



TiBa

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The Scorecard:
DNTLD-P
Quarterly Report

**Implementing
Strategic Initiatives
with Amref Health
Africa in Kenya**

MINING TB CASES

**Shikoye Mines – The Hot Spot of
TB in Kakamega County**

Success Stories: *County Edition with USAID TB ARC II*
Focus on Isiolo, Meru and Tharaka Nithi



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REPUBLIC OF KENYA



MINISTRY OF HEALTH

#ItsTimetoEndTB
#ItsTimetoEndCOVID-19



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Word from...



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14 Assessing Strategic Initiatives aimed at finding missing people with TB

20 Using Tele-Radiology to Improve Quality Reading of Chest X-RAY in Lodwar County Referral Hospital

24 Mohamed Wario: A personal experience with TB motivated me to be a Champion

28 TB Manyattas: A local solution for local problems, but it is no longer heaven for patients

32 Meru County adopts the use of biopsy in diagnosing TB

38 USAID – KCCB KOMESHA TB Program: The Faith Based Partner in TB Programming

43 TB Myths and Misconceptions



19 The CaP TB Homa Bay County Experience

21 Robust Specimen Referral System: Improving Early Detection of TB cases in Turkana County

27 From TB Survivors to TB Champions

31 One-on-One with Juster Kathambi

36 Fighting extensively drug-resistant TB: Ray of hope for siblings who want to become doctors

39 TB through the eyes of clergy



Word from the Ag. Director General for Health

Kenya is one of the countries that has been adversely affected by COVID-19 pandemic. To date, numerous resources, health care workers and political attention are still directed towards the management of the pandemic. Tuberculosis (TB) prevention, treatment and care services, just like other diseases, experienced some disruptions since the onset of the epidemic.

The Division of National Tuberculosis Leprosy and Lung Disease recorded a drop in TB case notification during this period. Active Case Finding (ACF) strategies and activities, both at the facility and community level were significantly affected resulting to reduced number of TB tests conducted in first half of the year from 29,833 in 2019 to 23,458 in 2020.

The ministry further recorded a reduced Out Patient Department attendance countrywide thus missing on getting persons presenting with TB symptoms. Patients with cough feared visiting our health facilities to avoid being mistaken for COVID-19 due to social stigma within communities. There is a likelihood that the stigma led to self-medication through over the counter medicines resulting to TB disease progression and spread to their contacts.

This year, we purpose to improve treatment outcomes through consistency and efficiency across the country. As a ministry, we dedicate our energies to reduce stigma, discrimination, morbidity, and mortality, and improve access to services and the quality of life among people with TB. 2021 offers new hope with the reduction of COVID-19 transmission in the community. We commit to ensuring continuity of essential health services, including TB management and call upon the dedication of all players, particularly the TB managers and coordinators, those with the diseases, caregivers, media, and other stakeholders at both National and County levels.



A handwritten signature in black ink, reading "Patrick Amoth".

Dr. Patrick Amoth, EBS

Ag. Director General for Health

Word from the Ag. Head, Directorate, Medical Services Preventive and Promotive Health

Tuberculosis (TB) remains one of the top 10 causes of death worldwide. Globally, millions of people continue to fall sick from TB each year. In 2018, 10 million people fell ill from TB and of these, 1.5 million people lost their lives. It is estimated that one quarter of the world's population (an estimated 1.7 billion people) is latently infected with the TB bacteria. Of these 5-10% are at risk of progressing to TB disease. Latent TB infection occurs when a person is infected with the TB bacteria but does not have any symptoms.

People with Latent TB infection pose a great threat in the community as they are the breeding ground for the TB epidemic. TB Preventive Therapy is offered to individuals who are considered at risk of developing TB disease in order to reduce that risk. The National Strategic Plan (NSP) for Tuberculosis, Leprosy and Lung Health 2019-2023 targets to offer TB preventive therapy to approximately 900,000 persons who have Latent TB infections. These populations are as follows: adults, adolescents, children and infants living with HIV; HIV-negative household contacts of bacteriologically-confirmed TB patients, health care workers, prisoners and other HIV-negative at-risk groups like patients on immunosuppressive therapy, dialysis, those preparing for organ or haematological transplant and patients with silicosis.

We now have shorter and more effective drugs to be used as TB preventive therapy which include 3HP given once a week for 12 weeks to all adults' populations and 3RH given daily for 3 months for children below 15 years. We appreciate all partners that are working towards availing these commodities in the country. The National TB Program now intends to sensitize the Health care workers on these updates starting from the county leadership, sub county and finally health facility level.

I therefore call upon all stakeholders to join hands with us in ensuring that we roll this out successfully.



Dr. Pacifica Onyancha
**Ag. Head, Directorate, Medical
Services Preventive and Promotive
Health**



Word from the Head of the Program

Involvement of communities and patients in Tuberculosis (TB) care and prevention is important to the successful implementation of the 2019-2023 National Strategic Plan. Just like HIV/AIDS and Malaria, TB is a major epidemic that poses challenges to our existence as a country. Effective partnerships between the Ministry of Health (MOH), private health service providers, the community, civil societies and non-governmental organizations can help mitigate some of these challenges and facilitate access to TB care and treatment.

The MOH recognizes that carefully designed community and patient engagement strategies are important in scaling up interventions on TB. In particular, education on TB will not only stimulate change in health-related behaviour, but communities will also become increasingly knowledgeable and self-reliant.

The MOH, for example, in partnership with Amref Health Africa in Kenya, USAID supported TB ARC II and KOMESHA TB have effectively engaged communities and patients to yield positive results, such as improved case-finding and treatment outcomes, and raised awareness concerning TB disease through health promotion.

It is our vision to establish and cultivate effective partnerships that will further ease access to TB services to homes and reduce the cost of care seeking for our patients as well as the cost of workload for health care workers. To all our partners, we thank you for your support.



Dr. Elizabeth Onyango

***Head, Division of National Tuberculosis
Leprosy and Lung Disease -Program***





Mining TB Cases through Community Outreaches:

*Shikoye Mines – The Hot Spot of TB
in Kakamega County*

By Mbetera Felix | DNTLD-P

The sounds of ore graders rein the air in Ikolomani gold mines, disturbing the peaceful Shisaya village in Shinyalu sub-location, Kakamega County. The beautiful village which is characterized with tall and calm green trees can be seen miles away hiding the mystery surrounding the mines. The mining of the ore is part of the long and complex gold mining process which is unregulated but depicts the struggle for survival. The precious mineral sought by the under-equipped villagers means everything to them. With a gram going for Ksh 5000, the dark shafts dug kilometers underneath earth offers hope despite the risks involved.

Research has shown that the most common occupational diseases that miners are likely to develop as a result of long-term exposure in the gold mining environment include pulmonary tuberculosis (TB), asthma, silicosis, obstructive airways disease, oral or nasal cavity erosions and noise-induced hearing loss.

Mama Boniface's homestead is one of the biggest mining sites in Shinyula that has been ravaged by TB. She understands well the risk posed to the miners having lost one of her sons and a nephew in a span of four months. She also has five more relatives and a neighbour currently infected with TB, one with a multi-drug resistant TB. She decries that the disease will soon wipe out her entire homestead. The risk is so high to the entire village as the site attracts hundreds of miners and locals who seek to make a living from the mines.

In February 2020, Boniface fell ill. At 41 years and weak, he was still mining at the site. He never took his cough, fever, night sweats and tiredness seriously.

"I thought I had Malaria" he says. "I used to buy Malaria drugs from the kiosk and treat myself. I would still go to work but I never got better".



Gold miners at shikoye mines during the outreach.

In May, Boniface got worse. His health deteriorated and he couldn't even walk. He was taken to a local health centre where he was diagnosed with TB and initiated on treatment immediately.

"Were it not for the TB medicines, I would be dead by now", he adds.

Jacob, a community TB ambassador attached to the health facility where Boniface sought treatment and is supporting his recovery journey did contact tracing, a critical strategy to TB Management in Kenya. He also works closely with the village elders to provide informal counseling, support, follow-up and advocating for local health needs. Together, they support the community health volunteers to provide TB health services at the households and at the community and make referrals and linkages to health facilities.

The only household contact Boniface had was his mother who was taking care of him for fear of losing a second child to TB in a span of a few weeks. Upon screening and testing, she was also diagnosed with TB.

"I wasn't feeling sick", says mama Boniface. "I was feeling okay but the doctor said I have TB after they took my sputum for testing. I was worried but when the doctor counselled me, I started my medication immediately", she adds.

The two led to further five more cases being diagnosed in the homestead. Through contact tracing, Boniface's uncle, three cousins and a neighbour who stays just a stone throw away were diagnosed with TB. One was diagnosed with a multi-drug resistant TB.

I thought I had Malaria. I used to buy Malaria drugs from the kiosk and treat myself. I would still go to work but I never got better.

One of his cousins was diagnosed with TB during a community outreach at the mining site by the National TB Program and Amref Health Africa in Kenya. He was initiated to treatment immediately. Sadly, he had already interrupted his medication by the second week of treatment.

According to Beatrice Mumanyi, the Sub-County TB and Leprosy Coordinator (SCTLC), they were shocked when he came back to be screened during the second outreach at the site. The mobile X-ray machine showed that he had an abnormal chest and upon interrogation, the SCTLC realized he was a treatment interrupter. Sadly, he had lost his brother to TB four months earlier. This, according to the SCTLC, is one of the major factors that is leading to the high number of cases in the county.

"Besides, the miners carry their TB medicines into the gold mines and the safety of the medicines is not assured. There is need for community surveillance on storage of TB drugs and other medicines amongst the miners," she adds.

Boniface attributes his sickness to the gods as a punishment for drifting away from church.

