



Meeting report on IMPACT TB workshop Vietnam

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Ha Noi

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The IMPACT TB project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 733174

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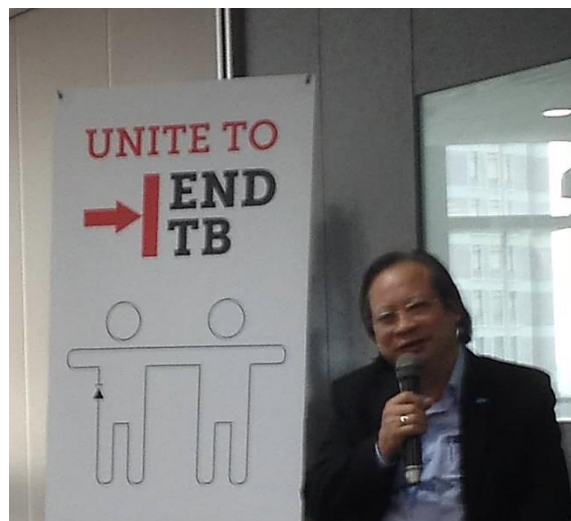
Executive Summary

IMPACT TB convened a workshop in partnership with the National Tuberculosis Programme of Vietnam and relevant stakeholders. The meeting was attended by representatives of the National TB Programme, World Health Organisation, TB Reach partnership (STOP TB), Clinton Health access Initiative (CHAI), Preventative Health Centre, Interactive Research and development, Vietnam community Network for Tb control, Woolcock Institute, Ho Chi Minh City Public Health association and other relevant governmental and non-governmental organisations working in TB control in Vietnam.

The meeting reviewed the current situation of tuberculosis in Vietnam, the five-year national strategic plan to 2020 and vision post-2020 and active case finding experience to date with a presentation from the National Tuberculosis Programme. Relevant global evidence and experience for active case finding in tuberculosis was also reviewed to provide a global context for the Vietnamese data.

Break-out groups then discussed the evidence gaps for active case finding and linkage to care in Vietnam and presented the future research priorities in this field. Groups were also invited to discuss the most effective strategies for IMPACT TB to continue engagement with the National TB Programme, Ministry of Health and relevant stakeholders to ensure relevance to policy.

A clear strategy for engagement was devised, with all stakeholders endorsing the relevance of the IMPACT TB project to TB control policy in Vietnam and alignment with current research priorities.



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Objectives of the meeting:

1. Introduce the IMPACT TB project to stakeholders in TB control in Vietnam;
2. Review current policy and experiences of active case finding implementation in Vietnam;
3. Review perceived facilitators and barriers to active case finding scale-up through facilitated discussion with experienced stakeholders;
4. Identify how the research questions that will be addressed within the IMPACT TB project can help fill important knowledge gaps concerning active case finding in Vietnam and facilitate future funding applications;
5. Develop a roadmap for how to translate IMPACT TB research findings into policy and practice.



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Participants and organisations:

The meeting delegates included representatives from the Vietnamese National TB Control Programme, World Health Organisation, TB Reach partnership (STOP TB), Clinton Health access Initiative (CHAI), Preventative Health Centre, Interactive Research and development, Vietnam community Network for TB control, Woolcock Institute, Ho Chi Minh City Public Health association and other relevant governmental and non-governmental organisations working in TB control in Vietnam.

