Historically inter-country coordination on tuberculosis (TB) response was strong. But more recently, coordinated TB research has been limited. What is your perception of needs and areas in TB prevention and care that intercountry collaboration on TB research can have the strongest impact on?

All areas of TB prevention and care would benefit from international collaboration on TB research. Such a collaboration would require a shared research agenda that has been agreed upon by the appropriate partners. This collaboration would be a kind of group exercise of experts representing national TB programmes, academic institutions, civil society and ex-patient organizations, as well as technical and funding agencies. These collaborators would have practical experience in areas such as TB diagnostics, clinical management of TB, health systems, intersectoral collaboration and social determinants for TB.

A recent report published in the European TB Research Initiative called, Defining the tuberculosis research agenda for the WHO European Region: a study report of the European TB Research Initiative (2019), provides an example of how this could work at the regional level. With the application of scientifically sound methodology, important questions in epidemiological research, and innovation were identified for both low and high burden TB countries. The study report is important, and all TB researchers and institution should refer to it in order to keep their research projects regionally relevant.

Please describe an appropriate course of action for intercountry collaboration platforms that want to support TB research and prevention?

We must start by creating a solid platform foundation, and most successful platforms are those that bring together all key actors. In the case of TB response, we must at least include researchers and policy makers. The European TB Research Initiative has involved civil society and ex-patients, which is important because inclusion of those groups helps to ensure that research gaps related to social determinants of TB and protection of vulnerable populations are considered.

Once a platform for collaboration has been created, an advisory group of interested members must be established, as this will help to empower implementors. This group should also be responsible for making sure that activities are prioritized and
that the actions undertaken are relevant to the specific needs of a country. The advisory group and the platform secretariat must jointly guarantee that capacity building initiatives are in place to prepare national counterparts for TB research uptake, and that the TB research agenda is promoted and serves as the rationale for the allocation of technical and financial resources. Research results must also be properly documented and made publicly available. This will, of course, help avoid the duplication of activities.

**What strategy should be used to help boost TB research uptake at country level? Who are the stakeholders that need to be engaged?**

Areas that should be addressed to ensure successful research uptake at the country level include: creating an interest in the research that is being conducted by national TB programme managers; improving the capacity of research implementors; and identifying additional funding sources. National counterparts should also have a well-developed plan on how they will use the research findings for creating evidence-based policies.

Once the interest at country level is secured, a review of country capacity should also be conducted to identify professionals with the potential to boost research implementation at country level. But if the number of professionals is insufficient, or if they have knowledge gaps, then capacity building initiatives must be introduced. One such initiative is the European Tuberculosis Research Initiative (ERI-TB)’s structured operational research training, which builds the capacity of TB professionals and teaches them how to implement operational research (OR) using data that has already been collected in the country. Finally, a prioritized research agenda should serve as a basis for the formulation of countries’ TB research priorities. It should also serve as a tool for advocacy for financial resource allocation by relevant stakeholders needed to carry out basic research, epidemiological and operational research projects, which are the basis for prospective data collection.

**Many parties have been calling for international action to improve research implementation, particularly on all-oral shorter regimens for drug-resistant tuberculosis. Why is this important and how should this be coordinated?**

Multi-country research is a method and a way for us to help fill regional research evidence gaps and also allows countries to collaborate and share experiences about the various ways they treat TB. Multi-country research is also a platform that will make it easier for them to establish relevant connections between national tuberculosis programmes (NTPs) for experience-sharing and, potentially, the improvement of cross-border TB control.

Significant improvements in treatment outcomes and quality of life for patients with drug-resistant tuberculosis are expected, following key updates to treatment approaches, as announced by WHO in a Rapid Communication which recommends the phasing out of shorter injectable-containing regimens and the introduction of a shorter all-oral bedaquiline-containing regimen for multidrug-resistant and rifampicin-resistant (MDR/RR)-TB patients. The region with the highest burden of MDR/RR-TB in the world is the WHO European Region, while the treatment success rate of these patients (57%) is far below the target (75%). This success rate could be increased by improving access to new regimens that are more effective, less toxic and easier to implement for eligible patients.

Also, WHO guidelines for DR-TB management suggest that the introduction of shorter all oral treatment regimens under operational research conditions will produce more evidence and improve the overall clinical management of DR-TB.

To ensure the comparability of research produced by each country, unified inclusion/exclusion criteria for participants should be agreed on. Also, treatment regimens used in the studies should be narrowed down to just a few.

**What will motivate countries to increase their participation in multi-country research projects? How can they benefit?**

Patients, doctors and NTPs will all benefit from OR projects. Patients will receive treatment that is potentially more tolerable, less complicated, and which could eliminate painful injections, while dramatically reducing the treatment time. Doctors, in turn, will receive guidance on how to provide proper clinical care for patients with drug-resistant TB.

NTPs will benefit from increased capacity and shortened treatment periods. Shortened treatment will ensure more efficient use of financial and human resources, which will provide for optimized DR-TB treatment regimens for a wider cohort of patients.

Participating in multi-country research programmes will be a capacity building exercise, that will improve treatment outcomes and will increase quality of TB care in the Region.
As a representative of a development agency, how do you perceive the role of development organizations in TB research?

Development agencies can act as mediators by evaluating country request for help and linking them with relevant agencies that provide technical assistance. That kind of initiative will ensure benefits for a broader group of patients.

Sustainability is the most important criteria, especially when evaluating project proposals, and when considering whether relevant parties will be able to use increased capacity to improve processes in TB management at the national level. Research activities are also an important component under USAID’s Global Accelerator to end TB. Ultimately, results from research activities should be linked to improving programmatic performance and result in practical benefits to all individuals who suffer from TB.

Disclaimer: The interviewee alone is responsible for the views expressed in this publication and they do not necessarily represent the decisions or policies of the World Health Organization.