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Review Article

Full-Scale Focused Campaign against Tuberculosis (FFCAT): Experience from the Philippines

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Abstract

Background and Challenges to Implementation: With a tuberculosis (TB) prevalence of 1 million cases a year and an annual incidence of 591,000 new TB cases 1, TB remains a public health emergency in the Philippines. Recent data from the Philippines show that TB case notifications remain low, compared to the disease incidence rates. USAID's TB Platforms project has designed several strategies to support the Government of the Philippines (GOP) in their efforts to achieve TB control in the country through assisting the Department of Health National Tuberculosis Control Program (DOH-NTP) to intensify and accelerate efforts toward eliminating TB by 2035. The Full-Scale Focused Campaign Against Tuberculosis (FFCAT) was piloted in Calapacuan, one of the Barangays in Central Luzon, to increase case-finding and TB awareness.

Intervention or Response: The FFCAT was designed with several activities to be performed in the specific area, continuously, for five days. A temporary diagnostic center equipped with mobile x-ray van and sputum smear microscopy facility was established in the middle of the Barangay. The FFCAT was started with a community assembly, followed by Focused Group Discussions (FGDs), a special campaign called "Bandillo", house-to-house visits, active screening of symptomatics and diagnosis and treatment of TB patients. The program was actively supported by the Department of Health (DOH), Local Government Unit (LGU), Provincial Health Unit, Rural Health Unit, and all other TB stakeholders.

Results and Lessons Learnt: A total of 2,200 households were visited, and 9,723 people were screened for TB. A total of 793 (8%) symptomatic individuals were identified, 197 (25%) had x-ray results suggestive of TB, and 26 (3%) were diagnosed with DSTB. In particular, 166 presumptives were self-reported, showing the positive behavioral impact of the campaign. Out of the 166, 37 (22%) have x-ray results suggestive of TB and 4 (2%) TB patients were diagnosed. The main challenge observed was the turn-around time of official x-ray results, which took approximately 1-2 weeks to be released. The immediate impact is demonstrably very good, but the cost per patient diagnosis is much higher.

Conclusions and Key Recommendations: The cascade of care, from screening, diagnosis and treatment, will be consolidated through the effort of the LGU. FFCAT offers a promising opportunity to find and treat people with TB. FFCAT implementation will be scaled up and implemented in other municipalities with the support of DOH and LGUs.

Keywords: *Tuberculosis (TB); Department of Health National Tuberculosis Control Program (DOH-NTP); Full-Scale Focused Campaign Against Tuberculosis (FFCAT)*

Background

Based on the results of the latest Philippine National TB Prevalence Survey (NTPS) in 2016, the burden of TB remains high among Filipinos, and is higher than previously estimated. Based on the survey, around 1 million Filipinos are expected to have TB, and may or may not even know it. Of this, around 760,000 Filipinos aged ≥ 15 years are estimated to have pulmonary TB. Based on culture-positive pulmonary TB cases identified, there is no evidence of a decline in pulmonary TB prevalence rates compared to the 2007 NTPS. Several factors have been found significantly associated with the risk of having pulmonary TB: previous TB treatment, older age group, being male, diabetes mellitus, smoking, indicators of poverty, and urban dwellers.

One of the factors for this persistently high burden is the poor behavior of Filipinos in terms of seeking healthcare for TB. For instance, the results of the survey showed that only 6% of the participants had cough of ≥ 2 weeks, with or without hemoptysis, at the time of the survey. However, 41% of those with these symptoms suggestive of PTB did not take any action, while 40% self-medicated. Only 19% consulted a healthcare worker, mostly in the public sector (67%). Primary reasons cited for not consulting a healthcare provider include the perceived trivial nature of symptoms, and costs related to work-day lost, travel and drugs.

