Final Project Workshop: Towards an Effective NCD Surveillance System for the City of Pune, India

Pune, 14 March 2015

The workshop was the final meeting of the project "Disease Surveillance in the Indian Megacity of Pune: Conceptualization, Implementation and Evaluation". It took place in March 2015 at the Bharati Vidyapeeth University in Pune. The project was funded by the German Research Foundation (DFG) as a knowledge transfer project. This funding scheme provided the opportunity for researchers to use their knowledge in an application-oriented project in cooperation with a non-academic partner. In this case, the project was based on a project on health disparities in Pune, which was funded by the DFG from 2010 to 2012. The transfer project was led by Professor Frauke Kraas and Dr Carsten Butsch (both of the Institute of Geography, University of Cologne). The cooperation partners in Pune were the Bharati Vidyapeeth Institute for Environment Education and Research (Indian research partner) and the Bharati Medical Foundation (application partner), both located in Pune.

The main objective of the current project was to develop and implement a prototype surveillance system which addresses two major gaps identified in urban disease surveillance in India, namely weak private practitioner participation (despite its dominance in health care provision in urban areas) and the exclusion of non-communicable diseases from routine surveillance. The aim was to design a generic "blueprint" for effective NCD surveillance for the continuous collection, analysis and interpretation of health-related data necessary for the planning, implementation and evaluation of public health practices. The system was designed in such a way that it did not duplicate existing programmes, but supplemented them. A pilot test was conducted with selected health care facilities in three pre-identified areas in Pune in order to gain important insights into the integration of non-communicable diseases in disease surveillance on the one hand and into the opportunities and barriers related to the integration of private health care facilities in disease surveillance on the other.

The purpose of the workshop was to present results of the study and to discuss recommendations for setting up an effective non-communicable disease surveillance system focused on selected diseases (diabetes, chronic respiratory diseases, cardiovascular diseases, and cancers) for the city of Pune. The workshop was attended by 60 participants from various groups, including representatives of the Pune Municipal Corporation and the ministry

of health, scientists and students from the medical sciences. All private practitioners who had participated in the research project were also invited.

The workshop was opened by Professor Erach Bharucha, director of the Bharati Vidyapeeth Institute for Environment Education and Research, and Professor Frauke Kraas, one of the project's principal researchers. Afterwards, the Additional Commissioner of the Pune Municipal Corporation, Mr Rajendra Jagtap, highlighted in his keynote address the importance of non-communicable disease prevention and control. He mentioned the lack of adequate data and the heterogeneity of the private health care sector as major challenges for surveillance. In the second session, Dr Mareike Kroll, Dr Revati Phalkey (both University of Cologne) and Sayani Dutta (Bharati Vidyapeeth University) presented major findings from the empirical work in Pune, which was conducted in a multi-step research approach. First, all private health care facilities were mapped in three selected research areas in June 2013. Second, a knowledge-attitude-practice (KAP) was conducted among private practitioners in these areas in July/ August 2013. The aim of the survey was to collect information on what is known, believed and done in respect of disease surveillance, based on a standardized questionnaire. Third, a pilot study on non-communicable disease surveillance was implemented on a voluntary basis for six months in 2014. Practitioners were provided with paper-based registers and asked to enter all newly diagnosed cases of ten selected diseases, including information on a few demographic and socio-economic variables regarding the patient (e.g. age, gender, educational level). For data protection reasons no personally identifiable information on patients (e.g. name or address) was collected. The pilot study was evaluated by analysing the reported cases, the data collection process and the standardized feedback provided by the study participants.

In the third session of the workshop, experts provided input statements on challenges of disease surveillance in Pune. Dr C.S. Yajnik, diabetologist and researcher at KEM Hospital in Pune, gave a presentation on risk factors and disease burden of diabetes as a major challenge for public health in Indian cities. He highlighted the fact that diabetes affects people at a younger age (around 10 years earlier) compared to developed countries. Dr Jitendar Sharma (Head of Healthcare Technology, National Health System Resource Centre, Ministry of Health and Family Welfare in New Delhi) discussed the necessity of surveillance data for informed decision-making and programme planning. He raised the issue of the lack of standards and guidelines for case recording and reporting. Another three invited speakers, Dr S.T. Pardeshi (Deputy Medical Health Officer, Pune Municipal Corporation), Dr P. Awate (State Surveillance Officer, Integrated Disease Surveillance Project) and Dr Savita Shardul (State Epidemiologist,

Integrated Disease Surveillance Project), were unable to give their presentations as on the same day they had to attend an emergency meeting organized at short notice to deal with an acute outbreak of H1N1 influenza in the state of Maharashtra.

In the last session of the workshop, participants discussed which approach would work best for non-communicable disease surveillance in India – taking into account the existing legal frameworks. Further topics of discussion included the suitability of data collection tools (paper-based versus different forms of electronic data reporting), which variables should be included in such a system on a routine basis and which prerequisites should be considered for upscaling the system to the city or even the state level. There was general agreement among the workshop participants on the necessity of implementing an NCD surveillance system that includes reporting units from the public and private health care sectors due to its importance in urban health care. Opinions about some aspects of the implementation process differed, for example regarding the legal framework, namely whether the reporting of diseases should be mandatory or voluntary. The opinions and perspectives of different stakeholder groups also have to be considered in further developments. Recommendations for establishing non-communicable disease surveillance in Pune derived from the pilot study and the workshop discussions will be shared with local stakeholders such as the Pune Municipal Corporation and the Ministry of Health.

Mareike Kroll / Carsten Butsch / Frauke Kraas