

Regional Meeting on

Application of Epidemiological Principles for Public Health Action

Conclusions and Recommendations

The participants of the Regional Meeting on Application of Epidemiological Principles for Public Health action, held in the WHO Regional Office for South-East Asia in New Delhi from 26 to 27 February 2009 recognized that in view of the challenges posed by the recent economic crisis, climate change, emergence of new infectious diseases, rising burden of non-communicable diseases, and the continuing problems of high child and maternal mortality, there is a need to strengthen the culture of epidemiology in the South-East Asia Region.

The scope and the reach of epidemiology, which is an integral part of public health, must be expanded to include the study of social, cultural, economic, environmental, ecological, and political determinants of health and constitute the keystone for use of evidence for development of public health policy. It must be used not only to plan, but also manage and evaluate public health programmes. In order to address the old as well as the new challenges to public health, the epidemiological surveillance and response capacity must be further strengthened in the Member States, with a sufficient number of trained epidemiologists, the support of public health laboratories and use of information technology (e.g., open source software that provide a common language).

Greater level of interaction is needed between epidemiologists and social scientists including for development of new methodologies in a multi-disciplinary way and to bring in the concept of socio-epidemiology. Such an approach will enable us move beyond health problems per se to a new complex social and human developmental challenges such as current crisis before us such as threat to public health posed by global financial meltdown and climate change.

Training in epidemiology in medical and public health schools should be skill-oriented or field-based, with teaching learning methodologies based on learning by doing. Imparting epidemiological skills and an analytical approach to problem solving is imperative at all levels of health services—from national to state/province to district and primary care levels. The epidemiological capacity however does not lie in medical schools and schools of public health alone but also in so-called alternate sector such as management and social science institutions, professional associations and civil society which also need to be tapped collaboratively and in a spirit of partnerships in order to address the various health dimensions.

Recommendations

Member States should:

- Promote and strengthen the use of principles of epidemiology and of quality epidemiological data for formulating national policies/strategies and managing health programmes;

- Invest in and establish a recognized career path for epidemiologists and public health specialists with skill/competency profile at all levels of health services;
- Build capacity of the national health staff at all levels of health service delivery including those working in national disease control programmes in effective application of epidemiological principles for evidence-based public health action;
- Develop and/or further strengthen networking among national institutes and centres active in epidemiology and harness their expertise for promoting and protecting public health and for sharing information for action;
- Enhance teaching and training of epidemiology in the undergraduate medical/nursing/dental/laboratory/veterinary courses, with emphasis on quality, in order to instill in students the epidemiological thinking;
- Foster better collaboration with environmental, ecological and social scientists to understand influence of these factors on diseases and in applying this knowledge in planning, programme implementation, monitoring and evaluation; conducting special surveys such as demographic health surveys at regular intervals could help in generating data relevant for this purpose;
- Collaborate and support utilization of existing epidemiology-related capacity available in each country, not only in medical schools and schools of public health but also in so-called alternate sector such as civil society, professional associations and management and social science institutions. Similarly, use laboratory inputs and information technology in improving epidemiological analysis; and
- Consider organizing annually a national epidemiology seminar to share information on and experiences in epidemiological research and training initiatives underway in the country

WHO should:

- Organize, in collaboration with interested partners and stakeholders, a regional conference to enhance visibility and relevance of epidemiology in the South-East Asia Region and advocate with policy makers on the critical role of evidence for public health action, at all levels of health services;
- Provide technical support to Member States in building capacity of national programme staff in epidemiology and application of it's principles for programme development and management;
- Continue to facilitate networking and partnership among institutes active in conducting epidemiological training or research both in medical schools and schools of public health and in the so-called alternate sector, and provide a forum for sharing of information and expertise within the Region;
- Prepare and share with Member States standard/uniform epidemiology training materials, and protocols developed based on consensus;
- Assist Member States in formulation and implementation of research that could determine the influence of social, cultural, economic, environmental, ecological and political factors on disease epidemiology and delivery of and access to health interventions, and in better translation of such epidemiologic evidence to policy and programme context;

- Develop various short (1-2-week) epidemiology training courses that are participatory, interactive and field practice-oriented for:
 - health programme managers so that epidemiological data are used to plan, monitor and evaluate public health programmes;
 - medical/public health school students through FETP-type training methods to engage them in the application of epidemiological principles to field investigations;
 - laboratory specialists to enhance a stronger involvement and constant collaboration between public health laboratory and epidemiologists
 - non-governmental organizations to encourage them to use epidemiological principles in their programmes; and
 - journalists and community organizations on communicating epidemiological information/data as evidence base for public health action.