"I used to be a staunch Christian, but I met friends who were non-believers. We used to drink, smoke and engage in non-Christian activities. When I got married, I forgot about church life," he says.

"I feel this sickness is God's punishment for neglecting his word and straying from church. I am now back to church where I spend most of my time serving God. The church supports me through the healing process," he adds.

Kakamega county is among the high TB burden counties in Kenya. In 2019, the county notified 2383 cases. In the period between January and September 2020, the county notified 1566 cases with COVID-19 adversely affecting case finding as patients



Boniface during the interview



A man washing and panning for Gold at the shikoye mines



A radiologist positioning a miner to create clear X-ray image during the outreach using a mobile X-ray machine.



From right Gloria Wandeyi from Amref Kenya with a community health volunteer and Mama Boniface during the interview.



CHVs and local elders engaging Gloria Wandeyi at the shikoye mines.

fear going to facilities for screening and treatment. The adoption of community outreach has enabled the National and County TB Coordinators to use Community Health Volunteers to screen the community for TB and find the missing cases.

Amref Health Africa in Kenya in collaboration with the Division of National Tuberculosis Leprosy and Lung Disease Program carried out a targeted community outreach in seven sub-counties in Kakamega County. The three-week outreach covered Ikolomani, Shinyalu, Lurambi, Malava, Lugari, Mumias East and Mumias West sub-counties. With support from Amref under the current Global Fund programming, according to Josphat Mutua, DNTLD-P community engagement focal person, the outreach used a mobile digital X-Ray machine to screen the targeted groups who included gold miners, slum dwellers, sugarcane cutters, mechanics and those visiting chang'aa dens. Those who were presumptive had their sputum tested through Gene-Xpert machines in the nearest facilities.

Out of a target population of 15,548, a total of 2946 was screened. 25 people were bacteriological confirmed while 85 people were clinically diagnosed with support of the Mobile Digital X-ray machines.

Status of National Tuberculosis Epidemic and Response

Quarter three 2020

Drug susceptible TB



16,740

Number of TB cases
Notified



83%

Treatment success
rate (All forms)



6%

Case fatality ratio



7%

Proportions of children



75%

Previously treated
(DSTB) with DST results



96%

Proportion of DSTB with
Known HIV status



6%

Lost to Follow Up



93%

Proportions on ART

Drug resistant TB

MDR

20

PDR

3

RR

83

182

**Monoresistant
TB**

Pre XDR

**Grand
Total**

Leprosy

8

Number of Leprosy
Cases reported

TB Prevention Therapy

1,632

Children <5 initiated
on IPT (contacts
of bacteriologically
confirmed cases)



Community Outreach: Targeting mobile population of truckers and crews at border points

Most long-distance drivers have not been able to seek healthcare services promptly due to their nature of work.



By Mbetera Felix | DNTLD-P

Collaborative TB prevention, diagnosis and management activities are critical for reducing the burden of TB disease and achieving favorable outcomes by ensuring early initiation to treatment. With the Ministry of Health directing nearly all efforts to containing COVID-19, gains so far made in containing other ailments including TB, could be crawled back, thus leading to an upsurge in community infections.

In December 2020, the Division of National Tuberculosis Leprosy and Lung Disease Program (DNTLD-P) rolled out a targeted screening exercise for truckers and crews along the busy highways and border points in Kenya. These key points include Mariakani, Namanga, Busia, Isibania and Malava.

The exercise saw qualified clinicians and counselors from the host counties and local facilities voluntarily screen and test truckers and crew for TB using screening tools and mobile digital X-ray machines. This happened as those who got tested waited for travel clearance at the weighbridges and border points. Those who were deemed to be presumptive had their sputum sent to the nearest health facilities with Gene-Xpert machines.

There were fears that many people are likely to die from the indirect effects of the COVID-19 pandemic. Truckers are considered vulnerable and are perceived as conduits of spreading many communicable diseases to their family members and friends across national and international borders.

According to the Busia County TB and Leprosy Coordinator, madam Mary Asoyong, most long-distance drivers have not been able to seek healthcare services promptly due to their nature of work.

"This is a population that is unique in many ways, due to the fact that they are mobile and most of them may not have time to access health services," said Asoyong.

"Busia County TB case detection has been on a decline since 2016. With COVID-19, less cases were notified as people shied away from seeking services in health facilities for fear of being quarantined if they exhibited similar symptoms to COVID-19," she added.

According to Josphat Mutua, DNTLD-P community engagement focal person, the program also provided health education about TB to the targeted audiences. Further, there has been an aggressive On-Job-Training for radiographers on the mobile X-ray machines. So far, a total of 11 radiographers from different counties have been inducted.

"The initiative has been received positively by the truck drivers and we hope to scale up their participation in voluntary screenings and outreaches. This will help us find missing TB cases and improve case notifications especially in border counties like Busia and Bungoma," he noted.

There is, however, the need for further investment on human and financial resources for the initiative to be successful. The existing staff should be sensitized, trained and offered proper incentives to regularly conduct TB screening, create awareness and Behaviour Change Communication activities along the border points and weighbridges.

During the screening sessions, 3730 truckers, their crew and members of the surrounding community were covered whereby 717 turned out to be presumptive TB patients. A total of 2246 people had the chest X-ray done with 53 having chests suggestive of TB. 421 truckers among other people gave sputum samples for Gene-Xpert analysis. Six persons tested positive for TB and were initiated on treatment while 43 were put TB on treatment based on clinical diagnosis.

The exercise was funded under the Global Fund programming for TB and COVID-19 management through DNTLDP. Other partners who supported the screening include Kenya Conference of Catholic Bishops (KCCB)-Komesha TB program, funded by USAID and Academic Model Providing Access to Healthcare (AMPATH) in Busia county.



Track drivers waiting to be screened at the Buisia Border



By Mbetera Felix | DNTLD-P

Amref Health Africa in Kenya in collaboration with the Division of National Tuberculosis Leprosy and Lung Disease Program (DNTLD-P) held a progress review and experience sharing meeting for Sub Recipients (SRs) implementing Kenya Innovation Challenge TB Fund (KIC-TB) and Public-Private Mix (PPM) initiatives.

The meeting which was held in October, 2020 at the Great Rift-Valley Lodge was aimed at reviewing the progress of the different initiatives towards finding the missing people with TB, assess the quality of implementation, identify and address areas of improvement, and share technical updates, best practices and lessons learned in the course of implementation.

Partners present included the World Health Organization-Kenya office, the Strategic Initiatives Advisory Committee, Kenya Coordination Mechanism Secretariat, USAID TB ARC II and Amref Health Africa Global Fund Project implementation team.

Kenya is a high burden country for Tuberculosis (TB), MDR-TB and TB/HIV. The Kenya National TB Prevalence Survey 2016 showed that the country was missing about half of the people with TB. According to the survey, about 67% of those found with TB had symptoms of TB but did not seek care while three-quarters of those who sought care at public or private health facilities were not diagnosed with TB. In addition, the WHO Global TB report (2020) shows that Kenya recorded a total TB incidence of 140,000 in 2019. However, only 84,345 cases were notified, thus missing almost 40% of all TB patients.

Strategic initiatives to find the missing people with TB

DNTLD-P and Amref Health Africa which is a non-state Principal Recipient (PR) for the Global Fund (GF) grant are implementing Strategic Initiatives which are geared towards finding the missing people with TB. These initiatives are using catalytic funds in the 2018 – 2021 GF TB grant. The three initiatives which were launched in 2019 include:

Kenya Innovation Challenge TB Fund (KIC-TB)

This initiative involves using innovative strategies to find the missing people with TB in the community and link them to diagnosis and treatment at health facilities. Under KIC-TB, nine organizations were competitively selected and have been sub-granted by Amref Health Africa to implement selected innovations in six counties; three in Nairobi, two in Mombasa and one each in Kiambu, Kakamega, Homa Bay and Kajiado.

Kenya recorded a total TB incidence of 140,000 in 2019. However, only 84,345 cases were notified, thus missing almost 40% of all TB cases.

Public-Private Mix (PPM)

The intervention focuses on enhancing the contribution of unengaged standalone formal and informal private health providers in finding missing people with TB. This is being implemented in nine urban towns in eight counties which include Garissa, Nairobi, Mombasa, Kilifi, Kisumu, Nakuru, Kiambu and Kajiado. The implementation is through Population Service Kenya, a Sub Recipient (SR) of Amref Health Africa.

Pay for Performance (P4P)

The aim of this initiative is to optimize the TB care cascade in health facilities in order to increase the number of people notified with TB and improve the quality of TB services. The initiative is implemented in 197 health facilities in 13 counties which include Nairobi, Mombasa, Kiambu, Kilifi, Kakamega, Homa Bay, Nakuru, Makueni, Kitui, Siaya, Turkana, Garissa and Meru.



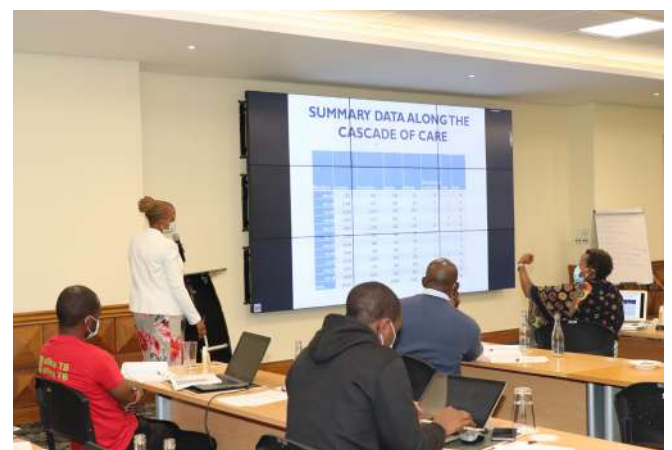
Participants during the group discussions.



