

Tropical Disease Foundation Inc.

ANNUAL REPORT

2015 2016



Our Vision

Equitable universal access to health for national prosperity

Our Mission

National and local community development through research, training, service, and healthcare delivery in the prevention and control of infectious diseases of public health importance.

Our Thrusts

Conducting research, training and service in infectious diseases in general and tuberculosis in particular

Engaging in strategic partnership with public and private agencies in the implementation of its program

Ensuring technology transfer in developing human resources for health nationally and internationally through collaboration with national and international institutions

> Serving as a national and international training center for infectious diseases and primarily on tuberculosis



Looking Back

The Tropical Disease Foundation (TDF) is a private, non-stock, non-profit, non-government organization founded in 1984 by a group of physicians in the Research Institute for Tropical Medicine. The founding chairman was Dr. Jesus Azurin, then the Secretary of Health. The Tropical Disease Foundation (TDF) began a legacy of quality research, service, and training in infectious diseases.

In 1988, TDF inaugurated its research laboratory on mycobacteriology. This included fluorescent sputum smear microscopy, tuberculosis (TB) culture, and drug sensitivity testing. Throughout the 1990's, research was conducted on hepatitis B, herpes simplex, rubeola, and multi-drug resistant typhoid fever. Additionally, TDF employees facilitated trainings for health workers, medical practitioners and community support groups among patients on treatment.

In 1997, the Tropical Disease Foundation was commissioned by the Department of Health (DOH) to do the Nationwide TB Prevalence Survey where TDF was granted the 2000 Outstanding Health Research Award by the Department of Science and Technology (DOST). This initiated the collaboration between the TDF and the National TB Control Program of the DOH through the DOTS Clinic organized at the Makati Medical Center. This Private-Public Mix Directly-Observed TB Treatment Short-course (PPMD) collaboration provides free service in the management of TB patients and was the first Programmatic Management of Drug-Resistant Tuberculosis (PMDT) and was approved by the WHO Green Light Committee.

From 2003 to 2009, the TDF carried out programs dedicated to fight TB, Malaria and HIV as Principal Recipient of Global Fund. Foremost of the notable efforts of TDF for TB program under Global Fund was the establishment of multiple centers capable of providing quality services for Programmatic Management for Multi-Drug Resistant TB (PMDT). In 2007, TDF led the 3rd Nationwide Tuberculosis Prevalence Survey.



From 2008 onwards, TDF undertook clinical trials as follows:

• DMID Protocol Number 01-009:

"A Prospective Study of Shortening the Duration of Standard Short Course Chemotherapy from 6 Months to 4 Months of anti TB Treatment"

Study 204

"A Multi-center, Randomized, Double-blind, Placebo-controlled Phase 2 Trial to Evaluate the Safety, Efficacy and Pharmacokinetics of Multiple Doses of OPC-67683 in Patients with Pulmonary Sputum Culture-Positive, Multi-drug Resistant Tuberculosis"

Study 208

"A Phase 2, Multi-center, Uncontrolled, Open-label Trial to Evaluate Safety, Tolerability, and Efficacy of Orally Administered OPC-67683 as 100 mg BID with optional titration to 200 mg BID for up to Six Months Exposure in Patients with Pulmonary Multi-drug Resistant Tuberculosis"

Study 116

"Registry for Data Collection to Determine Final Treatment Outcomes of Multidrug-Resistant Tuberculosis Patients Previously Enrolled in OPC-67683"

Study 213

"A Phase 3, Multicenter, Randomized, Double-blind, Placebo- controlled, Parallel Group Trial to Evaluate the safety and Efficacy of Delamanid (OPC-67683) Administered Orally as 200 mg Total daily Dose for Six Months in Patients with Pulmonary Sputum Culture

TDF is looking forward to continue undertaking various research activities in the succeeding years thereby fulfilling its mission for excellence in research.



Service Projects

DOTS CLINIC

The TDF continues to support the Makati City Health Department (MCHD) and the Center for Health Development—Metro Manila (CHD-MM) of the Department of Health in the fight to prevent and eliminate the spread of tuberculosis (TB).

The Private-Public Mix Directly-Observed TB Treatment Short-course (PPMD) clinic caters to patients residing in Makati area. Patients may avail the clinic's services which include screening, enrolment and treatment of TB patients. As of 2016, the total number of screened patients in TB DOTS clinic is equivalent to 154. Out of 154, there are 47 patients enrolled in the program. For the treatment outcome, 25 or 54% of enrolled patients have already completed their treatment. 16 patients which comprise 34% of total enrolled patients are on cured status. On the other hand, there are 3 or 6% which did not continue their treatment and the remaining 3 or 6% are not evaluated. The Makati City Health Department continues to support the PPMD TB-DOTS program and provides the necessary anti-TB medications and laboratory supplies regularly.

