## **Editorial**

At the end of 2010, an estimated 34 million people (31.6 million—35.2 million) were living with HIV globally and although annual new HIV infections fell 21% between 1997 and 2010, according to UNAIDS 2011, still much efforts are needed to get zero new HIV infection and zero AIDS related deaths. Three decades after the emergence of the HIV epidemic, and despite the development of many efficacious individual, group and structural level interventions, it is clear that advances made in the prevention of HIV have not been sufficient to get ahead of the epidemics. Globally, 8.8 million (8.5 million—9.2 million) incident cases of TB occurred in 2010. As in other areas of public health and health service delivery, consensus surfaced that fundamental to this problem was insufficient use of scientific evidence in planning and delivering interventions. To address this gap, health programme planners and implementers were encouraged to adopt 'evidence-based methods' by bringing in evidence from the scientific literature and experts to inform their decision making. Gradually, researchers have been encouraged to engage in knowledge translation to ensure that the findings from their research is being made known to policy makers, planners and implementers to guide better decisions. While emphasizing the need to close the gulf between evidence and action, there is a growing sentiment that current concepts and approaches for doing so are inadequate, and new models are needed.

The common practice of conducting research by researchers tends to detach researchers from those involved in programme planning and implementation. So, it is a significant practice to engage jointly researchers, programme planners and implementers to develop program, focus on operational research, process evaluation, and outcome and to develop the knowledge base further, so as to determine what works best in different situations and why.

A newly devised approach, Program Science, may offer a structure that both expands the scope for knowledge development and provides an intersection between programme and science focused on resolving programme issues. Programme science can best be defined as the systematic application of theoretical and practical scientific knowledge to improve the design, implementation and evaluation of public health programmes. Program Science incorporates different spheres of practice including strategic planning and policy development, programme implementation and programme management with complementary spheres of knowledge, including epidemiology, transmission dynamics, policy analysis, intervention efficacy and effectiveness, surveillance, operations research and monitoring and evaluation.

Thus, Program Science brings programme and scientific research together to enhance the health impact of HIV/TB prevention, care and support programmes.