Accordingly, one of the recommendations cited to solve the problematic health-seeking behavior on TB is to address its root causes, namely: (1) low risk perception, (2) poor knowledge of symptoms suggestive of TB, (3) low trust in the health system, and (4) low treatment adherence. In particular, these can be addressed through innovative behavior change communications community-based health promotion approaches. It is against this background that the URC TB Platforms - Region 3, in collaboration with the Center for Health Development Region 3 and in coordination with the Local Government Unit of the Municipality of Subic, in the Province of Zambales, implemented the Full-Scale Focused Campaign Against TB (FFCAT) - a community-based health promotion strategy, whose primary objective is to educate members of the local community on basic facts about TB, and improve their health-seeking behavior. Another objective of the activity is to actively find TB cases in the community and enroll them to treatment.

The USAID's TB Platforms for Sustainable Detection, Care, and Treatment (TB Platforms) is a five-year technical assistance (TA) Activity implemented by University Research Co., LLC (URC). The Activity aims to assist the Department of Health National Tuberculosis Control Program (DOH-NTP) to intensify and accelerate efforts toward eliminating TB by 2035 and provides technical assistance towards the country's commitment to find and successfully treat 2.5 million Filipinos with TB by 2022 articulated at the UN High-level Meeting held September 2018.

TB Platforms works in three regions, NCR, Region 4A and Region 3 as well as Marawi City, in April 2018 and will run through April 2023. The project aims to:

- Advance adoption and improvement of healthy behaviors of individuals and the community to prevent, detect, and treat TB;
- Deliver high-quality patient-centered TB and DR TB treatment for adults, children, and vulnerable populations;
- Expand local health systems capacity to deliver TB and DR TB services to targeted populations.

Objectives of the Full-scale Focused Campaign Against TB (FFCAT)

The Full-Scale Focused Campaign Against TB (FFCAT) is a community-based health promotion strategy for TB, with a three-fold objective:

1. Active screening, early diagnosis and ensure treatment of TB/DRTB patients;
2. Raise community awareness to enable control of TB in the selected barangay, as well as in the respective municipality, and neighboring municipalities; and

3. Promote prevention of TB in the community and enhance adherence to treatment

The FFCAT was implemented on March 11 to 15, 2019, at Barangay Calapacuan, which is the most populous barangay in the Municipality of Subic, Province of Zambales. The barangay was selected, being the one with the highest number of RR-TB cases in the municipality, based on 2018 data. In addition, a large proportion of the community members belong to high risk groups, including children, elderly, and low-income groups.

Preparatory phase

Prior to the conduct of the FFCAT, a series of coordination meetings was held. The first of these was a courtesy visit to the Local Chief Executive (Mayor) of Subic, Zambales. The objectives of the FFCAT were discussed, including its perceived benefits to the localities covered by the activity. The support of the LCE was also sought, particularly in terms of technical and logistical assistance emanating from the Municipal Local Government Unit (LGU) and Municipal Health Office of Subic, and the Barangay LGU of Calapacuan.

What followed were a series of coordination meetings with the implementors. These meetings served as avenues to discuss the concept, objectives and key component activities of FFCAT. Particular tasks were also assigned to each implementor, as shown in table 1.

Implementor	Tasks assigned
TB Platforms project	Provide technical assistance in the conceptualization, organization, facilitation and conduct of FFCAT
DOH-Region 3	Provide logistical/budgetary support, technical assistance (from a National TB Program perspective), facilitate the activity and moderate discussions
Provincial Health Office - Zambales	Provide logistical/budgetary support, technical assistance (from a Provincial TB Program perspective), conduct day-to-day activities
Rural Health Unit - Subic, Zambales	Collaborate with DOH-Region 3 and the Provincial Health Office - Zambales in conducting day-to-day activities, oversee barangay participation and full implementation of the FFCAT
Municipal LGU - Subic, Zambales	Provide logistical/budgetary support, technical assistance (from a Municipal TB Program perspective), conduct day-to-day activities
Barangay LGU - Calapacuan, Subic, Zambales	Provide logistical/budgetary support, mobilize the community members to participate in the day-to-day activities
Philippine Business for Social Progress	Provide logistical support, particularly provision of mobile x-ray van for screening
Philippine Red Cross - Zambales Chapter	Provide logistical support, technical assistance (from a community-based perspective), mobilize community members, and conduct day-to-day activities

Table 1: *Implementors of FFCAT and corresponding tasks assigned.*

In addition to the assignment of tasks, the coordination meetings also provided opportunities to identify the needed logistics and manpower. Each of the stakeholders contributed either in the form of logistics (sound system, tarpaulin, meals, snacks, diagnostic and treatment supplies, etc.) or manpower (doctors, nurses, activity facilitators, etc). The physical set-up of the event was also identified. The program was drafted, reviewed and revised repeatedly, to ensure that activities will be implemented efficiently and within the set time frame.