TDFI – Satellite Treatment Center (MDR-Tb)

A Satellite Treatment Center (STC) has operated in the vicinity of Tropical Disease Foundation, Inc. (TDFI). This is covered under the Memorandum of Agreement with Philippine Business for Social Program (PBSP). Trained TB clinic nurses are assigned to the STC to manage referred patients who are decentralized to the health centers as well as patients who started on treatment by Integrated DOTS (iDOTs) centers.

This is an initiative by the DOH – NCR Office enabling DOTS clinics to screen presumptive Drug Resistant TB patients and enrolling DRTB patients at their facility.



Quality Assurance

Laboratory External Quality Assurance

TDF laboratory participates in the Integrated Quality Laboratory Services' external quality assurance activity. IQLS is a consulting agency based in France whose aim is to help strengthen laboratory capacities and systems. TDF has been participating in the EQA activities of IQLS since 2013. Below are tables that summarize the performance of the laboratory in the EQA in 2015 and 2016.

Survey # 8 (July 2015)

AREA	AVERAGE SCORING (MAX 4)	AVERAGE IN %
Microscopy	3.67	91.75%
Identification	4.00	100.00%
First Line DST	3.89	97.25%
Second Line DST	3.90	97.50%
Average	3.87	96.75%

Survey # 9 (December 2015)

AREA	AVERAGE SCORING (MAX 4)	AVERAGE IN %
Microscopy	3.80	95.00%
Identification	4.00	100.00%
First Line DST	3.89	97.25%
Second Line DST	3.77	94.25%
Average	3.87	96.75%



Ongoing Research Projects

Study 213

"A Phase 3, Multicenter, Randomized, Double-blind, Placebo-controlled, Parallel Group Trial to Evaluate the Safety and Efficacy of Delamanid (OPC-67683) Administered Orally as 200 mg Total Daily Dose for Six Months in Patients With Pulmonary Sputum Culture-positive, Multidrug-resistant Tuberculosis".

This project involves the study of the safety and efficacy of Delamanid (OPC-67683) in combination with an optimized background regimen (OBR) versus placebo with OBR during a 6-month intensive phase of Multidrug Resistant Tuberculosis (MDR-TB).

The table below shows the enrollment and treatment status for the year 2016:

Screened	25 patients
Screen Failure	4 patients
Randomized	21 patients
Early Withdrawn	2 patients
Completed Post-treatment Follow-up Period (Month 30)	19 patients



Ongoing Research Projects



STAND Trial Updates (Shortening Treatment by Advancing Novel Drugs)

"A Phase 3 Open-Label Partially Randomized Trial to Evaluate the Efficacy, Safety and Tolerability of the Combination of Moxifloxacin plus PA-824 plus Pyrazinamide after 4 and 6 months of Treatment in Adult Subjects with Drug-Sensitive Smear-Positive Pulmonary Tuberculosis and after 6 months of Treatment in Adult Subjects with Multi-Drug Resistant, Smear-Positive Pulmonary Tuberculosis."

The project is sponsored by Global Alliance for TB Drug Development. Site initiation visit was conducted last March 23-24, 2015. Start of Pre-screening period was conducted last April 1, 2015 while the date of first subject enrolled was last September 17, 2015.

Due to issues on Serious Adverse Events (SAE) which resulted to the death of some patients in other sites, a suspension notice to stop enrollment has been issued by the sponsor last September 25, 2015 through the recommendation of Data Safety Monitoring Committee (DSMC).



Ongoing Research Projects

Site Enrolment Status

Out of 96 pre-screened subjects, 69 patients (72%) did not meet the eligibility criteria. All subjects have finished their treatment and are now in post treatment follow-up period for 24 months.

CONSENTED	17
SCREEN FAILED	7
RANDOMIZED / ENROLLED	10

PASCOLIZUMAB TB Trial

Protocol Title: "Safety and efficacy of blocking IL-4 with pascolizumab in patients receiving standard combination therapy for pulmonary tuberculosis: a randomized, double-blind, placebo-controlled, proof-of-concept clinical trial."

