from observational data.

The congress was formally opened in the evening of 19th September in the marvellous Sala Consigliare at Monreale Town Hall. Numerous dignitaries greeted the meeting's participants, and we would like to recall, in particular, the kind words of encouragement for our discipline spoken by Sicilian regional health committee chairman, Roberto Lagalla. We also appreciated very much the interest in medical statistics expressed by Giacomo De Leo, Salvatore Sciacca and Achille Caputi, of the Medical Faculties of the Universities of Palermo, Catania and Messina, respectively.

Immediately after these opening greetings, Louise Ryan (Department of Biostatistics, Harvard School of Public Health, Boston) gave a seminal lecture entitled **Statistics – the Science of Uncertainty**.

The proceedings on Thursday 20th September began with a guest lecture, **The Challenges of Italian Medical Statistics**, given by Adriano Decarli (*University of Milan*) and Alessandra Marinoni (*University of Pavia*).

This was followed by the traditional reports from the various **SISMEC Commissions** and Working Groups. We recall, in this regard, that the society has two permanent commissions (Research & Development and Edu-

cation & Training) and five working groups (on Observational Studies; Diabetes; Ethics Committees; Evaluation of Health Service Quality; and Environmental Pollution and Public Health). The results obtained and the initiatives organised and carried out by the SISMEC commissions and working groups bear witness to the active and important contribution the society makes to the development of medical statistics in Italy. Updates were also given on the projects of five intersociety working groups: Automated Databases in Epidemiology (in collaboration with the Italian Epidemiology Association); Pharmacoepidemiology (with the Italian Society of Pharmacology); Neonatal Auxology and Evidence-Based Neonatology (with the Italian Society of Neonatology); and Arrhythmia and Sudden Death (with the Italian Arrhythmia and Cardio-stimulation Association). All these initiatives demonstrate the importance that SISMEC attaches to other areas of medical research that offer a wealth of opportunities for cultural and scientific debate.

Friday 21st September opened with two guest lectures and a round table discussion on the main topic of the congress, Clinical Research: Between Experimentation and Observation. Stephen Senn (University of Glasgow) and Alexander Walker (Harvard School of Public Health, Boston) contributed to this discussion, as did several Italian experts from the National Institute of Health, from AIFA, from the Mario Negri Institute, from the academic and clinical world generally, and from the pharmaceutical industry. Particular thanks go to Maria Grazia Valsecchi (University of Milan Bicocca) for her contribution to the organisation of the round table discussion.

The final morning (Saturday 22nd September) was devoted to two particularly topical issues.

The first session, organised in collaboration with the Italian Epidemiology Association, concerned the recent legislation on the **protection of personal data** and its impact on clinical and epidemiological research. Our thanks go, in particular, to Ciro Gallo (University of Naples) for organising this round table discussion.

The second session, organised in collaboration with the Italian Society of Hygiene, Preventive Medicine and Public Health (SIII) and the Italian Epidemiology Association (AIE) focused mainly on a fascinating question: are we, or rather should we be moving (together with other scientific societies, such as SIII and AIE) towards the constitution of a Public Health Federation? While, on the one hand, such an evolution would raise the profile of the role of medical statistics in the Italian public health sector, on the other this prospect reminds us of the need for SISMEC to strengthen the cultural and scientific identity of this discipline. In the light of this, the decision to open the fourth SISMEC national congress with questions about the challenges faced by Italian medical statistics over the next few years and to close it highlighting the role of Italian medical statistics in the process of integration of the many scientific societies operating in the sphere of public health, emerges not as paradoxical but as a deliberate and carefully pondered choice.

