

Track:	E2. Key affected populations: behavioural, social, and cultural issues and contexts D1. TB epidemiology in adults
Title:	Differences in tuberculosis detection yields by sex from mobile X-ray screening campaigns in Viet Nam
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Text:	<p>Background and challenges to implementation: With a male:female ratio of 4.2-to-1 in tuberculosis (TB) burden, Viet Nam's sex disparity ranks among the highest in the world. While community outreach has been documented to be gender-sensitive, it is unclear whether community-based mass screening can promote health-seeking among women and girls.</p> <p>Intervention or response: In 2018 we organized community-based, mobile chest x-ray (CXR) screening events at 180 locations in Ho Chi Minh City, Hai Phong and Hoi An as part of the TB REACH-funded Zero TB Viet Nam project. At the events, participants were screened for TB symptoms and by CXR. Persons with radiographic abnormalities were tested using the Xpert assay. We quantified the proportion of patients progressing through the TB care pathway and calculated odds ratios to measure sex differences.</p> <p>Results and lessons learnt: In total, 32,804 people underwent a symptom screen. We screened 35.5% more women than men (18,875 vs 13,929), with the Hai Phong showing largest difference in mobilization (53.4% more women). Despite higher participation from women, significantly higher proportions of men had an abnormal CXR (19.3% vs 9.6%, OR=2.26 [21.-2.4]), were tested after an abnormal CXR (70.2% vs 52.7%, OR=2.12 [1.9-2.4]), and were diagnosed with Bac(+) TB (9.6% vs 4.7%, OR=2.13 [1.5-3.0]). A higher proportion of women were linked to treatment than men (84.4% vs 79.0%), but this difference was not significant.</p> <p>Conclusions and key recommendations: While our CXR events were able to mobilize a greater proportion of women to seek health, the sex differences observed in CXR abnormality and Xpert positivity rates mirrored Viet Nam's prevalence survey results. Such differences are possibly due to the biological characteristics of TB, but this cannot explain the large sex difference in the sputum testing rate. Future case finding initiatives should consider gender-responsive counselling on sputum production, the privacy of collection sites and expectoration aids to improve the proportion of females who are tested.</p>
Option:	Option 2 (Public Health Practice)

Preferred Presentation Style:	Oral presentation			
	Total	Females	Males	OR (95% CI)
All Three Cities				
Screened by CXR	32,804	18,875	13,929	N/A
CXR abnormal	4,491 (13.7%)	1,803 (9.6%)	2,688 (19.3%)	2.26 (2.1-2.4)
Tested by Xpert and/or AFB*	2,838 (63.2%)	950 (52.7%)	1,888 (70.2%)	2.12 (1.9-2.4)
Diagnosed with Bac(+) TB	226 (8.0%)	45 (4.7%)	181 (9.6%)	2.13 (1.5-3.0)
Bac(+) TB started on treatment	181 (80.1%)	38 (84.4%)	143 (79.0%)	0.69 (0.3-1.7)
Ho Chi Minh City				
Screened by CXR	18,140	10,054	8,086	N/A
CXR abnormal	2,904 (16.0%)	1,170 (11.6%)	1,734 (21.4%)	2.07 (1.9-2.2)
Tested by Xpert and/or AFB*	1,718 (59.2%)	551 (47.1%)	1,167 (67.3%)	2.31 (2.0-2.7)
Diagnosed with Bac(+) TB	149 (8.7%)	25 (4.5%)	124 (10.6%)	2.5 (1.6-3.9)
Bac(+) TB started on treatment	121 (81.2%)	21 (84%)	100 (80.6%)	0.79 (0.2-2.5)
Hai Phong				
Screened by CXR	13,747	8,322	5,425	N/A
CXR abnormal	1,453 (10.6%)	585 (7.0%)	868 (16.0%)	2.52 (2.3-2.8)
Tested by Xpert and/or AFB*	1,059 (72.9%)	380 (65.0%)	679 (78.2%)	1.94 (1.5-2.4)
Diagnosed with Bac(+) TB	71 (6.7%)	19 (5.0%)	52 (7.7%)	1.58 (0.9-2.7)
Bac(+) TB started on treatment	54 (76.1%)	16 (84.2%)	38 (73.1%)	0.51 (0.1-2.0)
Hoi An				
Screened by CXR	917	499	418	N/A
CXR abnormal	134 (14.6%)	48 (9.6%)	86 (20.6%)	2.43 (1.7-3.6)
Tested by Xpert and/or AFB*	61 (45.5%)	19 (39.6%)	42 (48.8%)	1.46 (0.7-3.0)
Diagnosed with Bac(+) TB	6 (9.8%)	1 (5.3%)	5 (11.9%)	2.43 (0.3-22.4)
Bac(+) TB started on treatment	6 (100%)	1 (100.0%)	5 (100.0%)	-

* AFB testing occasionally occurred when there were Xpert cartridge shortages and/or challenges with laboratory capacity.