Participants included:

Associate Professor Nguyen Viet Nhung (National TB Programme Manager), Dr Maxine Caws (IMPACT TB PI, Senior Lecturer Liverpool School of Tropical Medicine), Associate Professor Le Van Hoi (NTP vice-Director and Researcher, Hanoi Medical University), Vo Nguyen Quang Luan (WP1 lead IMPACT TB, CEO Friends for International TB Relief) Professor Knut Lonnroth (WP6 lead IMPACT TB, Karolinska Institute), Ha Pham (Senior Programme Manager Friends for International TB Relief), Khuat Thi Hai Oanh (Centre for Support community Development initiatives), Chu Thai Son (Vietnam Community Network for TB Control), Nguyen Trung Hoa (Go Vap District preventative Health Centre), Nguyen Giang (International Union Against TB and Lung Diseases), Nguyen Tuan Anh (TB Victory network), Rachel Forse (Programme Director, Friends for International TB Relief), Nguyen Phuong Lan (Interactive Research and Development Vietnam), Pham Huynh Khanh (World Health organization), Kelly Smyth (IMPACT TB Administrator, Liverpool School of Tropical Medicine), Lan Nguyen (Programme Manager, Friends for International TB Relief), Ines Garcia (Health Economist, World Health Organization), Andrew Siroka (Health Economist, World Health Organization), Tran Thi Hounh Lien (PATH), Dr Tom Wingfield (Postdoctoral researcher, Karolinska Institute), Jacob Creswell (Team Leader, STOP TB Partnership), Dr Nguyen Binh Hoa (Secretary, National TB Programme), Luu Ho Thanh Tuan (Clinton Health Access Initiative), Mattias Larson (Karolinska Institute), Nguyen Thien Huong (KNCV), Le Thi Ngoc Anh (NTP Victory network), Hoang Thi Thanh Thuy (Programmatic Management of MDR TB lead, National TB programme), Vu Nguyen Thanh (Ho Chi Minh City Public Health Association), Nguyen Thu Anh (Woolcock Institute), Nguyen Thi Mai Phuong (NTP PMDT team), Dr Nguyen Nhat Linh (World Health Organisation).



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Summary of tuberculosis situation in Vietnam:

Tuberculosis is a priority of the Vietnamese government and the National Tuberculosis Control Programme (NTP) has a strong network comprehensively providing DOTS throughout the country to a population of around 93 million. In 2015, there were over 102,000 new TB cases notified in Vietnam, which is around 80% of the estimated 128,000 cases occurring. Each day there are around 280 cases notified and 44 deaths from TB in Vietnam. Of those individuals with TB who have a known HIV status, 4% are HIV positive. An estimated 4.1% of new TB cases are multi-drug resistant (MDR; resistant to rifampicin and isoniazid) but this MDR is significantly higher in previously treated cases at around 25%.

Vietnam currently ranks 15 out of 30 high burden countries for TB burden in the world (14/30 in 2016 and 11/30 in 2015). The male to female ratio among notified cases is 3:1 in Vietnam, which is one of the highest ratios reported, with most settings showing a ratio of 2:1. The reasons for this very high gender disparity in Vietnam are not yet clear. Childhood cases (0-14 years) are estimated to represent less than 9% of notified cases and are likely to be underdiagnosed. The National TB Programme has made significant efforts to improve the management of childhood TB in recent years. Per case notification, tuberculosis in Vietnam has an annual declining prevalence of 4.6% and an annual declining incidence of 2.6%. There is also a significant reduction in TB mortality year on year of 4%.

Vietnam has recently completed a national TB patient cost survey in collaboration with WHO and is one of the first countries to do so. The aims of the survey were to document patient costs of TB, determine the proportion of TB patients in the NTP network experiencing catastrophic costs and design a standardized approach for measuring financial barriers. TB is an expensive disease- the survey showed 67% of all TB patients experienced catastrophic costs in Vietnam and this rises drastically for MDR-TB patients to 98%.

Around 20% of TB cases are currently unnotified in Vietnam; screening programmes are required to bridge the gap to have both a direct impact (a reduction in suffering and mortality) and indirect impact (shortening the duration of infectiousness). Improving case detection and case notification is a priority of the NTP and the Vietnamese government.