In early 2016, TDF laboratory was engaged by the National University Health System – Singapore to be the central laboratory in the Philippines for the Pascolizumab clinical trial. As the central laboratory, TDF performed fluorescent microscopy, MGIT TB culture, CFU determination, first-line drug susceptibility testing, and Peripheral Blood Mononuclear Cell (PBMC) extraction for the study. Pascolizumab TB trial was a proof of concept study to determine safety and efficacy of blocking IL-4 with Pascolizumab in patients receiving standard combination therapy for pulmonary tuberculosis. It was a randomized, double-blind, placebo-controlled clinical trial. The study aims to determine whether the administration of the pascolizumab as a supplement to standard treatment for drug-sensitive TB will lead to changes in one or more parameters of bacterial host response that may indicate potential for sterilization. It also seeks to confirm safety of blocking IL-4 in patients with TB.

The study involved two clinical sites that screened and enrolled patients for the clinical trial namely: Lung Center of the Philippines (LCP), and the Quezon Institute (QI). A total of 11 patients were enrolled by the sites, with 14 visits each. The first specimen was collected on July 8, 2016; the last specimen for the trial was collected on January 30, 2017. There were a total of 308 specimens collected and tested for the trial.



Ongoing Research Projects

MSD Trial (OnceMRK)

"A Phase III Multicenter, Double-Blind, Randomized, Active Comparator-Controlled Clinical Trial to Evaluate the Safety and Efficacy of Reformulated Raltegravir 1200 mg Once Daily Versus Raltegravir 400 mg Twice Daily, each in Combination With TRUVADA, in Treatment-Naive HIV-1 Infected Subjects."

The project is sponsored by Merck Sharp & Dohme Corp which aims to evaluate the safety and efficacy of reformulated raltegravir (MK-0518) 1200 mg once daily in combination with TRUVADA versus raltegravir 400 mg twice daily in combination with TRUVADA in HIV-1 infected, treatment-naive participants. The primary hypothesis beingtested is that reformulated raltegravir 1200 mg once-daily is non-inferior to raltegravir 400 mg twice-daily, each in combination therapy with TRUVADA, as assessed by the proportion of participants achieving HIV-1 ribonucleic acid (RNA)

<40 copies/mL at Week 48.

Study Milestones

First Patient Screened	02 Oct. 2014
First Patient Randomized	07 Nov. 2014
Last Patient Screened	18 Nov. 2014
Last Patient Randomized	10 Jan. 2015
Last Patient Last Visit estin	nated Dec. 2016

Site Enrolment Status

Subjects Screened	13 patients
Screen Failure	3 patients
Subjects Randomized	10 patients
Discontinued	0
On-going	0
Completed	10 patients





Community Health Education on Tuberculosis

In line with the Foundation's thrust of establishing partnerships, Tropical Disease Foundation (TDF) entered into a collaboration with De La Salle University Center for Social Concern and Action (COSCA) to provide technical assistance for their community health education project, to coincide with the celebration of World TB Day 2016. For two sessions, members of the TDF TB Clinic provided health education to members of beneficiary communities of DLSU-COSCA.

In relation to the World TB Day celebration, the health education sessions focused on tuberculosis disease, infection control and an overview on TB treatment, including MDRTB. Participants in attendance belonged to Barangays 713, 714, and 717. The attendees displayed a healthy thirst



for knowledge on the disease, raising questions and points for discussion, which livened up the sessions and showed that the TB eradication is a community concern and that their cooperation is vital for its accomplishment.

The brief cooperation proved to be a success, opening doors for future cooperation between TDF and DLSU-COSCA and culminating in the two organizations in attendance for the World TB Day celebration held in the Unilab Bayanihan Center in Mandaluyong, together with other stakeholders. Partnerships such as this, no matter the size, show that like TB treatment regimens, everyone needs to Unite, To End TB.



Takpan Ang Ubo!

In commemoration of the World TB Day on March 29, 2016, the Tropical Disease Foundation, together with the Global TB Alliance, launched Takpan ang Ubo (Cover Your Cough). Designed to help decrease transmission of TB in households and communities as well as to encourage people to go to DOTS clinics and health centers for early diagnosis, the project was piloted in Barangay Pio del Pilar, Makati City.



On March 28, a health-teaching seminar was conducted at the barangay hall targeting children, mothers, and local health workers. The session focused on reinforcing education on TB signs and symptoms, transmission, and what to do if TB infection is suspected. A short discussion on research and developments in TB management in the country was also conducted to update the participants on the latest developments in the fight against the disease.

On World TB Day, in order to optimize project reach a vehicle equipped with a public address system and informational banners went around barangay Pio Del Pilar, making stops at predesignated areas for a few minutes, enabling the people in the vicinity to hear the Takpan ang Ubo jingle as well as allowing TDF personnel to distribute brochures which included information on TB, its signs and symptoms, as well as information on where to go for diagnosis/treatment. The Takpan ang Ubo jingle used was prepared by TDF for the project.