Benson Ulo, Global Fund Project Manager, Amref Health in Kenya making a presentation.



Dr Elizabeth Onyango, Head DNTLD-P during the group discussions.



Ann Munene from Amref Health Africa in Kenya engaging one of the presenters.

Community health workers trained on human right to bolster the fight against TB



Edward Omondi from Amref Health Africa in Kenya during the training.

By Mbetera Felix : DNTLD-P

The Division of National Tuberculosis Leprosy and Lung Disease Program in partnership with Amref Health Africa in Kenya sensitized Community Health Volunteers (CHVs) and Health Care Workers at Sarova Whitesands in Mombasa on human rights, stigma and gender related issues regarding to TB and HIV.

The two-day sensitization forum was geared towards increasing their knowledge and capacity to be able to offer education on human rights and legal literacy to patients, households and the community.

According to Timothy Mutiso, a legal officer based at National AIDS and STIs Control Programme, the training was aimed at promoting human rights values and principles of equality, dignity, inclusion, non-discrimination and public participation through community health workers.

The 10 TB coordinators and clinicians, five TB champions and 15 CHVs from high TB burden facilities were drawn from across the county. They were also imparted with skills on the usage of I-Monitor alert system which they will use to document cases of stigma related violation or discrimination at the facilities, community and households as they go about their work. The data will

be aggregated, analyzed and linked to the relevant tribunals or escalated to higher levels if need be for resolution.

In cases where issues of violation are identified by the health care providers, the County Health Management Team and pro-bono lawyers will be notified to address the issues under the alternative dispute resolution or during the lawyer's regular facility visits.

"By capacity building the CHVs about human rights in simple language, we hope to comprehensively provide participants with relevant information on human rights and relevant provisions in our Constitution and health policies, with a special focus on TB and HIV," said Nkirote Mwirigi, Human rights Coordinator at the National TB Program.

A number of CHVs have already been capacitated in Nairobi, Meru and Kisumu counties. Other key partners supporting the initiative include the County Government of Mombasa, National AIDS and STIs Control Programme, Stop TB Partnership Kenya, Kenya Legal and Ethical Issues Network on HIV & AIDS and the Network for TB Champions in Kenya.

Quarterly Review Meeting: Assessing the Impact of COVID-19 on TB Management



County TB Coordinators and Managers during the TA.

By Mbetera Felix : DNTLD-P

The National Government initiated an urgent public health response and a series of measures to manage the COVID-19 pandemic including lockdowns and closure of public places. Both the pandemic and the measures put in place, however, had significant effects on the management of TB in the country.

During the quarterly review meetings (QRMs) which were held in November 2020, it was evident that the country reported reduced notification of TB cases between March and September 2020. TB and Leprosy County Coordinators noted that some of the challenges faced during the pandemic included reduced Out Patient Department attendance, social stigma, and discriminatory behaviors that made clients with cough fear disclosure to avoid being quarantined. Many clients avoided going to hospitals and bought over the counter medicines which, to some extent, has led to TB disease progression and spread in the community.

The QRMs helps the National and County TB Coordinators to address the performance issues and come out with a plan on how to improve case finding, and ensuring that performance is, in fact, improved as the fight against COVID-19 continues.

AFB EQA training for SCMLTs held from 11th to 14th January 2021 at Kiandani Hotel, Machakos



Training of Sub- County Medical Laboratory coordinators on external quality assessment.

By Catherine Githinji : DNTLD-P

The National Tuberculosis (TB) program held a four-day training to update the Sub- County Medical Laboratory coordinators from four counties namely, Mombasa, Wajir, Nyeri and Marsabit. The training was aimed to improve their capacity in management of TB control activities at the county and sub county levels with regards to external quality assurance, data management, and to enable them understand the principle behind TB Diagnosis and Surveillance. They were also orientated on the use of manual workbook and translating the same to a digitized online external quality assessment (EQA) workbook.

To achieve migration to online reporting, in 2019, the TB program supported 20 counties with laptops which were issued to sub county-laboratory coordinators (SCMLC). At the end of the training, the Program had managed to capacity built all SCMLC from nineteen sub-counties.

Through the training, the facilitators who comprised of the national team and county lab coordinators (CMLC) from the respective counties were able to refresh SCMLCs on TB diagnostic techniques, improve their training and supervisory skills for the laboratory coordinators at sub-county Level in addressing TB diagnosis, treatment, monitoring and Control as well as update the SCMLTs on the use of the manual workbook and keying data into an online EQA platform, interpretation and use EQA data for decision making.





The CaP TB Homa Bay County Experience: Advanced sample collection aids microbiological confirmation of TB in children



Seth Kagia conducting orientation to HCWs on how to use the advance sample collection devices.

By EGPAF

According to WHO, an estimated one million children become ill with TB each year globally. But the actual burden of TB in children is likely higher because of the challenge in diagnosing childhood TB. Without diagnosis, many of those children will die. TB is mainly diagnosed by checking the TB bacteria in sputum through Gene xpert.

Unfortunately, diagnosis of TB in children is difficult. Very young children often cannot produce sputum for testing. Even when a sample is taken for molecular testing, the quantity of TB bacteria in samples from children is often lower than in adults, making TB detection in children more difficult to detect.

Because of the inability of children to produce sputum, microbiological confirmation of TB is rarely achieved in children presumed with TB. Despite the development and roll out of novel TB diagnostic tests, such as MTB/RIF assay, sputum specimen acquisition has become a diagnostic

hindrance. Treatment is mainly done on clinical grounds without investigations.

Homa Bay County in partnership with the Elizabeth Glaser Pediatric AIDS Foundation (EGPAF) through Catalyzing Pediatric TB Innovations (CaP TB), a project that seeks to end childhood illnesses and deaths due to TB, supported Homa Bay County Referral Hospital with the purchase of sputum induction and nasopharyngeal aspiration devices and consumables to aid in obtaining quality sputum specimen for microbiological confirmation of TB in children.

The project also trained healthcare workers and provided additional equipment such as Nebulizer machine, suction machine, pulse oximetry, oxygen concentrator and assorted consumables to support the procedure. Through these interventions, the facility now conducts advanced sample

collection among the children unable to expectorate, identify those with TB and put all of them on treatment

“With the equipment, the TB clinic is now able to obtain quality sputum with nebulized hypertonic saline and Gastric aspiration among children suspected of having TB and whose status would otherwise not be confirmed and treated because of their inability to produce quality sputum”, says Daniel Okal, the Sub County TB and Leprosy Coordinator for Homa Bay Township.

Seth Kagia a clinician at the chest clinic further expounds that “in our everyday busy clinic, we perform induced sputum collection and nasopharyngeal procedures, unlike before when we were making the decision solely empirically. We often encounter infrequent and mild adverse events especially bronchospasm, the and CaP TB project has provided salbutamol inhaler to manage this”.

“Sputum induction and NPA procedures are safe, non –invasive and provides significant yield in the diagnosis of pulmonary TB in children especially those who are unable to expectorate” says CaP TB Project Country Implementation Manager.

During August, 2019 to September, 2020 period, a total of four healthcare workers were trained on this specialized TB diagnosis process. Over the period, NPA and sputum induction were done on 16 children out of who three were confirmed bacteriologically positive for TB. Gastric aspiration was conducted on 89 children out of which three were diagnosed and initiated on treatment for TB.



USING TELE-RADIOLOGY TO IMPROVE QUALITY READING OF CHEST X-RAY IN LODWAR COUNTY REFERRAL HOSPITAL –TURKANA COUNTY



Oct 2019 to Oct 2020 CaP TB project results

- 4 clinicians and 1 radiographer trained
- Turnaround-time for TB diagnosis reduced from 12 hours to 2 hours
- 103 difficult chest x-rays interpreted by the contracted radiologist company
- 12 patients confirmed to have TB disease representing 12 percent positivity rate
- All confirmed TB cases linked to TB treatment units for TB initiation

Dr. Phelix Mboya EGPAF CaP TB Implementation Manager handing over procured devices to the Sub County TB coordinator in 2019

By EGPAF

Although Tuberculosis (TB) is preventable and curable, it is the leading world's infectious killer. An estimated 1.4 million people died due to TB in 2019. According to the 2016 Kenya Prevalence Survey, four out of every 10 TB cases are missed and four out of every five TB clients identified were HIV negative. As TB is now common among people not infected with HIV, the need for active TB case finding in all health facility entry points has never been greater.

Turkana County is among the high TB-burden counties in Kenya. In 2018 the county detected 2587 new TB cases of which 490 (19 percent) were children. In 2019, 2502 cases were detected with 602 (24%) being children. This is way higher than the WHO's guidance on estimated national TB prevalence rate of 10 to 15 percent.

The Turkana county government in collaboration with EGPAF's Catalysing Pediatric TB project (CaP TB) seeks to reduce pediatric TB morbidity and mortality through implementing innovative models of care to improve case detection, treatment and prevention. CaP TB project supports 10 health facilities in Turkana to among other things; support clinical radiological diagnosis of TB to increase identification of TB among children at Lodwar County Referral Hospital, and facilitate online transmission of difficult chest x-ray from the hospital to contracted radiologist based in Nairobi for interpretation.

Baseline findings before CaP TB project intervention

Before CaP TB project rolled out tele-radiology in September 2019, there was no radiologist at the Lodwar County Referral Hospital to interpret difficult chest x-rays (CXR). Simple chest x-rays were read by medical officers

and clinical officers in the facility. Patients with difficult CXR took longer to diagnose and initiate treatment since various clinicians needed to give their opinions before making final decision.