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National Strategy on Tuberculosis control to 2020; vision to 2030

Objectives by 2015 (now passed)

1. Reduce prevalence rate in community to less than 187/100,000 population
2. Reduce TB mortality rate to less than 18/100,000 population
3. Reduce MDR-TB rate to less than 5% among new TB cases

Objectives by 2020:

1. Reduce prevalence rate in community to less than 131/100,000 population
2. Reduce TB mortality rate to less than 10/100,000 population
3. Maintain MR-TB rate at less than 5% of total new TB cases

Vision by 2030:

Continue to reduce TB mortality rate and prevalence rate in community to less than 20/100,000 population, moving forward to the aim of the Vietnamese people living in a TB free environment.

Solutions and interventions

- Policy and law
 - i. Revise, amend and supplement policies
 - ii. Research and publish legal frameworks
 - iii. Develop remuneration policies for health workers involved in TB prevention and control
 - iv. Research and publish regulations on health insurance
- Communication
 - i. Strengthen dissemination and communication about law and policy of TB prevention and control
 - ii. Disseminate about TB and TB Control, especially to those in vulnerable areas
 - iii. Agencies, organizations, communities, patients and their families to propagate about TB
- Technical solutions and TB control services
 - i. Medical examination and treatment facilities are responsible for detection, diagnosis, treatment and management of TB cases
 - ii. Create favourable conditions for all people
 - iii. Optimise the application of new technologies
 - iv. Proactively apply new technologies recommended by WHO
 - v. Research and apply new approaches to move towards universal access to TB services
- International relations
 - i. Strengthen partnerships with other countries, international organizations and individuals
 - ii. Expand international partnership in all areas of TB prevention and control



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- iii. Work closely with other countries to solve similar detection and treatment problems for TB spreading across borders
- Drug supply and logistics
 - i. Research and develop TB drug management and supply framework and appropriate logistics for adequate TB control activities
 - ii. Research and publish policy to create better nutritious conditions for TB patients
 - iii. Strengthen and improve infrastructure and equipment of units
 - iv. Investment in research, produce domestic drugs for TB treatment demands. Monitor drug resistance and adverse reactions
- Financial resources
 - i. Mobilize resources for TB prevention and control from national budget
- Human resources management
 - i. Ensure sufficient personnel for implementation of TB prevention and control activities
 - ii. Diversify types of specialty training
 - iii. Improve TB control management skills for managers at all levels
 - iv. Integrate TB prevention and control activities in the National Target Program on HIV/AIDS prevention and control, and other preventative health programmes.
- Monitoring and Evaluation
 - i. Promote supervision and report system to improve evaluating and assessing skills
 - ii. Research and develop plans to improve TB epidemiology surveillance and evaluate effectiveness of TB prevention and control services
 - iii. Strengthen monitoring and evaluating the implementation of TB laws and policies



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Pre-Meeting survey Results

Meeting delegates were invited to participate in an opinion survey prior to the meeting to assess current views on active case finding research priorities in Vietnam.

Question 1. Important research priorities for improving case detection?	
Improving knowledge about TB in the community	32
Screening/active case finding in risk groups	24
Involving the community	15
Improving referral and notification systems	13
Improving general availability of health care services	11
Reducing direct and indirect costs of health seeking and diagnosis	10
Engaging all health care providers	10
Developing better diagnostic tools	6
Using enablers and incentives for health care staff for screening/diagnosis/detection	6
Question 2. Important research priorities for improving linkage to care?	
Improving monitoring and supervision of treatment (including DOT, e/m-health solutions, etc.)	38
Improving models of care, including decentralization of treatment, less hospitalization etc.	31
Improving support, training and supervision of health care staff	25
Reducing direct and indirect costs of care for patients	22
Involving the community	20
Developing better drugs/treatment regimens	16
Using enablers and incentives for patients	6
Using enablers and incentives for health care staff	5