Aside from the brochures, tissues packets with the TDF DOTS Clinic contact information were also handed out to enable people to practice cough etiquette and encourage them to consult their local health center or nearest DOTS clinic. The stickers on the packets also reminded people to Cover Your Cough and do your part in the fight to End TB.



Preparation

Days before the project day, TDF staff prepared the materials needed.



On the day of the celebration, staff organized themselves and "dressed" the vehicle to be used. A short meeting with the Barangay official was held and caravan routes were coordinated.





Caravan

The caravan rolled on with a lively cover your cough jingle playing. People from all walks of life approached the vehicle to receive the brochure, tissue pack and some candies from the staff:



the young ones and the older ones, mothers and fathers...







... people from different occupations, and those walking or driving to their destinations. People approached to ask questions while others decided to read what they received.



Health-Teaching Seminar

Simultaneously, while the caravan was going around the community, a health-teaching seminar was being conducted by a TDF Physician. Participants were given a chance to ask questions after the session to clarify some issues about TB, it's diagnosis and treatment.

Ms. Louie Zepeda, a former TB patient, shared her experience to stress the importance of seeking diagnosis early and getting the right treatment. The project ended with a simple token of appreciation given to the officials and the Barangay for their support to the project.





Launching of TB Malaya Website

TBpatientssufferfrom discrimination due to social stigma and the misconceptions that surround the disease. It is the fear of this discrimination that sometimes discourages people from going to their local health centers to get checked in order and get the proper treatment, increasing the possibility that the illness will be in an advanced state prior to treatment, making it more difficult to cure. Such delay in treatment makes it more likely that they will infect other people with the illness. Patients may also be less likely to finish treatment if they are apprehensive that people will find out about it.



In order to address this need, the TB Malaya project was initiated in November 2013 by Mildred Pancho herself, a former TB patient with XDR-TB, and her husband Stuart Pancho, a nurse with 9 years of experience in the Programmatic Management of Drug-Resistant TB (PMDT). The project aimed to promote more positive attitudes towards TB and people suffering from the disease by sharing real-life stories through social media.

Seeing the efficacy of such an approach in expanding the reach of advocacy efforts, the Tropical Disease Foundation funded the creation of the TB Malaya website (www.tbmalaya. org) in 2015. In addition to information about tuberculosis, the site also includes videos and stories written by patients and healthcare workers for patients and their families, making it a venue of support for people struggling with the disease and its emotional impact in their lives. To some extent, TB Malaya acts as a virtual support group where people can share their experiences and encourage each other to get tested and complete their treatment.



The TB Malaya website was launched on Aug 26, 2015 at the Microtel by Windham at the UP Technohub, Quezon City. Attending the launch ceremony were representatives from TDF together with an independent consultant in the field of TB and the Programmatic Management of Drug-Resistant Tuberculosis (PMDT), representatives from the Department of Health NCR and NTPMO, the Philippine Red Cross, USAID/TASC, Oxfam, PhilCAT, various PMDT treatment and satellite centers in Tayuman, the Lung Center of the Philippines, Tala, San Lazaro Hospital TDF – STC, and the Philippine Tuberculosis Society, Inc., the Philippine Business for Social Progress, Ideals, and Peacemaker's Circle Foundation, Inc. Also present were TB patients and bloggers as well as a representative from the Philippine Star.

Here's a sample of the blogs shared by TB patients in TB Malaya website:

Till Death Do Us Part

Posting date: Setyembre 21, 2015

"That person who enters your life out of nowhere, and suddenly means the world to you..." - Style Estate (Yung taong pumasok sa buhay mo mula sa kung saan, at syang biglang naging mundo para sa'yo...)

Ano ba talaga ang nararamdaman ng isang ikakasal na? Ang karaniwang naririnig ko ay masaya, nakakatakot, nakakakaba, nakaka-excite at iba't iba pang emosyon. Ganyan na ganyan yung naramdam ko noong ikakasal na ako kila...

Levofloxacin (Lfx), Prothionamide (Pto), Cycloserine (Cs), B6 at Kanamycin (KM). Oo, ikakasal ako sa mga gamot. Yan ang ilan sa mga gamot na ibinibigay sa mga pasyenteng may Multipledrug-resistant TB (MDR-TB).

MASAYA, yaan ang isang naramdaman ko dahil alam kong natagpuan ko na ang kailangan ko. Ikaw ba, anong mararamdaman mo kapag natagpuan mo na ang kailangan mo? Siguradong masaya ka din. Katulad ng sinasabi din ng karamihan na "beginnings are wonderful things..." at para sa akin, isang magandang panimula ito!