Assistance from the Barangay Health Workers (BHWs) and Barangay Nutrition Scholars (BNS) in the Municipality of Subic was also sought for the activity. Accordingly, the BHWs and BNSs were first educated on basic information about TB. They were then oriented on the different activities to be conducted during the campaign, and on the assistance they could provide.

Conduct of the campaign

The first day of the FFCAT marked the official kick-off ceremonies. Community members assembled at the covered court of Barangay Calapacuan. The program started with an acknowledgement of the different stakeholders and partners. Also introduced was the theme

of the campaign, "Tibay ng Dibdib para sa Bayan: Tibayan (community resilience)", which is the health promotion campaign handle, with aims of eradicating stigma, promoting public awareness, and improving the behavior of community members to actively seek care for TB. Participants were also given messages that underscored the importance of achieving and maintaining good health to prevent opportunistic health challenges such as TB. Thereafter, participants were oriented on the seven 'stops' for the seven group sessions (Table 2) held simultaneously during the campaign. Participants were divided into groups and after attending one session, each group moved to the next, until all sessions were attended. Participants were given freebies after each finished session.

Stop/Session	Description
Stop 1: Tutok-Baga and Test your Baga ('Lungs-Watch' and 'Test your Lungs')	In this station, doctors and nurses secured the participants' vital signs, performed chest auscultation, and tracked patient history. Participants were screened through chest x-ray. Those with positive or suspicious x-ray results were referred to the laboratory area for DSSM or Xpert testing. Positive cases based on DSSM or Xpert, or on clinical diagnosis, were subsequently enrolled to treatment at the RHU.
Stop 2: Tsi-Bog ('Eat')	In this session, participants were taught about proper diet. They were also educated on the mode of transmission of TB, being through droplets/airborne, and not through sharing of food utensils. Snacks were also served in this station.
Stop 3: Totoo Ba? ('Is it true?')	This is the Question-and Answer session on myths and conceptions about lung care and TB. The session started with a guessing game of words related to TB. After the game, participants were asked to write down questions they may have about their lungs and about TB. The session facilitator selected three questions to jumpstart the discussion. Participants were also engaged in the game of "Totoo Ba?", where participants were asked to determine if presented statements on TB are true or false. Messages on TB prevention and control were also emphasized. After the session, each participant was given a face mask.
Stop 4: Throwback	This is a short story-telling session about the history of TB in the Philippines. After the story-telling, participants were asked to solve a picture puzzle and to answer questions related to the story told.
Stop 5: Tunay na Buhay ('In Real Life')	Participants in this session were shown video testimonials of cured TB patients. The objective of the session was to emphasize the importance of full adherence to the TB treatment regimen. It also emphasized that cure from TB can be realized from the health facility, with the help of a robust support system.
Stop 6: Tibay ng Dibdib ('Resiliency')	In this station, the Social Behaviour Change (SBC) Interactive Panel was used to discuss basic TB facts. Participants were also engaged to play the game features of the panel.
Stop 7: Tips sa Bahay ('Tips at home')	Participants in this session received a short lecture on infection control at home. The session facilitator discussed practical tips to protect loved ones from the transmission of TB bacilli. Participants were also given hygiene-related products (soap, alcohol, hand sanitizer).

Table 2: *Seven stops/sessions of the FFCAT.*

The opening program culminated with the signing of pledge of support and commitment of the different stakeholders and participants. High-risk individuals such as senior citizens, tricycle operators, bike-drivers and other community members attended Day 1 of the activity. While the group sessions were being held at the covered court, house-to-house visits were conducted simultaneously by the DOH-Human Resources for Health, BHWs, BNSs and midwives. During the house-to-house visits, community members were informed about the campaign and were encouraged to undergo free screening for TB. While activities were ongoing, the barangay captain also repeatedly advertised the campaign and encouraged community members to avail of the free services for TB, through its public address system.