Chest x-ray Tele-radiology interventions

The CaP TB project partnered with Lodwar County referral hospital to enable transmission of CXR pictures online to a contracted radiologist for interpretation where findings are transmitted online within two hours. To facilitate this, a desktop computer, printer, modem, flash disc and monthly data bundles were provided and clinicians and radiographers were trained on how to determine difficult chest x-ray for children aged 0-4 years and transmit them to the contracted radiologist. Once the results are received, the clinicians are able to make clinical decisions based on accurate readings in good time and provide the patient with the appropriate medical intervention.

This project has helped to demonstrate that early decision making for clinical radiological diagnosis of TB among children is key in reducing mortality. its scale up by the County Government of Turkana will help to save lives.

The CaP TB project partnered with Lodwar County referral hospital to enable transmission of CXR pictures online to a contracted radiologist for interpretation where findings are transmitted online within two hours.



Robust Specimen Referral System: Improving Early Detection of TB cases in Lokichoggio, Turkana County

Many people in Turkana lead a nomadic lifestyle. Families often stay in one hut that 'is not well ventilated and this coupled with poor nutrition due to food insecurity increases their chances of contracting and transmitting Tuberculosis (TB).

Early uptake (as soon as a person tests positive for TB) of anti TB therapy can interrupt the transmission cycle and reduce TB prevalence. Accessing quality TB diagnostic services in a resource limited setting such as Turkana requires a robust system for specimen referral for timely clinical decision-making. The 2019-2023 National Strategic Plan for Tuberculosis, Leprosy and Lung Health emphasizes a well-coordinated referral system as a cost-effective way of increasing access to diagnostics in areas where testing is not available onsite. It also contributes to equity in access to health care, improved health outcomes and enhanced disease surveillance.

Robust specimen referral systems allows patients to receive care and treatment at one location, while their specimens are transferred to various levels of a tiered laboratory system for testing. Centralized testing requires rapid and safe transport of specimens from health facilities or lower-level laboratories to the higher-level laboratory, as well as expedite reporting of results back to clinicians.

Cognizant of these challenges, Turkana County in collaboration with the Elizabeth Glaser Paediatric Aids Foundation (EGPAF) through the Catalyzing Pediatric TB (CaP TB) project sought to ensure seamless specimen networking within the county. This was made possible through the introduction of an additional motorbike rider in Lokichoggio region to network TB samples to a new Lopiding GeneXpert hub and IRC Kakuma GeneXpert hub in case the Lopiding GeneXpert machine is non-functional. The project uses the hub and spoke model to collect and network the specimen and relay back the result for clinical decision making. Facilities were also supported with refrigerators for storage of TB specimens to maintain sample quality and integrity.

"I suffered chest pains and persistent cough for some time", Regina Emeto, a pastoralist and beneficiary of the system says. "I'm glad the disease has been found and I am now taking treatment at no cost", she adds.

"Specimen referral using motorbike rider is a boon in the County since the health care workers who previously referred samples can now concentrate and assist patients in their workplace, hence increasing staff productivity", says James Maragia who is Turkana County Medical Laboratory Coordinator.

"I am glad that through this innovation by CaP TB, we have drastically reduced the turn-around time for TB samples referrals from 10 days to under 24 hours and TB patients can receive timely medical intervention," says Joseph Ekuam- EGPAF Laboratory Technical Advisor.



Photo Courtesy

Early Lessons Learned by the Project

- » Sample referral system has reduced the turn-around time for processing and receipt of results for TB samples from 10 days to less than 24 hours
- » Sample referral has increased access to GeneXpert leading to increased bacteriologically confirmed cases
- » This has also resulted in timely initiation to treatment for patients diagnosed with TB and increased initiation of TB preventive therapy (TPT) for under 5s as contact tracing activities are initiated early enough

DNTLD-P / Amref Health Africa Community Outreach in Kakamega County



A miner being positioned for Xray imaging.



Josphat Mutua, DNTLD-P community focal person mounting a mobile X-ray Machine at the site.



A radiographer taking Xray images during outreach.



Alice Wanyonyi, Gloria Wandenyi, Jorum Ndirangu from Amref Kenya and Emilly Vuguza, Kakamega CTLC.



Clinicians screening members of the local community.



Beatrice Mumanyi, SCTLC Ikolomani during the screening.



Emilly Vuguza -CTLC Kakamega, Caroline Kaibei-SCTLC Lurambi and Alice Wanyonyi Amref, engaging county TB implementers during the outreach.

Capacity Building of CHVs and Health Care Workers on Human Rights Issues



Cosmus Mwashumbe, CTLC Mombasa making a presentation during the capacity building.



Cosmus Mwashumbe, CTLC, Mombasa.



Evaline Kibuchi, C.E.O, Stop TB Kenya Partnership Kenya.



Titus Kiptai from Amref Health Africa in Kenya.



Participants during the training workshop. Top right, Wendy Nkirote, DNTLD-P Human rights focal person, Steve Aguva, chair, Network of TB Champions and Timothy Mutuku, legal representative, NASCOP.



A portrait of a man, Mohamed Abkul, standing outdoors under a large tree. He is wearing a white polo shirt with thin blue horizontal stripes and a patterned headband. The background shows a rural setting with a corrugated metal roof and some foliage.

Mohamed Abkul

*A personal experience with TB
motivated me to be a Champion*

By Mbetera Felix : DNTLD-P

A near-death experience with TB motivated Mohammed Abkul Wario, 32 years old, to champion for TB elimination through raising awareness about the disease in his community. The former security officer has managed to transform lives at "Kambi Juu - Mabatini in Bulesa Pesa ward", a village in Isiolo County.

In 2010, Abkul fell very ill. He was in pretty bad shape and neither he nor his family members knew about TB.

"The situation took toll on me. My weight dropped from 60 Kgs to 30 Kgs. I was tying my pants with a string. Had no hair on my head, was totally malnourished and I was in a terrible state. I used to cough and sweat a lot, my lips were peeling off and had rashes all over my body. You could even count my ribs. You couldn't have looked at me twice," narrates Abkul.

Many would visit their homestead every morning to see if he had woken up as they were preparing for his burial.

"You see, by then, no one close to me had fallen ill with TB. I could not tell if the signs and symptoms I had were similar to those of TB. No one at home had sensed that it was TB. People were just saying this guy is going, this guy is going, says Abkul.

He visited a number of private clinics where he was treated for Typhoid and at times Amoeba. He bought over the counter medicines from chemists and kiosks and took a lot of medicines to the extent that his stomach ballooned.

He got so weak and was unable to walk. In early 2011, a concerned neighbour by the name Hassan requested him to visit the county referral hospital to be tested for TB. Abkul met the Sub County TB and Leprosy coordinator, Mr Mwarango who recommended a chest X-ray and an Acid-Fast Bacillus test which turned positive.

Even though Abkul was counseled, he was still troubled. He never figured himself having any contact with a person who had TB before, and even if he did, he really could not tell what basic signs of TB were.

"I thought of myself as having been cursed or bewitched. At that time, in my locale, TB cases weren't many. In fact, they were rare. This affected me," he says. "In the Borana community, especially in the 1960s, when people had that you had 'murati' (TB as referred in Borana) they would gather sticks and build a cage, lock you up with all your belongings and migrate to another place because they believed a curse had befallen you. After some years when they return, they would find you died long ago and the cage had fallen and buried your body," he adds.

He was initiated to treatment and after two to three weeks, his condition improved. He used to go to a TB clinic commonly referred to as "Manyatta" in the area to pick his weekly drugs and return home. He regained some weight and the future to his recovery looked bright. But then Abkul thought he had healed and defaulted treatment.

The second wave of TB hit him so hard and knocked him out completely. This time around, Manyatta became his home as he was diagnosed with Drug-Resistant TB. With the admission came the daily injections. He was at the Manyatta for eight months for ease of management.

"I was admitted and given an injection on top of the other drugs," he narrates.

"When I defaulted on my treatment, I went back to smoking. This time round I got worse. TB infection affected my brain. The culture sample was taken to Nairobi because my condition baffled people as I was unconscious. Sometimes I would forget things and lose consciousness. I would go to a place let's say a shop and forget where I was and just stay there," he adds.

This was in 2012. A CT-Scan showed that one side of his brain had been affected. His speech was affected as well. He could not utter words well. The culture results came out Multi-Drug resistant (MDR) positive. This time, he was treated for MDR for two years with constant and close follow up. It was during this period that he was trained as a TB champion. He would take his drugs and visit other patients in the Manyatta where more than 40 TB patients were also housed.

"I faced death. Adherence to treatment wasn't a joke. Mwarango used to call me all the time to know how I was faring on. He would ensure I received my medication on time. Maybe if I was left on my own, I would have defaulted just like before, he says.

"They put me on toes and this ensured my recovery. So largely their efforts made me who I am today. I was also given free NHIF support and used to receive the Ksh 6000 monthly stipend from AMREF for MDR TB patients. This money enabled me and my family members to easily have food. I also used the money to renovate our family house which used to leak. The house is now habitable. I dedicated myself to help other patients take their medicines as prescribed. I realized defaulting on treatment can worsen one's condition," Abkul adds.

It was during his patient support in the Manyatta that Dr. Mwarango and his team noticed his capabilities and passion. They chose him as a role model among other patients. They decided to capacity build him and since then, that's the path he has chosen. To be a champion in a community that knew less about TB. He has nurtured other champions in his village. Being a member of the Stop-TB partnership in Kenya also saw him interact with other champions from different corners of the country.

The stigma that followed his initial diagnosis is one that he wishes to forget. He used to stay with his mum, brother and sister.