Kasama sa pagsisimula ay yong pakiramdam na TAKOT. Ito yung takot na baka hindi ko kayanin hanggang sa wakas. Kahit sabihin natin na 18 buwan lang itatagal ng kasal ko sa mga gamot ay mahabang panahon pa rin yon ng pagsasama (Araw-araw na pagsasama!). Doon unti-unti ko silang makikilala. Makikilala sa paraang hindi laging sa paraan na gusto ko. Papalapit na ang araw, tapos ko na ang mga requirements tulad ng Social Case Study, Barangay Certificate, sketch papuntang bahay namin at financial support na kailangan bago ma-ikasal sa mga gamot.

Ito na, ito na talaga ang araw. Espesyal na araw na nakatakda, ang palitan ng Vow!

Nurse: Narito kayo para sa inyong espesyal na araw, kung saan kayo ay magsasama at magiging isang laman. Maari niyo nang ipahayag ang inyong vow.

Levofloxacin (Lfx), Prothionamide (Pto), Cycloserine (Cs), B6 at Kanamycin (KM): Hindi ko sinasabi na magiging madali ang buhay natin sa loob ng 18 na buwan, maaring may pagkakataon na mag-aaway tayo. Pero isa lang ang ipanapangako ko sayo, hindi kita iiwan! Wag na wag mo lang akong susukuan dahil hindi kita susukuan. Tandaan mo, para sa baga ko 'to!

Kasehlel: Lfx, Pto, Cs, B6 at KM! Gusto ko lang sabihin na, salamat at natagpuan kita. Hindi ko inakala na makikilala kita kasi sa dinami dami ng gamot, ikaw pa. He he. Pero hindi ako nagsising nakilala kita dahil alam kong ikaw ang The One. Hinding hindi kita susukuan!

Nurse: Diniklara ko na kayong mag-asawa!

Nobyembre 26 ng 2014, ikinasal ako sa gamot.

Nakakapanibago sa umpisa, hindi ako makapaniwala na magkasama na kami talaga. Lumilipas ang araw, mag-uumaga, mag-tatanghali at mag-gagabi. Sa paglipas na araw unti-unti ko pang nakikila ang mga gamot. May panahon na lagi niya'ng pinapakabog ang dibdib ko at medyo pinapahirapan akong matulog. May panahon ding pinaglalaway ako at kinakailangan kong kumain ng candy katulad ng nahiligan kong sampaloc candy. Nagkaroon din ako ng pagkasilaw sa araw or kahit anong liwanag, na kahit hindi ako masyadong pinapatulog ay



nakakatulog pa rin ako dahil sa sobrang liwanag at pagkahilo dito. Alam niyo ba, dahil sa sobrang pagkahilo ko, may araw pa na nakatulog ako sa fx at syempre, lumampas ako sa dapat kong babaan. May araw gabi din na bigla akong maiiyak ng hindi ko alam ang dahilan tapos biglang matatawa. Nababaliw na ba ako? hindi, medyo epekto lang ng gamot. At pang huli ang yung biglang may mag "tinnnnnnnngggggg.." sa tenga ko! Ito ay dahil sa injection, araw-araw na injection na parang araw-araw bugbog ang pakiramdam ko.

Hindi madali ang mga nararanasan ko nung mga unang araw at buwan ko sa gamot. May mga panahong pumapasok sa isip ko na hindi ko kaya, gusto ko ng iwan 'tong gamot na to. Hirap na hirap na ko.

Pero sabi nga ng isang quotation na nakita ko sa internet,

"You are annoying, you are hilarious, you make me yell, you drive me crazy, but you are everything I want." kaya "till death do us part"!

...everything I want? Baka "everything I need."

Anyway, magkasama pa rin naman kami ng gamot hanggang ngayon. Sanay na ako sa kanya. Totoo nga na sa simula mo lang kailangan mag-adjust. Ngayon nga kaya ko ng maging Sam Smith sa gamot ko, "Oh won't you stay with me...'cause you're all i need." Hindi kagaya dati na Vice Ganda lang ako sa kanya na nagsasabing, "Dahil manhid ka, manhid ka, walang pakiramdam."

Madali lang pala talagang mahalin ang gamot. Kailangan lang ng mahabang pagtitiis.

"Real love is when you are completely committed to someone even when he is being completely unlovable." (Ang tunay na pagmamahal ay yung ganap kang nakatuon at tapat sa isang tao kahit pa ganap syang hindi kaibig-ibig.)