The second day of the activity started with the orientation of the teams to conduct the house-to-house visits. At the same time, the registration of participants for the second day also commenced. Participants on Day 2 included high-risk groups such as senior citizens, members of the LGBTQ community, and fishermen folks. Aside from the TB health promotion, diagnostic and treatment services provided since Day 1, free HIV counselling and screening services were also provided. Of the total screened, 75 individuals personally consented to undergoing HIV screening, none of whom were identified to be HIV-positive. Day 2 ended with a post-activity conference to discuss the successes, and identify issues, concerns and challenges encountered during the implementation. Recommendations were also provided to fine-tune the flow and implementation of activities in the succeeding days. Numbers achieved in terms of TB screening, diagnosis and enrolment to treatment during the activity were also reviewed and validated.

The third day of the activity also started with an orientation of the teams to do the house-to-house visits, as well as the registration of attendees. Participants included members of the Pantawid Pamilyang Pilipino Program (4Ps; Bridging Program for the Filipino Family) of the Department of Social Welfare and Development, including teachers and other community members. Participants were checked by doctors and nurses, and underwent symptomatic and chest x-ray screening. Those with positive or suspicious findings were endorsed for diagnosis and treatment. Participants took their turns in attending all the group sessions/stops. Day 3 was concluded with a raffle draw for the participants. All in all, a total of 9,723 people were screened during the campaign. The active participation of the community to the three-day event was acknowledged through key messages and closing statements.

Evaluation: Results of the pre- and post-FFCAT knowledge test

A seven-item knowledge test (See appendix 1) was prepared to measure the TB knowledge of participants at two points of the event. The pre-test was given before participants began the tour around the event. The post-test was given after participants completed the tour. However, caution must be exercised in interpreting the results, because there were different sets of respondents who took the pre-event and post-event test. Because of the sheer number of participants who came for the event, the facilitators who were tasked to administer the knowledge tests were unable to give the post-test to the same respondents who took the pretest.

The tool was designed with a Likert scale. Respondents were asked to rate their agreement to the information statements. The statements correspond to the following:

1. Transmission: TB bacteria cannot be transmitted by using utensils of a TB patient.
2. Transmission: TB bacteria can only be transmitted through germs expelled in the air by a TB patient and inhaled by those in close contact with the patient.
3. Transmission: Other people are susceptible to TB if in close contact with the patient.
4. Diagnosis: Seek immediate consultation if with prolonged coughing of two weeks or more.
5. Treatment: TB treatment is free at health centers.
6. Treatment: TB treatment lasts only for one week.
7. Treatment: Discontinue medication if relief is already apparent.

Scores were assigned correspondingly. A score of "0" is given if respondent indicated "I don't know." Wrong responses were given low scores of "1" and "2". Correct responses were given scores of "4" and "5." The highest possible score is 35 points or 100%.

Respondents

The knowledge tests were given on Days 1 and 2 of the FFCAT. There were 112 who completed pre-event test and 44 post-event tests were collected (Table 3).

	Pre-event	Post-event
Respondents	44	44
Age (Mean, Range)	56.89 (20-89)	54.82, 20-85
Sex: Female/Male	76%/24%	84%/16%
Marital Status: Married	43%	39%
Employment: No work	75%	73%

Table 3: *Profile of respondents of the pre- and post-FFCAT knowledge test*

Summary of results

Average score: Out of a perfect score of 35, post-event respondents had a higher mean of 26.82 (76.62%) than the pre-event respondents (25.90, 74.01%).

Pre-event scores: Respondents who took the pre-event test had adequate knowledge about seeking early consultation for cough symptoms (90.18%), airborne transmission of TB bacteria (88.39%), free treatment at health centers (87.50%) and susceptibility of close contacts (83.93%). They, however, scored low on items related to treatment compliance (58.04%), treatment duration (47.32%), and the common misconception of transmission through shared utensils (32.14%).