"You know that people fear TB a lot. So, when people learnt that I was TB positive they shunned me. The stigma for people with TB is very high and even then, people don't know much about the disease. So, people kept away from

me completely and their ignorance on TB made it even worse. At home, I had a separate room and I was attended to separately so that I couldn't infect other people. You know TB is highly infectious. So, most of the time I was alone," he recounts.

The sorrowfulness in his eyes depicts the agony he was in on his road to recovery.

"My family and neighbours excluded me when I needed them most. Most of them were gossiping about me, saying how positive I was with HIV/AIDS. The way my body had wasted, people were just saying this guy is just as good as dead. Many people did not want to be associated with me. This affected me profoundly and up to date my life is still affected," he adds.

Two years ago, in 2018, Abkul identified a beautiful lady whom he wanted to marry, but the lady's parents rejected him believing he was HIV positive. They couldn't allow him to marry their daughter and even rejected his dowry.

"I went home a dejected man. I even cried. I called Dr Mwarango who saw me through my recovery. Gladly, he spoke with my in-laws to be. He told them that he knew me well and that he had witnessed my struggle with TB till when I recovered. He assured them that I wasn't HIV positive as they thought. Still, they had some doubts and I did a HIV test that was witnessed by the lady's family and some community members. I tested negative. That's when the family agreed that I could marry their daughter. In fact, when people heard that I was HIV negative, they were shocked. They couldn't believe it," recalls Abkul.

Abkul still believes TB greatly affected his marriage. It took him two years to get married to the love of his life. His girlfriend finally accepted his proposal after the testing.

He is grateful to God that everything worked out well. His wedding which took place on November 7th 2020 was graced by close TB champions including Dr Mwarango and members of the sub-county TB management team.

As a champion, he has supported many people in his community not only in fighting stigma but also in ensuring that those under medication do not default. He also shared his quandaries with his wife. He told her of his battles with the disease, his recovery process and his passion as a champion.

"The story really moved her, especially my fight with MDR TB. She accepted me just the way I am. And she is very supportive of my role as a TB champion. We are planning to have kids. God willing, soon will have mini champions at home," he says laughing.

Abkul calls for more civic education to help fight stigma in communities. He also calls for TB champions to be well skilled and equipped so as to be effective at the grass-root level.

According to Abkul, TB champions should be seen as role models, the embodiment of the fight against TB. Their stories should strike some special chord and connection, particularly among TB patients so that they adhere to their medication. They should carry hope as TB is treatable and curable.

At the moment, he works as a full-time TB champion without any income. He used to be a security guard, a post he lost in 2010 when he got ill with TB. Amref Health Africa used to support his course as an MDR champion, but since January 2020, the taps dried up thereby inhibiting his work. His wife is also unemployed. His prayer is to Isiolo County leadership and partners to recognize his effort and consider him for employment.



Mohamed Wario with fellow community health volunteers during a community outreach



Isiolo CTLC, SCTLC and Wario during his wedding



Wario and his wife



Abdiakim Adan and Mohamed Wario during the interview.

From TB Survivors to TB Champions

By Mbetera Felix : DNTLD-P

Mohamed Abkul, a TB champion in Isiolo County, has touched many lives and encouraged TB patients to adhere to their medication. One of the people he has supported is Abdiakim Adan, a 20-year -old form-two student from Bulesa Pesa ward.

Adan fell ill in 2018. By that time, he was a Kenya Certificate of Primary Education candidate. Bubbling with life, Adan looked forward to passing his exams and further his studies. He recalls that one morning on his way to school, he felt a sharp pain on his back, but did not give much attention.

“During breaks while playing with other pupils, I felt like something was piercing me on the back whenever I bent. With time I became weak and even lost appetite as most of the time I couldn’t eat when I came home from school. My weight dropped to 40kgs,” he says.

Through Abkul’s guidance and support, his father took him to the county hospital where a chest x-ray and sputum tests were done. He was diagnosed with TB. His close contacts at home were also screened.

“I felt really bad, but had to accept myself. Dr Abkul encouraged me and I didn’t hide the fact that I was sick and seeking treatment.” says Adan. “I didn’t want to endanger myself and those close to me. I was, however, worried and warned other people to stay away from me. I had to eat alone and tell anyone coming close to me that I had TB and caution them on the dangers of the disease and how they risked getting closer to me”.

Abkul played a big part in his recovery. Though a TB champion, he is referred to by many in Bulesa Pesa as a doctor. He guided Adan through his recovery process by ensuring he took his medication as prescribed.

“The doctor attended to me and guided me on how to take care of myself. He cautioned me on the dangers of this disease and the effects of not taking medicines. He would always pay us a visit and ask me not to be shy or afraid of consulting whenever I had a problem or was in pain,” Adan says.

With praises, he narrates how the doctors gave him free “Porridge”, fortified supplementary foods to boost his immunity and help him gain weight. His advice is to those who are diagnosed with TB to come forth for support, accept themselves and start treatment immediately.

“TB is curable. I used to weigh 40Kgs, now I am 57.5 Kgs. I am healed and I thank God. The doctor helped a lot. I would contact him even at night asking him what to do or what to eat. He particularly told me to take a lot of water. He was very supportive, my impression of him is that he is an excellent doctor.” says Adan

A lot, however, needs to be done to empower the community. Whereas all family members knew of his status and he had a separate room for himself, his personal effects were separated from the rest. At school, the reactions were mixed. Whilst others empathized with him and offered him moral support, others had negative perceptions about him.

The county TB Team, however, engaged the school administration and family members who were assured that he was strictly following his medication and could not spread the infection to others.

Today, Adan is spreading hope to other people in Isiolo, particularly to his fellow students that TB is curable. The entire experience was a big challenge to him considering the fact that he was to seat for his KCPE exams and religiously stick to his treatment schedule.

TB Manyattas:

A local solution for local problems, but it is no longer heaven for patients



The new TB management clinic under construction

By Mbetera Felix : DNTLD-P

The concept of 'TB Manyattas' dates back in 1976 when Dr Tonelli, a Catholic Sister, persuaded nomads in Wajir District with TB to construct their homes next to her health centre to be able to receive supervised drug administration. A family member was allowed to stay with the patients who were admitted for four months in the Manyattas. This was to enable them provide psychosocial and treatment adherence support to their loved ones.

The success of the Manyattas in Wajir in TB management led to the development of similar facilities in nomadic areas between 1984 and 1986. With support from Royal Netherlands Tuberculosis Foundation (KNCV), the Netherlands Development Organization (SNV) and the Foundation of Swiss Civil Servants, the Kenyan Government, built TB Manyattas at district hospitals in Lodwar, Garissa, Hola,

Kajiado, Laisamis, Loitokitok, Marsabit, Moyale, North Horr and Isiolo.

The TB Manyatta wards in Isiolo were, however, opened to offer in and out patients services. With the opening of the Isiolo County Referral Hospital, the TB Manyatta was left to function as a model isolation site for TB patients in the upper eastern region.

According to Frank Gitinga Marangu, the TB and Leprosy Coordinator for Isiolo sub-county, the Manyatta catered for the patients in Meru, Isiolo and Marsabit region.

"Manyatta means a house or a place where people live. That's why the hospital was given the name Manyatta so that people in the community can feel comfortable visiting the facility and also feel at home when admitted," he says.

Initially, the Manyatta was built with around 47 cubes. Its modernity from the local Manyattas as known by locals in Isiolo and Marsabit saw each patient allocated a room where they could be managed with ease. However, not all patients were admitted. Those who needed social protection were given first priority.

"Those patients without homes, those without families and those that we felt they were very vulnerable if they went back to the community with their anti-TBs and could not complete their doses because of different challenges at home were given consideration," says Marangu.

"Being a mobile community, the old people could not move with their families or livestock so we used to stabilize them at the Manyattas and they could join their families after getting better".

The Manyattas were like heaven to many TB patients. They were not only provided with free shelter but also security, food and plenty of water. All these were courtesy of the Government through the Isiolo County Referral Hospital.

Sadly, not all was sunshine and roses for the TB patients at the Manyattas. With the facility came the stigmatization of patients, largely from the community. According to Mr Marangu, there was a lot of stigma. The community used to refer to the Manyattas as the TB hospital and they associated it with HIV.

“People thought that all the patients who were staying at the Manyattas had HIV. It was one of the biggest challenges that we faced with the Manyattas. The patients were thus seen as outcasts,” he says.

The county TB management team carried out community outreaches with community health volunteers (CHVs) and partners aimed at educating and empowering the community on the functions and importance of the Manyattas. This helped in fighting stigma which saw the community embrace the facility.

In June 2016, Stop TB Partnership-Kenya, Kenya Legal & Ethical Issues Network on HIV and AIDS (KELIN), concerned TB patients and communities and some members of Civil Society working on Health and Health Rights protested when the Manyattas were converted to Isiolo County Assembly offices. This was seen to be another hurdle in the management of TB in Isiolo as over 300 TB and 17 MDRTB patients who were receiving treatment from the facility were affected.

The TB clinic was moved to a temporary setting within the Referral Hospital. But this did not inhibit the functions of the TB County Management Team. In fact, this could be seen as a blessing in disguise. The team reached out to the county government which offered to build a new TB Manyatta, a modern TB complex, but inside the Isiolo County Referral Hospital. The new facility is almost complete.

