Developing countries have the highest burden of noncommunicable diseases (NCDs), and monitoring global progress in their prevention and control is not fully possible without data from them. Reducing premature mortality due to NCDs by one-third is one of the sustainable development goals (https://www.sustainabledevelopment.un.org/sdgs). Apart from that, the global NCD monitoring framework focuses on four major NCDs (cardiovascular diseases, cancers, chronic respiratory diseases, and diabetes) and eight key risk factors (RFs). The framework includes components related to disease burden (mortality and morbidity), exposure to key RFs and national response in terms of health system preparedness and coverage, and presence of key policies and programs (http://www.who.int/nmh/ncd-tools/indicators/GMF_Indicator_Definitions_Version_NOV2014.pdf. [Last accessed on 2016 Sep 16]). The targets have been set for 2025, and the progress is to be measured every 5 years with 2010 serving as the baseline for the targets based on relative reduction. To monitor the progress globally, countries need to establish harmonized national NCD-relevant health information systems that include vital registration, RF and disease surveillance and response, service statistics, and health management and financial information. Surveillance and monitoring measure progress and provide the basis for accountability of stakeholders and measurement of health inequities which are vital for public decision-making.

However, there are many challenges facing the NCD surveillance systems in developing countries. These include weak mortality surveillance systems, lack of morbidity information from private sector, inadequate use of information technology for data collection, transmission, and analysis, lack of available platforms for or inability to integrate with population-based surveys and health facility surveys, lack of data on health-care quality, cost and outcomes, and a general inadequate technical capacity to conduct NCD surveillance. This situation is worsened by an inadequate recognition of NCDs as a public health challenge and a need for governments to mount a multisectoral response. While information on NCD burden may be limited in developing countries, even the available information is not adequately used for action.

However, the scene is not that dismal. There have been many examples of how these challenges have been addressed and significant progress made. The number of countries conducting recent surveys of RFs jumped from 30% in 2011 to 63% in 2013. India addressed the challenge of lack of data on mortality through the inclusion of a verbal autopsy-based cause of death ascertainment among the deaths identified through the Sample Registration System. This has enabled it to monitor the progress. As per its report, the proportion of deaths due to NCDs has gone up from 42.4% in 2001–2003 to 49.2% in 2010–2013. Nepal provides a good example of how NCD surveillance activities can be gradually expanded. While the first round of NCD RF survey was restricted to urban Kathmandu to generate preliminary evidence of the burden and to develop capacity, in subsequent measured steps, the scope of the surveys was enlarged, first to three districts including hilly regions and then to the whole country. Nepal also included biochemical testing and used handheld devices for data collection in its latest survey. The WHO-EMRO has recently taken the excellent initiative of developing training manuals for strengthening the capacity of national NCD Surveillance program managers. India is embarking on a national NCD monitoring survey which is fully funded by its government.

These progresses have been facilitated by two factors – strong advocacy and availability of global tools. While the WHO has provided excellent leadership in this regard through its advocacy and development of tools and manuals (STEPS set of documents, Service Availability and Readiness Assessment tools, Global School-Based Health Surveys adults among others), other international partners such as World Bank and Centers for Disease Control have also played important roles. However, it is to the credit of both governments and nongovernmental groups that these have been converted to actions on the ground.
However, many areas of concern continue to exist. Most of the surveys in developing countries have been donor-funded. Countries have yet to be convinced for the need to invest in setting up surveillance systems and not treat these as one-time activity. While it could be argued that the initial surveys were undertaken as a part of advocacy and capacity building, subsequent investments have to be budgeted in the programs. In the given scenario, conduct of heavily funded vertical tobacco surveys (Global Adult and Youth Tobacco Surveys) is not really good examples of how the scarce resources should be spent. Based on the experience in South-East Asia Region countries, the continuing need for external technical support for NCD surveillance is worrisome. There is no doubt that NCD surveillance is more complex than infectious disease surveillance, which is also weak in most of these countries. One of the missing pieces of data in surveillance globally is the information on community environment, nonhealth sector data as well as legislation implementation statistics. As we advocate (rightly so) increase the use of fiscal and legislative measures for addressing NCDs and modifying environment, we need to create mechanisms to measure these as well. Lack of integration of NCD surveillance into existing surveys wherever possible is also not being done. There is no reason, except perhaps territorial concerns, why Demographic Health Surveys (DHS) cannot cover many aspects of NCDs. For example, health facility surveys conducted as a part of the DHS in Nepal and India did not include NCDs in their ambit. Lack of a global partnership or network focusing on NCDs is also perhaps a weakness that needs to be corrected. Linking surveillance to public health action is also weak in most of these countries.

Overall, while significant challenges remain, countries are making good progress due to increasing recognition of NCDs as a public health problem and global advocacy and support. With the inclusion of mortality target of NCDs as a part of the sustainable development goal, broad-based efforts should gather momentum. While global targets for NCDs may or may not be achieved, this period will be used gainfully by countries to invest in the development of sustainable NCD surveillance systems. These surveillance platforms once developed can also be used for other NCDs which are vying for attention in developing countries including mental disorders, chronic kidney disease, etc.

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