Formulation of Interventions to Address Malaria Vulnerabilities in Indigenous People

In the past 5 years, the Philippines has been winning the war on malaria. Between 2009 and 2011, the malaria morbidity rate has been reduced by 62.3% while mortality rate was reduced by 66.7%. By 2012, less than half (35 out of 80) of the provinces in the country have reported confirmed malaria cases as a result of the implementation of the targeted malaria control interventions by the National Malaria Program, the local government units, and the Global Fund for Fight AIDS, TB, and Malaria. However, the decrease in malaria incidence has not been felt uniformly across all provinces. The 2012 data from the Department of Health showed that two provinces accounted for 85% of all reported cases – Palawan, with 4,171 cases, and Tawi-Tawi with 2,781 cases.

With the decreasing numbers, the Program Review conducted in 2013 shows that the elimination of malaria is technically feasible but would require the strengthening of program monitoring at the central level. Concurrently, there should be integrated surveillance and effective case investigation and response systems at the community level, with emphasis on foci transmission. The National Malaria Control and Elimination Plan (NSPCEM) 2014 – 2020 outlines the strategies formulated to combat the disease.

In 2013, Indigenous Peoples (IP) comprised 46.42% of malaria cases in the 53 endemic regions in the country. These IP communities which comprise 14 – 17 million (data accuracy is hampered by the lack of formal census in these communities) of the country's population top the list of the groups identified by the Department of Health as highly vulnerable and at risk groups. These include IP communities populating or living near forested areas in Southern Palawan and Mindanao, where children and women are particularly at risk. Although the DOH acknowledges the challenges imposed by the limited population data, the professional consensus is that "indigenous peoples are at considerably higher risk than the total population". The NSPCEM identified IPs as the principal group most at-risk of malaria. Their means of livelihood, such as gathering forest products, hunting, and swidden farming, increase their exposure to malaria-causing mosquitos. The geographical remoteness of these communities also contributes to make preventive, diagnostic, and curative services more challenging.



To further advance the gains made by the DOH's malaria program, the Tropical Disease Foundation embarked on a research in 2015 to gather information on various factors that could enhance the formulation of interventions to address malaria vulnerabilities in indigenous people. The study headed by Dr Luz Escubil, Principal Investigator, looked at factors such as:

- 1. Socio-demographic profile
- 2. Knowledge regarding malaria
- 3. Perceptions and experiences with malaria
- 4. Health practices and health decision-making in households
- 5. Risk behaviors
- 6. Available malaria porgram and interventions in the community
- 7. Health financing

Trained field enumerators were sent to three municipalities each in Palawan, Sulu, and Tawi-Tawi. These three provinces had the highest 3-year average of reported malaria cases in 2011 - 2013. From these municipalities, the barangay with the highest number of IP cases in the same period were identified and all IP households with eligible study participants in the identified barangays were included in the study. To ensure the success of the data gathering activities, the research team coordinated with local government units and health offices.

A combination of interviews and focus group discussions (FGDs) were conducted to obtain information. Participating in the FGDs were barangay health workers, malaria microscopists/RDT volunteers, IP chief/ community leaders, traditional healers (if available), and IP community members who never contracted malaria.



This mother from the Tau't Bato tribe in Palawan shares how she treats malaria. The leaves of a plant (known only as "gamot sa udilas") is heated over a slow fire or burning charcoal. Once burned, a drop of cooking oil is added and mixed in a circular motion. Using the ring finger, the solution is applied on the side of the patient's stomach in an upward motion. This is only applied once and is believed to cure the patient immediately.



Training Projects

Clinical Trial Capacity Training

A Clinical Trial Capacity Training was held last March 31, 2016 at the Tropical Disease Foundation conference room for laboratory personnel of the National TB Reference Laboratory (NTRL). The one-day TB Research Laboratory Orientation was attended by 10 people from NTRL headed by Dr. Cecilia Ama. A three-day laboratory immersion followed wherein two NTRL staff rotated in different sections of the TB research laboratory.

The laboratory orientation was conducted by the laboratory staff of TDF. It was a series of lectures about the different components of a TB research laboratory and the principles of TB diagnostic assays used in clinical trials. Just like any other training conducted by the laboratory, pre- and post-tests were given to the participants to measure the knowledge gained through the lectures. A participant must pass the post-test to obtain a certificate of training. All of the personnel from NTRL passed the said exam and were given their certificates.

During the laboratory immersion, two staff from NTRL rotated in the different sections of the laboratory and observed how procedures for TB testing are done. The immersion allowed the NTRL staff to see how specimens for clinical trials are handled, processed, and analyzed. The flowchart

for TB clinical trial specimens and processes were also observed and discussed with the NTRL staff. This is an initiative by the DOH – NCR Office enabling DOTS clinics to screen presumptive Drug Resistant TB patients and enrolling DRTB patients at their facility.