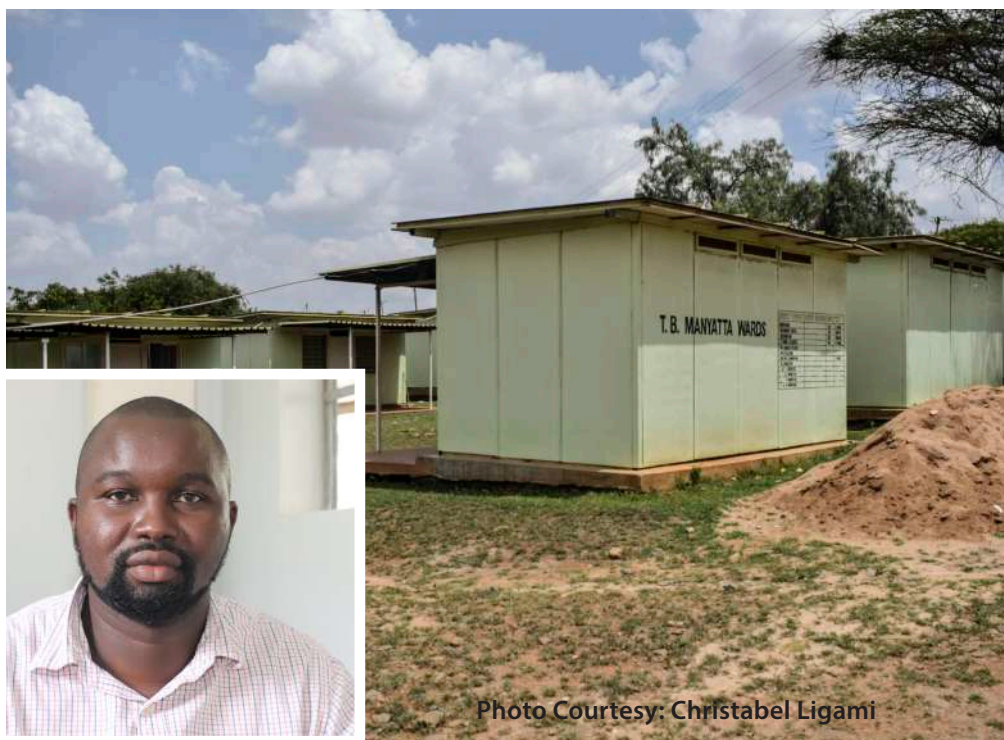


Photo Courtesy: Chrístabel Ligami

Frank Marangu, Isiolo Sub-county TB and Leprosy Coordinator. Above, the old Manyattas

“Since we moved from the Manyatta actually, we improved greatly on the quality of care and even TB outcomes. When we were at the TB Manyatta, we used to have challenges of staffing, but here at the County Referral Hospital, we have enough staff due to the integration with other facilities. For example, we are doing a 100 per cent HIV testing for all TB patient unlike the past years when we could not reach even 16 per cent HIV testing rate,” Says the Sub County TB coordinator.

“Our cure rates were very bad. We were always at 60s, but in quarter three, 2020, we were able to record a cure rate of 89 per cent compared to the national target which is 80 per cent. With completion of the TB complex, we are sure we get past 90 per cent” he adds. “Patients were also diagnosed at the County Referral Hospital sent to the Manyatta which was almost two kilometers away. In between some patients could get lost, but right now, we are in the hospital compound, and with follow-ups and reduced distance from the lab, we are not likely to have defaulters”.

According to Mr Marangu, the complex might still be referred to as TB Manyatta for the sake of identity with the patients and the community. However, the new facility will not offer admission services. This is because of lack of funding. Sustaining the TB patients in the wards for long at least six months requires good funding to cater for their food and general up keep at the facility. In addition, it is perceived that with the patients at home and with the community empowered, stigma souring TB and misconceptions will be reduced, thus the need for community care support as opposed to the admissions.

The Manyatta which will serve as a model TB clinic for the county and the whole north eastern region will continue to serve clients from Samburu, Marsabit and Meru. More partners like Centre for Health Solutions are expected to come on board and support the facility upon its completion. The construction is fully funded by the County government. Plans are already underway to seek for partners to support in creating awareness using the local radio stations as the services will be free of charge.



One-on-one with Juster Kathambi
*A young nurse leading the fight
against the world oldest infectious
disease in Meru County*

By Diana Kagwiria - TB ARC II

In this edition of TiBa newsletter, we share with the story of a 34-year-old Juster Kathambi Murangiri, the Facility In-Charge of Gakoromone Dispensary, Meru County, who leads a team of 17 health workers in the fight against tuberculosis through active case finding. Kathambi, a nurse by profession, trained at Kenya Medical Training College, Meru and was thereafter posted to Gakoromone Dispensary as a Nurse on contract before being promoted to the Facility In-Charge.

What does your work as the facility in charge involve?

It entails screening, diagnosing and treating clients visiting the facility. I also provide guidance in the management and running of the facility, which entails providing guidance to the staff through one-on-one meetings as well as group meeting. Additionally, I represent the facility in various meetings.

What is the average number of clients that you serve in a day?

In a day we serve an average of 70-100 clients. Sometimes especially during market days in the neighboring Gakoromone Market, the numbers go up.

How do you offer TB services here?

We give TB integrated services through active case finding, where we screen every client from outpatient. We send the suspected cases for investigation through the GeneXpert for those that can produce a sputum and those that who cannot, we send them for X-rays. We as well do recordings in all the registers as required.

Since you don't have a GeneXpert machine, how do you diagnose?

With the support of the Meru County, the National TB Program and USAID TB ARC II activity, we take the sample to the nearest GeneXpert site which is Meru County Referral Hospital for examination with a turnaround time of 24 hours or less. The results are sent to us via short text messages (sms) or email. After we receive the results, we immediately contact the patient through the contacts they will have shared with us and in case they are offline or don't respond to the phone call we send the Community Health Volunteer to look for them. Once the patient is here, we immediately

initiate them on treatment. We thereafter do a follow-up based on the diagnosis made until the patient completes the treatment.

Is active TB case finding something you have been doing all along or did you begin this recently?

We never used to do it until the Meru County TB Coordinator and the Imenti North Sub-County TB Coordinator in collaboration with the National TB Program and USAID TB ARC II, visited and educated us on its importance. Initially most of the patient's cards didn't have the signs and symptoms of TB but after the sensitization the County government included them and from that we don't miss any patient with TB. We also use presumptive registers in all our departments.

Did you have any challenge with the uptake of active case finding in the facility?

Yes, at the beginning we experienced some resistance, which was understandable in some departments as this was a new thing. Through continuous sensitisation every department has picked it up. We have also had shortages of falcon tubes which are critical in collection of the sputum for GeneXpert.

Have you experienced change after taking up TB active case finding in the facility?

There has been a positive in finding the missing TB cases in the facility. Unlike in the past, we are now able to diagnose at least an average of two TB patients every week and initiate them on treatment. This means we are not only reducing the spread of the disease in the community where these patients come from but also reducing misdiagnosis.

How many TB patients are you attending to currently?

We are currently attending to 22 patients.

What measures have you put in place to ensure continuity of TB active case finding in the facility?

We normally have monthly meetings to review our data, discuss gaps and come up with solutions to our problems as a team. Every staff is given an opportunity to air their views as we use a bottom up approach.

Once we onboard a new staff, we also sensitise them on active TB case finding in case they are not aware of it.

We log in to the online continuous medical education sessions as a facility to learn from the experts as well as best practices from the other teams across the country.

Additionally, we hold community outreaches at least twice in a quarter in collaboration the County and Sub County TB coordinator and the partners like USAID TB ARC II as well as screen the facility for TB every six months.

What is motivating you to continue doing this work?

Our biggest motivation is seeing a patient getting diagnosed, treated and cured of TB. We get motivated when we are able to provide the services as recommended by WHO.

Parting short to other facility in charge and health care worker in general?

If we all actively look for TB we will find it and end it. The disease requires collaborative efforts from everyone in order to end it.



Meru County adopts the use of biopsy in diagnosing TB

By Diana Kagwiria - TB ARC II



A swelling on 'Hillary's neck before treatment.



The swelling on Hillary's neck is gone after being treated for TB adenitis.

According to the Kenya Tuberculosis Prevalence Survey 2016, Meru County is the 4th highest TB burden county in Kenya. The County in collaboration with the Division of National Tuberculosis, Leprosy and Lung Disease Program (DNTLD-P), the USAID funded Tuberculosis Accelerated Response and Care II (TB ARC II) activity, and other partners have put up various measures to change this narrative.

The County has not only accelerated its effort to finding the missing TB cases through sputum and X-rays analysis but also adopted the use of biopsy analysis using the GeneXpert machine.

"As a county we are committed to ending TB. In order to find all the missing cases, we have embarked on other ways of finding the missing cases, especially extra pulmonary TB, through cross examination of human biopsies in the laboratory using the GeneXpert machine," says Eunice Kanana, Meru County TB Coordinator.

She adds, "The idea came about in 2018 after we exposed a few biopsies to GeneXpert and they turned out TB adenitis. This was an eye opener for us as we found out we could be missing out on some cases if we relied only on the use of sputum analysis and X-rays."

The adoption yielded great results through the commitment of the clinicians across the county and the pathologist at the Meru County Referral Hospital where majority of the biopsy samples are taken for analysis.

"We have sensitized the clinicians in Meru County that any stubborn swelling should pass through the pathologist. We have a pathologist who is very passionate and she always picks a GeneXpert sample alongside the biopsy sample to test for TB" Kanana adds.

In the period between 2018-2020, a total of 189 biopsy samples were collected for TB examination at the Meru County Referral Hospital Laboratory. After analysis 39 were positive for TB, 36 were drug sensitive TB, three were drug resistant TB, and two were new cases — in that they had never been exposed to anti-TB drugs where one was being treated for abscess and trauma.

Hillary Mutuma*, a primary school teacher in Meru County is one of the beneficiaries of this adoption. He is among the three patients diagnosed with extrapulmonary Drug resistant TB yet he had not taken TB drugs before. He suffered embarrassment in his community due to swellings in the neck.