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Question 3. What is the top (in terms of feasibility) from the improving early case detection research areas:	
Improving knowledge about TB in the community	14
Screening/active case finding in risk groups	11
Engaging all health care providers	7
Improving general availability of health care services	6
Reducing direct and indirect costs of health seeking and diagnosis	6
Improving referral and notification systems	6
Improving health care access specifically for hard-to reach groups	5
Improving lab capacity	4
Improving knowledge and practice among health workers to identify presumptive TB	3
Using enablers and incentives for health care staff for screening/diagnosis/detection	2
Using enablers and incentives for patients to initiative and complete diagnostic pathways	1
Question 4. What is the top (in terms of feasibility) from the linkage to care research areas:	
Improving support, training and supervision of health care staff	14
Improving models of care, including decentralization of treatment, less hospitalization etc.	13
Improving monitoring and supervision of treatment (including DOT, e/m-health solutions, etc.)	12
Involving the community	10
Reducing direct and indirect costs of care for patients	8
Using enablers and incentives for patients	7
Developing better drugs/treatment regimens	5
Using enablers and incentives for health care staff	2



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Overview of Active case finding experience in Vietnam to date

Several intensified case finding projects have been conducted in Vietnam over the last decade in line with the NTP strategy of intensifying TB control efforts. Projects have been conducted with a focus on either household contacts of TB or MDR TB cases, specific high-risk populations such as HIV patients or prisoners or migrants [1-10]. The Woolcock Institute (Australia) has conducted three projects under the title Active Case-finding in Tuberculosis (ACT). ACT1 was a pilot project screening around 500 household contacts (2009-2010). ACT2 (2010-2013) progressed to enrol over 25,000 to the randomized control trial (RCT) comparing yield of active screening with passive diagnosis and was conducted in 70 districts within 8 provinces- 4 in the south, 2 from central Vietnam and 2 from the north with geographical and urban-rural stratification. Act3 (2013-2018) is being conducted in the rural Mekong Delta Province of Cau Mau and aims to enroll 120,000 participants into a randomized controlled trial of community-based screening [11-13]. Propercare, on which the IMPACT project is based, has been conducted since 2014 in Go Vap District of Ho Chi Minh City. In addition, several projects have looked at factors related to diagnostic delays, the contribution of the private sector and knowledge, attitudes and practice (KAP) about TB diagnosis in healthcare workers and the general population [14-20]. Publications were not identified for all projects reported and further work will be conducted to synthesize information on previous projects in collaboration with the NTP.



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Future research priorities

Future research priorities were discussed at length and it was agreed that there are broadly four main research areas of focus:

1. Impact on TB morbidity and mortality- reduction of suffering, transmission and deaths due to TB
2. Case detection/early detection. Development of screening and active case finding programmes. Reduction of the case-detection gap.
3. Feasibility and acceptability of programmes and interventions
4. Cost effectiveness and affordability. Finding a way to implement a model at a low cost to the government/NTP and removing TB costs from patients.

From these four broad themes, ideas were discussed in further detail. It was suggested that there should be a particular focus on research on screening for high risk groups such as internal migrants to inform targeted implementation, in addition to close contacts of existing TB patients.

Future research should look to minimize barriers to health care access and could consider patient incentives to increase early diagnosis and treatment adherence. It was also suggested that projects could investigate the effectiveness of providing more in depth TB education to health care staff. Improvements in diagnostic testing, including both novel diagnostic tests and evaluation of diagnostic algorithms using existing tools should be evaluated to improve sensitivity and specificity. Research should aim to develop an evidence-based TB screening programme and needs-based support package for TB diagnosis and treatment.

Future work could also provide tools for measuring the impact of active case finding. The VICTORY network provides a platform for TB related research in Vietnam which ensures research is aligned with NTP strategy and avoids duplication of research efforts. The objectives of IMPACT TB were endorsed by all participants and will provide valuable evidence to inform NTP and strategy and highlight future knowledge gaps.