NTRL Staff Training



Training Projects

Evaluation of Reasons for Patients' Loss to Follow-up During MDR-TB Treatment in the Philippines

Dr. Thelma E. Tupasi, President of the Tropical Disease Foundation presented the findings of the study "Evaluation of Reasons for Patients' Lost to Follow-up During MDR-TB" Treatment in the Philippines" at the 35th Annual Chest Convention on March 10, 2016 at the Sofitel Philippine Plaza, Manila. The convention with the theme PulmoConnect: Bridging the Gaps in Pulmonary Medicine was sponsored by the Philippine College of Chest Physicians.

In her study, Dr Tupasi showed that despite advances in MDR-TB diagnostic and treatment, there has been an increase in the patients lost to follow-up (from 21% - 39%) and a decrease in treatment success rates in 2007 (63%) - 2011 (44%). A third of the patients who were lost to follow-up (LTFU) started treatment with extensively drug resistant TB (XDR-TB) or pre-XDR-TB. For these reasons, the National TB Program, Department of Health requested that a study be done to identify factors associated with LTFU and to document patients' perspectives on the types and delivery of interventions that could positively impact the prevention or reduction of LTFU among MDR-TB patients.

Dr Tupasi was invited to discuss the results of the study which was conducted in 2014, funded by the United States Agency for International Development (USAID) through a cooperative agreement, under the auspices of the Philippine Business for Social Progress – Impact and with research oversight provided by the Lung Center for the Philippines. The research was implemented by Dr Tupasi (TDF) with Technical assistance from TASC Project, USAID Washington, US CDC, and WHO Philippines.







Training Projects

Philippine Advanced Biosafety Officers' Training

The fourth Philippine Advanced Biosafety Officers' Training course sponsored by the U.S. Biosecurity Engagement Program was held in 2016 at Hotel Jen, Manila. It was a six-week intensive training on biosafety and biosecurity attended by 21 participants from the Philippines (including Anthony Geronimo of TDF) and 1 from Pakistan. The six-week course was divided into three 2-week sessions, with intersession breaks, in a span of six months. The first 2-week session was held from July 18-29, 2016; the second 2-week session was held from September 19-30, 2016; and the third 2-week session was held from November 21 to December 2, 2016.

The course is anchored on the AMP (Assess, Mitigate, Perform) model of biorisk management. The sessions were interactive and involve a lot of group activities and exercises that allow participants to develop skills and knowledge needed by a biosafety officer. The participants also visited some facilities, including TDF laboratory, and conducted biorisk assessments and audits. During the intersession breaks, intersession assignments that require application certain principles to respective institutions were given to the participants.

At the end of the course, written and practical examinations were given to the participants; all participants passed the examinations and were certified as biosafety officers of the Philippines.







Research Publications

August 2015-July 2016

As part of the outputs of the researches undertaken for 2015-2016, some of the following documents have been published in peer-reviewed journals as follows:

- Mangan JM, Tupasi TE, Garfin AM, Lofranco V, Orillaza-Chi R, Basilio R, Naval LC, Balane GI, Joson ES, Burt D, Lew WJ, Mantala M, Pancho S, Sarol JN, Golubkov A, Kurbatova EV. "Multidrug-resistant tuberculosis patients lost to follow-up: self reported readiness to restart treatment." Int J Tuberc Lung Dis. 2016 Sep;20(9):1205-11. doi:
- Fox GJ, Benedetti A, Mitnick CD, Pai M, Menzies D; Collaborative Group for Meta-Analysis of Individual Patient Data in MDR-TB." Propensity Score-Based Approaches to Confounding by Indication in Individual Patient Data Meta-Analysis: Non-Standardized Treatment for Multidrug Resistant Tuberculosis."PLoS One. 2016 Mar 29;11(3):e0151724. doi: 10.1371/journal.pone.0151724. eCollection 2016.PMID:27022741
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Capability and Technical Assistance

To be up-to-date with the current trends in the respective professions of TDF employees, the Foundation continue to build a competent workforce equipped with knowledge and skills. Employees are given the opportunity to participate to various seminars and trainings on a wide range of specializations.

Trainings/Seminars/Lectures participated by TDF employees for the Fiscal Year 2015-2016.