"The first swelling appeared in 2017 and disappeared after several months without any medication as it was not painful. After a few months it reappeared in the neck and disappeared after several months. It then appeared again below the ear where everyone could see. A friend in the medical field told me those were fat deposits and they would disappear with time. My fellow teachers and the pupils were curious of what was happening and it was very hard for me," Hillary opens up.

It was out of this nag from teachers and pupils that he decided to seek medical advice in the nearest health facility.

"Upon presenting myself at our local dispensary, they examined me and referred me to Meru County Referral for a final needle aspiration where a sample was collected. I was then asked to collect the results after several days. Upon collecting the results and taking them back to the dispensary the clinician confirmed to me that I had TB," Hillary explains.

Hillary is happy to have found a diagnosis for the ailment. He is on the last month of treatment which he is responding to well.

"When the clinician told me I had TB, I was somehow happy that it was finally known what I was suffering from and even more happier when I was initiated on treatment. I was told that I would recover completely if I completed medication. One week into treatment, the swelling began shrinking and now it has disappeared completely. I feel more confident now and I am able to do my work comfortably without getting the uncomfortable stares from people," a delighted Hillary says.

He narrates, "I am continuing with medication, and I am hopeful that I will recover fully. My biggest motivation in life, is that I want to get cured and continue living for the future ahead of me."

The county is also using the adoption to diagnose BCGitis in children. Through examining stubborn swellings, the County was able to diagnose thirteen children below six months with BCGitis. This was discovered after a fine needle aspiration biopsy test from swellings showing on small babies two months after receiving BCG vaccine

"The children were presenting swellings on their left hand, two months after BCG injection. Once we exposed the pus in the swelling to the GeneXpert we were able to diagnose BCGitis, stop that batch number as well as inform the policy makers of the issue for correction," says Kanana.

Just as is the case in TB diagnosis and treatment in Kenya, patient don't pay for the service as TB services are free thanks to the Kenyan government and donors like USAID.

The county TB team together with the partners are in the process of writing a scientific paper from this adoption to inform policy and more research in finding missing TB cases across the world.



Eunice Kanana, Meru County TB coordinator.



*Hillary, Diana Kagwiria and Samuel Manasseh from USAID TB ARC II during the interview



A nurse checks the weight and height of *Hillary during one of his TB clinic visits.

Fighting extensively drug-resistant TB

**Ray of hope for
siblings who want
to become doctors**



By Diana Kagwiria and Mbetera Felix

A somber mood greets us when we arrive at Fridah Makena's home in Tigania East, Meru County. Her mother's grave welcomes you at the gate. She passed away from post Tuberculosis complications a year ago. At only 17 years of age, she bears a lot of suffering which can't be described, from the daily injections, losing her mum, being in and out of school to the uncertainty of where she will get her next meal. Her elder injured "*boda boda*" brother who also doubles up as her guardian welcomes us home.

At the door peeps shy Kenneth Munene, their last born. Still stigmatized by the children from the neighbourhood who have been making fun of him. He finally came out after assurance from the sub-county TB coordinator and the community health volunteer. Nothing is known of their father who disappeared four years ago when Makena, Munene and their mother fell ill with TB.

Munene was a drug sensitive TB patient. He had not converted by the fifth month of treatment. He was started on an 18-month regimen which had injections when a GeneXpert test revealed he had multidrug drug resistant (MDR) TB. During the home visits, it was discovered that Makena also had MDR TB. Their mother had no cough apart from unexplained wasting which prompted the medical officer to induce sputum during a clinical review meeting. It turned out that she also had MDR TB. Their single room which had a very small window posed a great challenge to their recovery.

They were responding well to treatment until the sixth month when Munene was discovered to have developed further resistance to three key drugs used to treat DR TB, levofloxacin, Isoniazid and Rifampicin, a condition referred to as Pre-extensively drug resistant (Pre XDR). After consultation with the national programmatic management of drug-resistant TB team (PMDT), they were put on another treatment that was to last for 24 months. This further compelled the siblings to be out of school for two years.

The family got support from the National TB Program and its partners USAID TB ARC II, Amref Health in Africa and the county management team. They were enrolled



Faith Makena, during the interview



Kenneth Munene during the interview

to NHIF as well as offered a monthly stipend of Ksh. 6000 each to buy food and other necessities.

Within no time, they started responding well to medication. After few months they all had converted thus could not spread the disease to their contacts. The siblings went back to school as their mother got back to doing menial work to provide for the family.

Though they felt loved as teachers and other students empathized with them, majority of their neighbours at home stigmatized them on learning that they had TB. Many of the community members treated them as outcasts fearing they would infect them with TB.

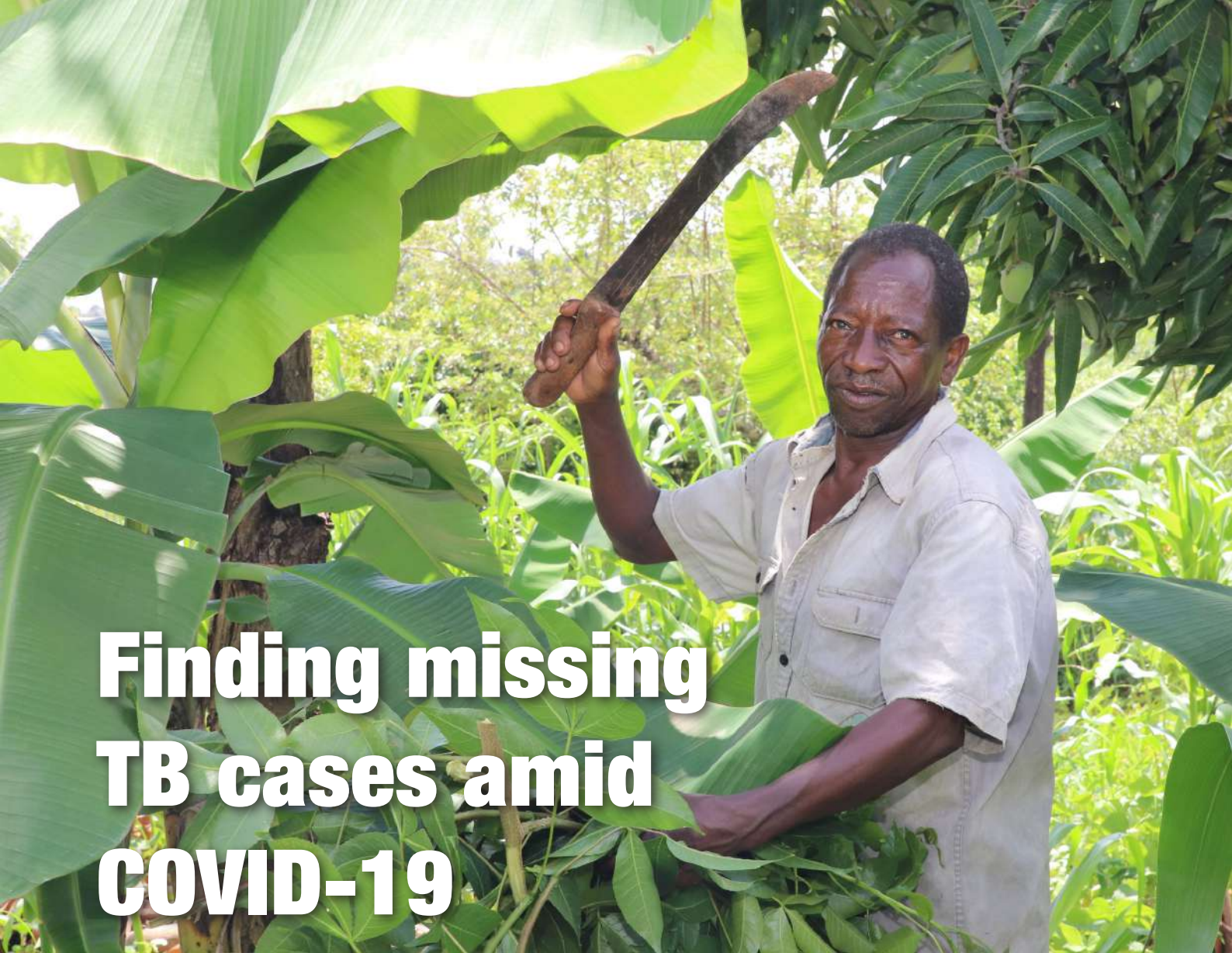
The family was left in isolation at their home expect for Zachary, a community health volunteer who visited them in the morning and evening to give them medication through directly observed therapy.

Having noted the poor state of life the family was in, Zachary advised them to save some money from the monthly stipend and purchase a dairy cow, poultry, water pump as well as renovate their house to be well ventilated, an advice they heeded to.

With hope and determination, they all got healed. Their economic status improved. Unfortunately, the mother passed away last year as a result of post TB treatment complications.

The siblings are now staying with one of their elder brothers who quit his *boda-boda* job to look after them as their other brother is studying in the university away from home in Meru town, while their sister is married in Isiolo.

Though still in grief, Makena now in form two and her brother Kenneth, a class eight candidate shared that they are working hard in school. Their hope is to become doctors so as to save the lives of TB patients. They also hope to invent TB friendly medicines to avoid post treatment complications as was the case with their mother. Their biggest challenge however is raising school fees and funds for up keep as they have no income. They call for well-wishers to support their course in education.



Finding missing TB cases amid COVID-19

By Diana Kagwiria - TB ARC II

60-year-old Jared Mbiuki was coming from his job in a slaughter house in Magutuni Market, Maara Sub County, Tharaka Nithi County, when he got attracted to a TB awareness campaign during an outreach mission. The outreach was organized by Tharaka Nithi County Department of Health, Tuberculosis Unit, in collaboration with the National Tuberculosis, Leprosy and Lung Disease Program (NTLD-P), the USAID funded Tuberculosis Accelerated Response and Care II (TB ARC II) activity, and other partners.