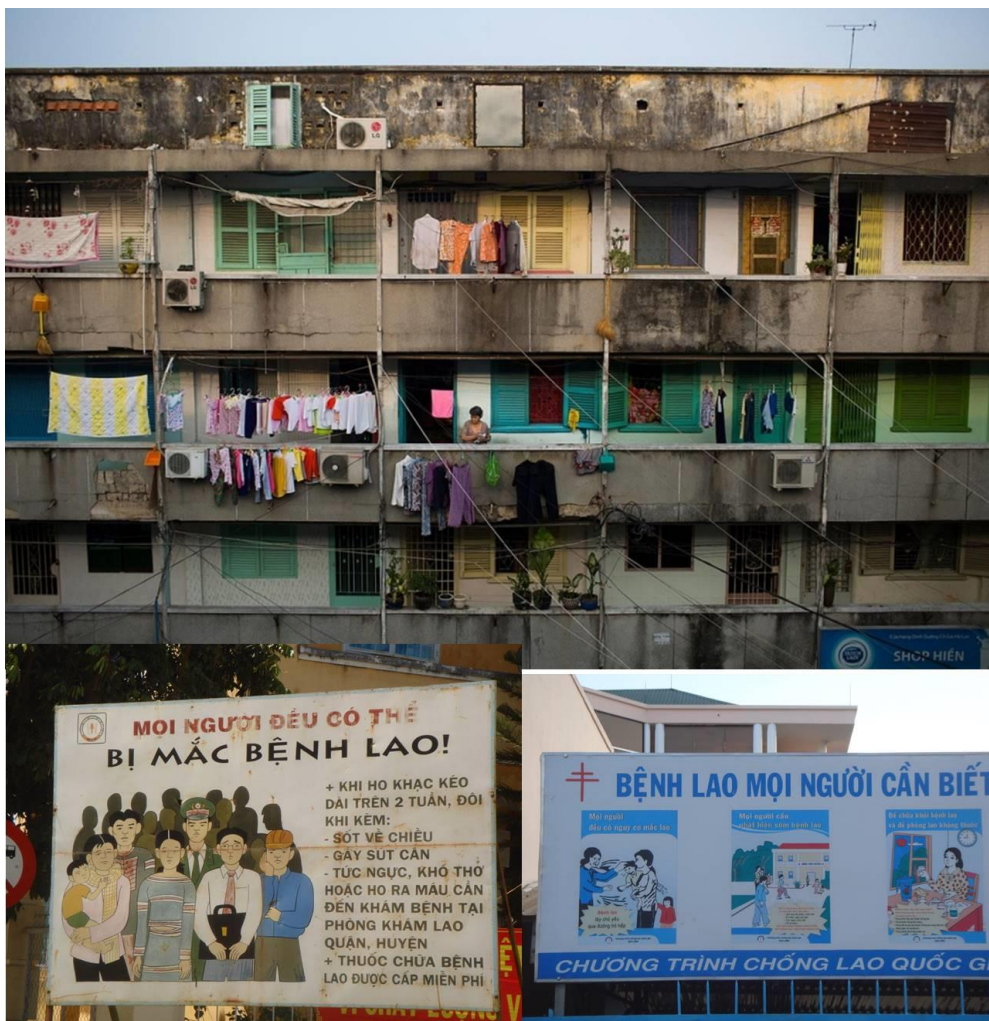


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Plans for Future Engagement with National TB Programme and stakeholders

Feedback from group discussion indicated a desire for future engagement through:

1. Establishment of a focal contact person within the NTP to liaise with Karolinska Institute (Knut Lonnroth and team to be appointed).
2. Good communication between IMPACT TB team and NTP facilitated by focal contact people.
3. The experience and finding of IMPACT TB will be disseminated to build on and strengthen existing progress of the National TB Programmes VICTORY network.
4. An annual meeting will be held for IMPACT TB and VICTORY
5. IMPACT TB research will be a driver behind translation into policy for the National TB Programme.



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