Post-event scores: Respondents who took the post-event test had adequate knowledge about early consultation for cough symptoms (93.18%), treatment compliance (81.82%), free treatment at health centers (77.27%), and treatment duration (75.00%). They had lower correct scores for susceptibility of close contacts (65.91%), airborne transmission of TB bacteria (59.09%), and the common misconception of transmission through shared utensils (54.44%).

Differences in item scores: Of the seven items measured, post-event respondents had higher correct answers in four items. Post-event respondents had lower correct scores in three other items. The differences in scores are presented in table 4. As indicated, the gap does not reflect improvement in knowledge about TB. The figures simply indicate that, on the average, respondents who took the post-event test had slightly more correct answers than those who took the pre-event test.

Domain	Item	Pre-event	Post-event	Difference
Treatment	TB treatment lasts only for one week.	47.32	75.00	27.68
Treatment	Discontinue medication if relief is already apparent.	58.04	81.82	23.78
Transmission	TB bacteria cannot be transmitted by using utensils of a TB patient.	32.14	54.44	22.40
Diagnosis	Seek immediate consultation if with prolonged coughing of two weeks or more.	90.18	93.18	3.00
Treatment	Treatment: TB treatment is free at health centers.	87.50	77.27	-10.23
Transmission	Other people are susceptible to TB if in close contact with the patient.	83.93	65.91	-18.02
Transmission	TB bacteria can only be transmitted through germs expelled in the air by a TB patient and inhaled by those in close contact with the patient.	88.39	59.09	-29.30
Total correct answers	All items	69.64	72.04	2.76

Table 4: *Difference in item scores of the pre- and post-FFCAT knowledge test.*

TB case-finding results

A total of 2,200 households were visited, with 9,723 people screened for TB. Individuals screened belonged to different high-risk groups including senior citizens, tricycle operators, bike drivers, fishermen folk, LGBTs, TB contacts, and poor/indigent members of the community. Of the 9,723 screened, 793 (8%) were assessed to be TB-presumptive through symptomatic surveillance. Out of the symptomatics, a total of 197 (25%) were with x-ray results suggestive of TB. In terms of diagnosis, a total of 26 (3%) individuals were diagnosed as positive for drug-susceptible TB. Of the 26, 7 were Bacteriologically-Confirmed (BC), while 19 were Clinically Diagnosed. This translates to a ratio of 27% BC and 73% CD.

Of the 793 presumptives identified, 166 (21%) were self-reported, showing the positive behavioral impact of the campaign. Out of the 166, 37 (22%) have x-ray results suggestive of TB and 4 (2%) TB patients were diagnosed. The main challenge observed was the turnaround time of official x-ray results, which took approximately 1-2 weeks to be released. The immediate impact is demonstrably very good, but the cost per patient diagnosis is much higher.

Comparison of the accomplishments in terms of the target number of TB cases notified among the same cohort in Q1 (January-March) of 2018 and 2019 showed that FFCAT contributed 67% to the accomplishment in Q1 of 2019, as shown in table 5.

Year	Population in Brgy. Calapacuan	Target CNR	Target TB cases to be notified	Actual accomplishment	Accomplishment in percentage
2018 (Jan-March)	15,010	474	72	27 (Q1, 2018)	38%
2019 (Jan-March)	15,259	474	74	39 (26 from FFCAT case-finding)	53% (67% contributed by FFCAT)

Table 5: *Comparison of number of TB cases notified in Q1 of 2018 and 2019 at Brgy. Capalapcuan, Subic, Zambales.*

Likewise, comparison of accomplishments in terms of total TB cases enrolled to treatment among the same cohort in March of 2018 and 2019 showed a 271.4% increase in the latter year, due to contributions from FFCAT (Table 6).