Amongst the many important events for which plenary sessions were organised, we would like to mention:

- two guest lectures:
 - Statistical Methods and 30 Years of Experiences in Accident Research Based on In-Depth Investigation in Germany (Dietmar Otte, *University of Hannover*); and
 - Using Distances when Detecting Disease Aetiology (Marcello Pagano, Harvard School of Public Health, Boston).
- two sessions highlighting the activities in this sector of mainly Sicilian-based researchers:
 - The Surveillance of Health Status in Italy was discussed by many researchers from Sicily's universities, Epidemiological Observatory and Cancer Registry. Salvatore Scondotto and Gabriella Dardanoni of the Regional Epidemiological Observatory are thanked for their important and enthusiastic contribution to the organisation of this event.
 - Clinical Research Meets Medical Statistics was the topic dealt with by guest speakers (researchers) from the Department of Internal Medicine of the University of Palermo. Our thanks go to Salvatore Corrao of the University of Palermo who organised this round table discussion.

Without diminishing in any way the valuable contributions of the many speakers in the plenary sessions, the main reason why the fourth SISMEC national congress will go down as a wholly positive experience is the enormous success of the sessions devoted to **free communications**. We received more than 140 abstracts for scientific contributions, some of which were of undoubtedly high quality. As soon as we began reviewing these contributions – at this point I would like to thank the members of the Scientific Committee for their contribution – we began to see, and this impression was confirmed by the oral presentations spread out over 12 parallel sessions held on the 20th and the 21st, evidence of the dynamic way in which the researchers are approaching the new challenges presented by our discipline, sometimes coming up with original ideas, usually displaying the scientific rigour that characterises our discipline, and almost always providing evidence of the contribution that medical statistics makes to clinical and epidemiological research in our country. The Congress Proceedings provide an overview of the scientific research activity of Italian medical statisticians.

The session given over to the presentation of five **research prizes** to young researchers (for the best BSc, PhD, specialisation and master's degree theses in topics related to statistical and epidemiological methodology applied to clinical and public health problems) gave me great pleasure and satisfaction, too. It also served as a reminder that SISMEC believes in promoting the growth of the discipline through encouragement of young and promising researchers.

The members of the Scientific Committee, the Organising Committee and the SISMEC Board are thanked for their always constructive, astute and stimulating contribution to the hard work that made this event possible. I would like to thank, in particular, Antonella Zambon and Dominique Matranga without whom the congress could not have been organised, or at least not so efficiently. I wish to express my particular gratitude to Ettore Marubini, Alessandra Marinoni and Sergio Favilli, irreplaceable teachers, for always supporting and encouraging me, especially in the worst times.

In the attempt to link the trends, experiences and contributions that we were able to gather from the 4th SISMEC Congress with the challenges now facing the society's new board, we would say that most important and strategically promising strategy has to be that of investing in the work of young researchers. They were out in force in Monreale and many provided contributions of an outstanding level. The challenge is not to waste this resource, to encourage these young people to see SISMEC as their scientific society, but also to involve other promising young researchers in projects developed by SISMEC. To this end, the board is now following two directions. First, it intends to implement the recent decision of the society's general meeting regarding a reduction of the membership fee for students attending university courses relevant to the training of biostatisticians and epidemiologists. Second, it intends to promote working groups on important issues particularly aimed at young researchers of our discipline. In this regard, we recall the recent establishment of the SIPrEMAS working group (Synthesis of Effectiveness Trials and Models for Decision Analysis in Health Care), organised by Gian Luca Di Tanna (University of Rome "La Sapienza" and Emilia Romagna Regional Health Authority) and Gianluca Baio (University of Milan Bicocca and University College London). Other groups are about to be established, and as soon as they are, notification will be given on the SISMEC website and in this journal.

It is worth closing with a quote from Gramsci which we address to the new generations of medical statisticians: "... Learn, because we need all your intelligence. Stir yourselves, because we shall need all your enthusiasm. Organise yourselves, because we need all your strength ..." SISMEC intends to move in this direction, that is to help young people to study and channel their natural enthusiasm and energy into projects that may be pivotal for the growth of the society and guarantee our discipline a gratifying future.

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