GURAY, CLAUDETTE V. Southeast Asia (SEA) High Containment Facility

Operations and Maintenance (O&M) Workshop

Aug. 10-14, 2015 / Indonesia

BELEN, JOVITA P. Budget and Risk Financial Management

Aug. 3-7, 2015 / Kuala Lumpur, Malaysia

VETO, RHOLINE GEM MARTIN S. Philcat Convention

GABATIN, MIKAELA ANGELA A. Crowne Plaza Manila Galeria

Aug. 13-14, 2015 / Ortigas Ave. Quezon City

VETO, RHOLINE GEM MARTIN S. Intensive Clinical Management and
Operational TB Drug Resistance Course

Sept. 28-Oct. 2, 2015 / H20 Hotel, Manila

BALANE, GLENN I. GCP Training

ANONAS, MARCO

GABATIN, MIKAELA ANGELA A. Sept. 16, 2015 / TDF, 5th Flr, Makati City



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BERNARDINO, MARK LESTER M.

DEBLOIS, MAITA B.

LEPITEN, CHRISTIAN R. GUDA, GLAIZA ERIKA B.

DEBLOIS, MAITA B.

CHEN, CHIKA G.

VETO, RHOLINE GEM MARTIN S. DEBLOIS, MAITA B.

BERNARDINO, MARK LESTER M. GERONIMO, ANTHONY A. CHEN, CHIKA G.

MARTIN, NORWIN GAYLE DP

VETO, RHOLINE GEM MARTIN S. DALUZ, ABIGAIL S.

VETO, RHOLINE GEM MARTIN S.

ICH CGP Training - Quintiles

Oct. 27, 2015 / Otsuka Philippines

King's Court, Makati City

Pollution Control Association of the Philippines, Inc. Training

Nov. 9-13, 2015 / Cityland Pioneer, Mandaluyong

ICH GCP Training

Nov. 2015 / Otsuka Philippines King's Court, Makati City

PMDT Program Implementation Review and Data Quality Check

Feb. 2-4, 2016 / Hotel H20 Roxas Blvd., Manila

Challenges and Clinical Implications

of MDR & XDR Tuberculosis

Mar. 7, 2016 / Marco Polo Ortigas Manila

Ortigas, Pasig City

ICH GCP Training

Nov. 2015 / Otsuka Philippines

King's Court, Makati City

Community Health Education in TB

Mar. 13, 2016 / Dela Salle University Manila

Takpan ang Ubo TB Caravan and Health Teaching Seminar

March 28, 2016 / Brgy. Pio del Pilar, Makati City



Capability & Technical Assistance

VETO, RHOLINE GEM MARTIN S. DALUZ, ABIGAIL S. BALIWAGAN, MA. BEGONIA BALANE, GLENN I.

GABATIN, MIKAELA ANGELA A.

ANONAS, MARCO

UBALDE, JOHN PHILLIP

World TB Day

March 29, 2016 / Unilab Bayanihan Center

Pasig City

FLORES, RUPERT REY J.

ICH GCP Training

April 2016 / King's Court, Makati City

CATINDIG, ANGELITO M.

Tax Updates

April 19, 2016 / PICPA Building

Mandaluyong City

CATINDIG, ANGELITO M.

SEC and BOA Updates

April 20, 2016 / PICPA Building

Mandaluyong City

CATINDIG, ANGELITO M.

Ethics and Good Governance

April 22, 2016 / PICPA Building

Mandaluyong City

CATINDIG, ANGELITO M.

Comprehensive Corporate

and VAT Taxation

April 29, 2016 / PICPA Building

Mandaluyong City

NAVAL, LEILANI C.

Innovative Strategies for Development

Summit 2016

June 8-10, 2016 / Crowne Plaza Manila

Ortigas, Pasig City



Capability & Technical Assistance

Advance Biosafety Officers GERONIMO, ANTHONY A.

Training Course (ABOT 4)

July 18-29, 2016 / Hotel Jen

Roxas Boulevard, Manila

NTP - ITIS Refresher Course DALUZ, ABIGAIL

July 19, 2016 / Department of Health

Manila

VETO, RHOLINE GEM MARTIN **iDOTS** Implementation

July 22, 2016 / City Garden Hotel

Makati City

GUDA, GLAIZA ERIKA B. **DSSM Training**

July 25-29, 2016 / Ciudad Christia Resort CORPUZ, ELIZABETH KAYE A.

San Mateo, Rizal

CATINDIG, ANGELITO M. The Tax Exemption and

> Tax Aspect of Non-Stock, Non-Profit Organizations,

NGOs, Foundations

July 26, 2016 / PICPA Building

Mandaluyong City

ANONAS, MARCO

GABATIN, MIKAELA ANGELA A. NTP-MOP 5th Edition

Training on the Revised

July 27-29, 2016 / Ciudad Christia Resort

San Mateo Rizal

CATINDIG, ANGELITO M. **Effective Business Writing**

July 28, 2016 / PICPA Building

Mandaluyong City



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