Cohort	Number of Bacteriologically-confirmed cases	Number of clinically diagnose TB cases	Total number of TB cases registered/ enrolled to treatment	Percentage increase
March 2018	2	5	7	271.4% increase from 2018 to 2019
March 2019	7	19	26	

Table 6: *Comparison of number of TB cases enrolled to treatment in March of 2018 and 2019 at Brgy. Calapacuan, Subic, Zambales.*

Challenges and Recommendations

A number of challenges were experienced during the implementation of FFCAT. These include: (1) Limited time to prepare a targeted master list of individuals to be screened for TB, (2) Some individuals were missed and not screened through x-ray, (3) There was a shortage of GeneXpert cartridges and long turnaround time for the testing results and (4) Majority of participants were females, thus missing the higher-risk gender group. Table 7 outlines these challenges in further detail, and the corresponding recommendations [1-17].

Challenges	Recommendations
There was inadequate time to prepare a targeted master list of individuals to be screened for TB. A master list of individuals for TB screening, particularly those identified to be TB-presumptive, may have made the FFCAT more targeted and may have produced higher yield. However, the implementors were pressed for time. Also, lack in manpower made the task of master-listing difficult to perform.	Do early master-listing of target individuals for TB mass screening, prior to the next FFCAT. The master-listing must be given enough time to make sure all high-risk and TB-presumptives in the community are captured. These target individuals must also be informed early to ensure their attendance.
Some participants were missed and those who needed to be screened were not screened through x-ray. One possible reason for this is that some participants did not follow the order of group sessions, and proceeded to the other sessions, skipping session 1 (i.e. Stop 1, Tutok Baga). There were also only a few facilitators guiding the flow of participant groups from one session to another.	Implement stricter measures to make sure participants follow the proper order of sessions, starting with participant interview and screening via chest x-ray. More facilitators must be assigned to the task of ensuring proper transition of participant groups from one session to another.
There was a shortage of GeneXpert cartridges so the health staff resorted to testing via DSSM. However, the DSSM tests entailed a longer turnaround time. There was also lack of manpower to do the DSSM tests. Some participants intentionally went home immediately after the x-ray.	The staff of Subic RHU tracked the x-ray positive individuals, and visited them in their houses to collect sputum for DSSM or GeneXpert. In the next FFCAT, adequate supply of Xpert cartridges will be ensured. More manpower, i.e. med techs, must be assigned specifically for sputum collection and testing. The activity must also be guarded such that all x-ray positive individuals should have sputum samples collected, prior to leaving the activity.
Majority of participants were females, thus missing the higher-risk gender group of males. One reason for this is that the activity was conducted during the working hours of the day, when most male members of the family are expected to be at work. The lack of a master-list of target individuals (which includes males) may also be a factor.	Do a prior master-listing of target individuals, prioritizing males, for TB screening, prior to the next FFCAT. TB mass screening on weekends may also be considered, so that target individuals, especially males, maybe able to come to the site.

Table 7: *Challenges and recommendations related to the implementation of FFCAT.*

Conclusion

The cascade of care, from screening, diagnosis and treatment, will be consolidated through the effort of the LGU. FFCAT offers promising opportunity to find and treat people with TB. FFCAT implementation will be scaled up and implemented in other municipalities with the support of DOH and LGUs.

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Appendix 1: Pre- and Post-FFCAT Knowledge Test

Pretest tool

Full name	
Age	_____ years old
Sex	□ Women □Men
State of Life	□ Single □ Married □ Separate □ Widow
Occupation	□ Nothing □ There: What?_____
Barangay/City or Town	

Read each sentence. Circle the number/number of your answer

Remarks	I am...				
	Really disagree	Somewhat disagree	I do not know	Quite agreeable	Really agree
The TB virus spreads through the coughing or sneezing of a person with TB.	1	2	3	4	5
I get TB if I use a spoon and fork by someone with TB.	1	2	3	4	5
I should consult a doctor when my cough lasts for 2 weeks or more.	1	2	3	4	5
It only takes about a week for TB treatment.	1	2	3	4	5
TB treatment is free at the health center.	1	2	3	4	5
My family members may be infected with TB if I have TB.	1	2	3	4	5
It may stop treatment if I feel better even before the treatment is over.	1	2	3	4	5

Post-test tool

Full Name	
Age	_____ years old
Sex	□ Women □ Men
State of Life	□ Single □ Married □ Separate □ Widow
Occupation	□ Nothing □ There: What? _____
Barangay/City or Town	

