



ISCEP

International Society for Cardiovascular
Disease Epidemiology and Prevention

Report on the 50th Ten Day International Teaching Seminar on Cardiovascular Disease Epidemiology and Prevention, Goa, India, June 17 – June 29 2018

Cavelossim in Goa, was where fifty six fellows and fellows from twenty three countries gathered for the 50th Ten Day International Teaching Seminar. This was the fourth time that a seminar has been held in India but for many of the fellows it was their first visit to India.

Professor Dorairaj Prabhakaran, co host of the seminar, Director of the Centre for Chronic Disease Control in India and current chair of the International Society of Cardiovascular Disease Epidemiology and Prevention, welcomed seminar participants at the seminar opening. Chronic diseases such as heart disease and stroke are leading causes of death and disability world wide and particularly so in India where the burden of chronic diseases has reached epidemic proportions. In India, there are 65 million people living with diabetes and the annual coronary deaths are expected to reach 4 million in 2030. At the present stage of India's health transition, chronic diseases contribute to an estimated 53% of deaths and 44% of disability-adjusted life-years lost. Urgent and sustained efforts are needed to control this epidemic. The 50th Ten Day Seminar was a continuation of efforts to build capacity in the in epidemiology and prevention of cardiovascular diseases and it was particularly timely that this was being held in India. The seminar was formally opened with a symbolic lighting of candles by the faculty followed by a performance of traditional Goan folk dancing.

The daily seminar programme includes four one hour lectures. The lectures start off with the principles of epidemiology including concepts and methods of investigation, inference, followed by the major findings of cardiovascular epidemiology, and then the application of these findings to goals, strategies, and assessment of cardiovascular disease prevention programmes. A special lecture from Professor Vikram Patel, from Harvard TH Chan School of Public Health considered the goal of university health care for chronic diseases with illustrations from personal experience.

A concurrent series of lectures on biostatistics aims to provide an introduction to key biostatistical concepts and methods used in epidemiologic research, covering issues such as sample size and power calculations, multiple regression and survival analyses.

Group work is a central feature of the seminar. Fellows are allocated to four groups with faculty facilitators which meet daily. The small groups encourage more active individual participation and help fellows to work together to address the practical problems of doing research to answer real questions. In the first week, group work aimed to consolidate material in the lectures with practical exercises using data to examine concepts such as the use of routinely collected hospital and mortality data and measures of risk. This was followed by a series of reviews of the literature using published papers with different study designs discussed in the preceding lectures. These illustrated the use of various study designs and their strengths and limitations, as well as to introduce topics in cardiovascular disease. A cross sectional survey examined the relationship of education and sociodemographic factors with prevalence of cardiovascular risk factors in urban communities in transition in India. A case control study of risk factors for degenerative aortic valve disease in India illustrated how routinely collected data from a hospital database of patients referred for elective diagnostic procedures could be used in research to address relevant clinical questions. A cohort study explored the relationship between cardiorespiratory fitness and the risk of incident atrial fibrillation and stimulated discussion about confounding and possible biased ascertainment of outcomes when interpreting results. A randomized clinical trial of anti-inflammatory therapy for atherosclerotic disease illustrated the use of the trial design for proof of principle studies and raised questions about the generalizability of findings from trials to clinical practice.

In the second week, the groups are assigned to prepare a study protocol using different study designs: cross sectional, case control, prospective and trial. One aim is to highlight the strengths and limitations of different study designs. Participants learn to work as a team to confront the practical problems of doing research to answer real questions. The question this year was: "Does air pollution increase cardiovascular disease?" The groups took on the challenges of such a topic as to how exposure to air pollution might be defined and measured, what populations in which to conduct such studies, what cardiovascular endpoints might be used and how they might be ascertained and assessed. Group discussions continued into the afternoon breaks and late night sessions with intense arguments for and against different options. On the final day of the seminar, each group presented its proposed study design protocol to the others with spirited exchange of criticisms and comments and defence of choices made. The range of approaches as to how air pollution exposure might be assessed and measured, and what populations and specific endpoints might be studied, illustrated the possibilities of epidemiologic studies and potential relevance for clinical and public health policy. This was followed by a final summing up of some of the major issues in epidemiological research. The quality of the presentations demonstrated how much had been achieved in a relatively short time. Many of the questions and study designs discussed in previous seminars have been subsequently developed by fellows into full research projects, often with international collaboration with other seminar fellows and plans were also being made this time to follow up some ideas which might be particularly relevant to India.

A particular highlight of the seminar was a special one day 50th anniversary celebration of the seminar in which past seminar alumni described the work in which they were now involved. A plenary lecture by Dr. George Mensah, now Director of the Center for Translational Research and Implementation Science at the National Heart Lung and Blood Institute, National Institutes of Health USA, surveyed the history of the ISCEP seminar, the major achievements of the seminar as a cause of celebration, the continuing challenges of translating research discoveries to health impact as a cause for concern, and ended with an stirring call to action, identifying future challenges, opportunities and strategies. Professor K Srinath Reddy, founder of the Public Health Foundation of India, described the challenges in creating a public health movement to redress the limited institutional capacity in India for strengthening research and policy development in public health, requiring collaboration with multiple constituencies including academia, state and central governments, multi and bilateral agencies and civil society groups, and some of the barriers and vested interests faced when trying to influencing policy to improve public health. Other seminar alumni presented their activities encompassing collaborative research programmes, training and policy initiatives. Their national and international leadership roles, accomplishments and changes they had instigated to improve clinical practice and public health policy were inspiring for everyone present.

In a packed timetable, we also had some time to experience the kaleidoscopic blend of Indian and Portuguese cultures in Goa, which was under Portuguese rule till 1961, visiting historic buildings as well as sampling the Goan cuisine including the notable Feni spirit made from cashew, only available in Goa.

The fiftieth seminar has continued to build on the tradition of this annual event, which aims to accomplish not just the training of an international corps of people working on the prevention of cardiovascular disease and improvement of health for all but the making of bridges across countries and cultures through peaceful international scientific cooperation. This seminar series has now trained over 2000 fellows from over 100 countries, many of whom are now leaders in the field. Each seminar adds to the strong network of people working together for common aims.

Many individuals and organisations have made this seminar possible. Thanks must be expressed first and foremost to our hosts, Professor Dorairaj Prabhakaran, Professor Nikkil Tandon, and Dr. Poornima Prabhakaran and their colleagues and the most generous support the Centre for Control of Chronic Diseases, India, the All India Institute of Medical Sciences, and the Public Health Foundation of India. We also thank the other organizations which have sponsored the seminar and supported fellows' and faculty participation.

Report prepared by Kay-Tee Khaw, on behalf of the Faculty, 50th Seminar.

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