Read each sentence. Circle the number/number of your answer

Remarks	I am...				
	Really disagree	Somewhat disagree	I do not know	Quite agreeable	Really agree
I should consult a doctor when my cough lasts for 2 weeks or more.	1	2	3	4	5
It may stop treatment if I feel better even before the treatment is over.	1	2	3	4	5
TB treatment is expensive and expensive at the health center.	1	2	3	4	5
The TB virus spreads through the coughing or sneezing of a person with TB.	1	2	3	4	5
My family members may be infected with TB if I have TB.	1	2	3	4	5
It only takes about a week for TB treatment.	1	2	3	4	5
I get TB if I use a spoon and fork by someone with TB.	1	2	3	4	5

Appendix 2: Photos

Figure 1: *Community assembly held during the Full-Scale Focused Campaign Against TB (FFCAT) at Barangay Calapacuan, Municipality of Subic, Province of Zambales.*

Figure 2: *Coordination with the Local Chief Executive of Subic, Zambales, Hon. Jay Khonghun.*

Figure 3: *Coordination Meeting with the Implementors/ Stakeholders of FFCAT.*

Figure 4: *Orientation of Barangay Health Workers and Barangay Nutrition Scholars for the Conduct of FFCAT.*

Figure 5: *Opening Ceremonies of the FFCAT led by TB Platforms-Region 3 Field Operations Area Manager, Dr Rhodora Cruz.*

Figure 6: *Dr Cesar C. Cassion, DOH-Region 3 Director, delivering the inspirational message during the FFCAT.*

Figure 7: *FFCAT Stop 1: Tutok-Baga and Test your Baga.*

Figure 8: *A male participant and his son at FFCAT Stop 2: Tsi-Bog.*

Figure 9*: FFCAT Stop 3: Totoo Ba?.*

Figure 10: *FFCAT Stop 4: Throwback.*

Figure 11: *FFCAT Stop 5: Tunay na Buhay.*

Figure 12: *FFCAT Stop 6: Tibay ng Dibdib.*

Figure 13: *FFCAT Stop 7: Tips sa Bahay.*

Figure 14: *Participants of the FFCAT signing their pledge of support and commitment to the 'Tibay ng Dibdib Para sa Bayan: Tibayan' Campaign.*

Figure 15: *Mr. James Wechsler, President of the University Research Co. LLC, together with Mr. Soy Ty Kheang, URC South East Asia Regional Manager and Dr Rhodora Cruz and Mr Nilo Yacat, signifying their full-pledged support to "Tibay ng Dibdib Para sa Bayan: Tibayan" Campaign.*

Figure 16: *House-to-house visits conducted during the FFCAT.*

Figure 17: *Mr. Soy Ty Kheang, URC Southeast Asia Regional Manager, exploring the different features of the interactive panel used in the FFCAT.*

Figure 18: *Dr Rhodora Cruz, URC TB Platforms Region 3 Field Operations Area Manager, discussing the mechanics of the FFCAT to the program facilitators.*

Figure 19: *Mr. Nilo Yacat, URC TB Platforms Specialist for Social Behavioural Change, discussing the key messages for TB Prevention and Control to be delivered during the FFCAT campaign.*

Figure 20: *Mr. Patrick Kim Sarmiento, URC TB Platforms Region 3 Community Mobilization Coordinator, discussing the flow of program activities for the FFCAT campaign.*

Figure 21: *Ms. Emilyn Gallardo, the Public Health Nurse of the Municipality of Subic in Zambales, giving final instructions to the facilitators prior to the conduct of FFCAT.*

Figure 22: *Group photo of project partners from the Department of Health - Region 3, Provincial Health Office of Zambales, Municipal Health Office of Subic and Office of Barangay Calapacuan, who served as facilitators during the FFCAT.*

Figure 23: *Mr. Nilo Yacat, orienting the different facilitators on the seven 'stops' during the FFCAT.*

Figure 24: *The officials of Barangay Calapacuan, discussing how to go about the activities during the FFCAT including the house-to-house visit.*

Figure 25: *Community members of Barangay Calapcuan, registering to participate in the FFCAT.*

Figure 26: *Community Health Volunteers assisting the community members as they register to participate at the FFCAT.*

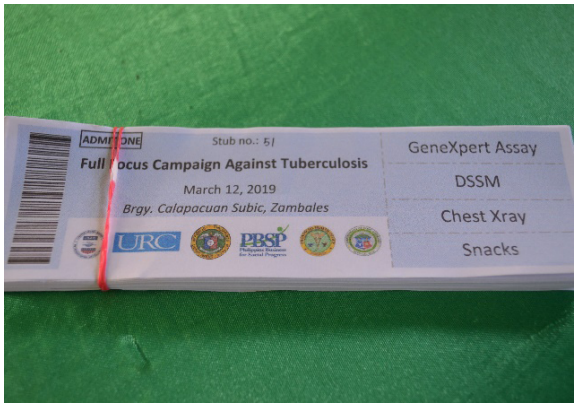

Figure 27: *Photo of the stub used by participants as they go through the TB cascade of care provided during the FFCAT.*

Figure 28: *Photo of two elderly FFCAT participants, reading the assessment form for TB signs and symptoms and risk factors.*

Figure 29: *A facilitator explains the contents of the TB assessment form to one elderly participant and provides guidance in filling-out the form.*

Figure 30: *Participants of the FFCAT listening to the key-note messages delivered as the campaign commenced.*

Figure 31: *Photo of the mobile x-ray van provided by the Philippine Business for Social Progress (PBSP), to deliver chest x-ray screening for FFCAT participants.*

Figure 32: *Area designated for collection of sputum from FFCAT participants found to have TB-positive or -suspicious chest x-ray results.*

Figure 33: *Dr Hansel John Ybanez, URC TB Platforms Region 3 Training and Patient-Centered Care Coordinator, listening to one of the FFCAT participants during the interview for TB risks and signs and symptoms.*

Figure 34: *Participants of the FFCAT doing a dance exercise prior to the education sessions.*

Figure 35: *Participants of the FFCAT actively doing the dance exercise.*

Figure 36. *Staff of the Department of Health - Region 3,:headed by Director Cesar Cassion, posing to 'END TB NOW' at Barangay Calapacuan, Subic, Zambales.*

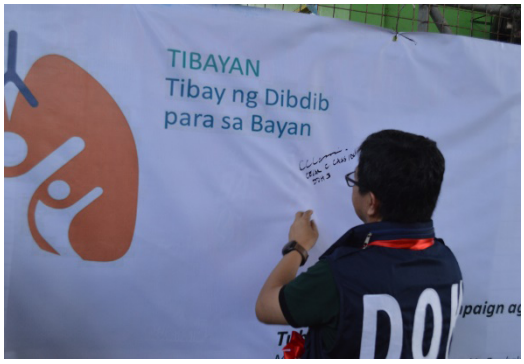

Figure 37: *Department of Health - Region 3 Director, Dr. Cesar Cassion, signing the pledge of commitment for TB prevention and control in the community.*

Figure 38: *Representatives from the Department of Health, as well as community members of Barangay Calapacuan, signing the pledge of commitment for TB prevention and control in the community.*

Figure 39: *Dr Rhodora Cruz and Ms. Nezreel Montefalcon from the Philippine Red Cross - Zambales Provincial Chapter, signing the pledge of commitment for TB prevention and control in the community.*

Figure 40: *Community members of Barangay Calapacuan, signing the pledge of commitment for TB prevention and control in the community.*

Figure 41: *Participants of the FFCAT being interviewed by doctors for medical history and TB risks and signs and symptoms.*

Figure 42: *Two FFCAT participants at the "Stop 1: Totoo Ba", playing the famous 'Pinoy Henyo' game on TB signs and symptoms.*

Figure 43: *Three FFCAT participants solving the puzzle game featured at "Stop 4: Throwback", which taught participants about the history of TB in the Philippines.*

Figure 44: *URC Region 3 Philippines headed by President James Wechsler, Rural Health Unit Staff of Subic, and the Barangay Officials of Barangay Calapacuan headed by Barangay Captain.*

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