When he got nearer, a community health volunteer (CHV) invited him to one of the tents for TB screening.

"They first inquired whether I was having a cough, night sweats, fatigue, loss of appetite, weight loss. After telling them I was having a persistent cough and fatigue, they gave me a falcon tube and requested I put my sputum there. They also requested for my phone number and told me that they would call a few days later to provide me with the test results," Jared shares.

A day later, Jared received a call from the same community volunteer requesting him to present himself at Magutuni Sub County hospital to collect his results.

"At first I was hesitant because I associated hospital with death, as well as persons living with HIV but the CHV, Stella, whom I know very well convinced me to go as my matter was not related the two issues that were worrying me," Jared recalls.

Upon presenting himself in the hospital, they confirmed that he had tuberculosis. He was counseled and immediately initiated on treatment.

"Since I began treatment, I have been progressing on well. I am no longer coughing, no more fatigue and I have added some kilograms. I am more productive at work now as I don't get tired easily, as was the case before," a jovial Jared says.

His wife shares the same sentiments by noting, "I am happy my husband is responding well to treatment. I will continue supporting him in ensuring that he takes a balanced diet as well as reminding him to take the medications. He is feeding well, his appetite is back and he is responding well to treatment. He is gaining back his weight."

The CHV visited his place of work and home for contact tracing and luckily none of his contacts was found to have the disease, upon sputum collection and examination with a GeneXpert machine.



Jared Mbiuki and his wife during the interview

Jared is grateful to the CHV for inviting him for the TB screening. He notes, "I would have continued suffering were it not for her intervention. I am also thankful for the support accorded to me from the point of screening, diagnosis and the ongoing treatment phase."

Jared calls to people, especially men, to go for TB screening and testing as the disease is curable and its treatment is free.

The community volunteer, Stella Kagwiria who traced Jared notes that she feels motivated when she is able to identify a cougher in the community who is confirmed to have TB and put on treatment.

"I am happy and it motivates me to continue doing the work that I do when I see them recover. It also acts as a good evidence in the community that I serve that TB is curable as I always tell them," Stella says.

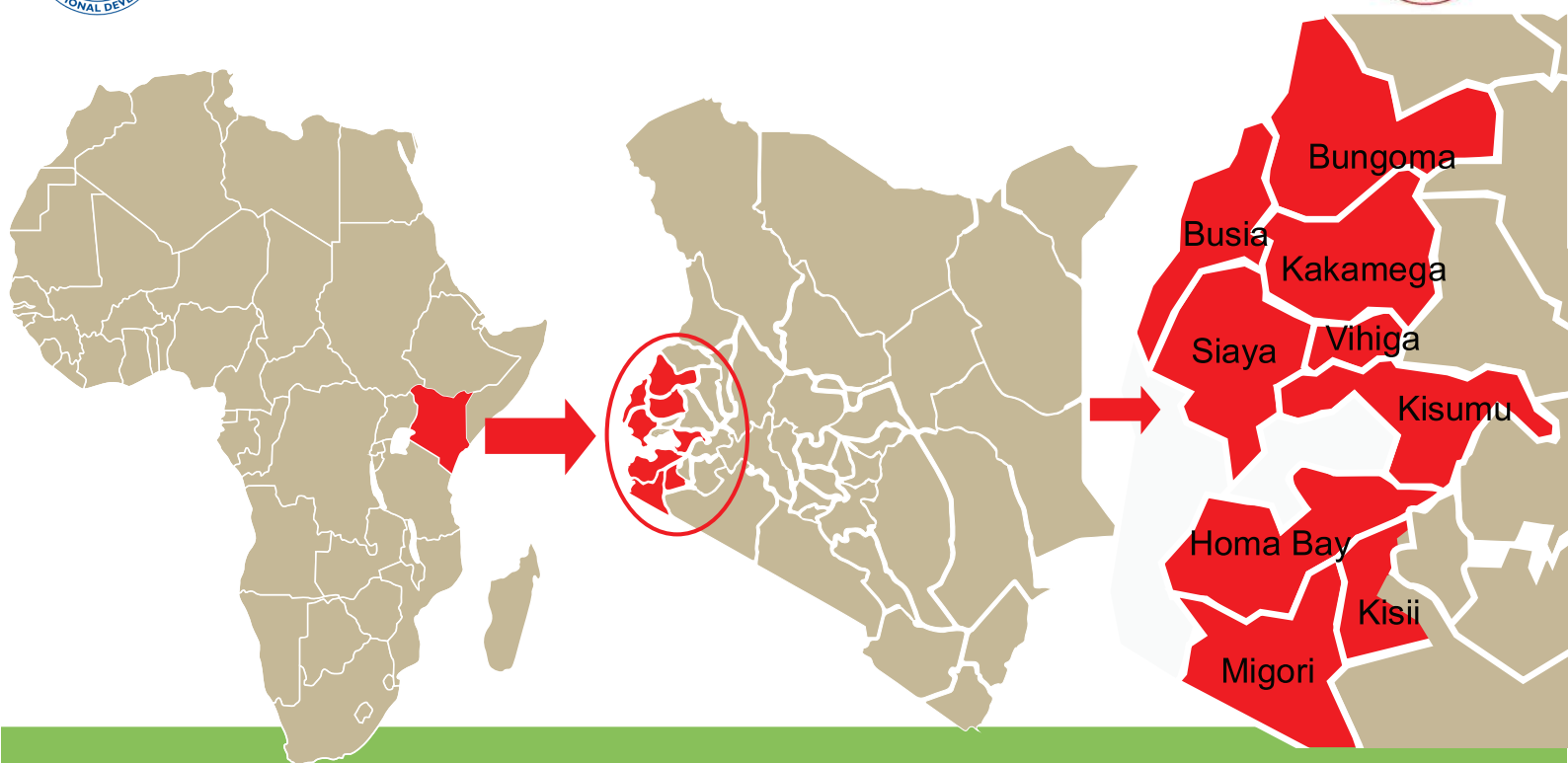
According to the Tharaka Nithi County TB Coordinator, Francisca Mukami and Maara Sub County TB Coordinator, Martin Mawira, immediately after the first cases of COVID-19 were announced in Kenya, between April and June 2020, there was a decline in TB case finding and notification of more than 20% compared to the previous quarters in the County. This, they note, was due to the few number of patients visiting the health facilities.



Maara Sub County TB coordinator, Martin Mawira reviews Jared Mbiuki, a TB patient, during a clinic visit.

To find the missing cases and create awareness on TB disease, community TB screening outreaches were conducted across the county in collaboration with the National Tuberculosis, Leprosy and Lung Disease Program (NTLD-P) and partners among them the USAID Tuberculosis Accelerated Response and Care II (TB ARC II) activity.

During the exercise, 965 clients were screened for TB, with 496 being presumptive TB cases. Out of these 19 patients were diagnosed and put on treatment with Jared being one of them.



USAID – KCCB KOMESHA TB Program

The Faith Based Partner in TB Programming

By Komesha TB Program

In 2016, Kenya conducted a national TB prevalence survey that revealed a TB prevalence of 426/100,000 population, this was higher than previously thought. The survey further revealed that 40% of TB cases were being missed, 83% of all diagnosed TB cases were HIV negative, males were most affected by TB (809/100,000), Individuals with symptoms of TB in the community were not seeking care and the current practice of TB symptom screening missed TB cases. The contribution of TB diagnosis by FBOs and private health facilities in Kenya stood at 2% and 18% respectively with the public health facilities contributing the bulk of TB cases being diagnosed in Kenya.

Based on the gap revealed in access to services to prevention and treatment of TB at private hospitals, USAID came up with a grant meant to aid Kenya's National TB Program in reducing the incidence of TB and mortality associated with TB. Through competitive bidding, Kenya Conference of Catholic Bishops (KCCB) was awarded the funds to

support the response towards Kenya Tuberculosis Support Program. Through this award, KOMESHA TB Program was born with the aim of supporting and complementing efforts towards the reduction of TB incidence and mortality in Kenya. This support is provided through facilitating increase and timely use of quality treatment for TB, TB/HIV & DR-TB; promotion of participatory approaches to improve TB service uptake; and ensure achievement of favorable TB outcomes.

The Kenya Conference of Catholic Bishops (KCCB), is a permanent institution of the Catholic Bishops Assembly in Kenya. KOMESHA TB Program is implemented through KCCB. The name KOMESHA TB loosely translates to "Stop TB" in English. This is a five year program that is currently in its second year of implementation with a presence in nine counties of Western Kenya namely- Homabay, Kisumu, Busia, Siaya, Migori, Kisii, Vihiga, Bungoma and Kakamega. Five of these counties (Homabay, Kisumu, Busia, Siaya and Migori) are ranked among

the high TB burden counties in Kenya. Across the nine counties, the program supports 108 facilities and engages in extended community activities. The community activities include sensitization and screening in churches, mosques, and faith based educational institutions; advocacy through faith based and public media; and supporting an all-round county led county owned approach to implementation of TB services.

Through KCCBs structures, collaborations with like-minded stakeholders and an extended network of facilities, hospitals, and educational institutions the Komesha Program is reaching out to communities to ensure access to quality TB services aimed at improving overall TB outcomes among those being treated for TB. This initiative is carried out in collaboration with the National TB program led by Dr. Elizabeth Onyango, the county and sub-county health teams and the health facility teams.

TB through the eyes of clergy

Reverend Susan Odanga, is a 61-year-old clergywoman married for 34 years to Reverend Canon John Odanga, a serving clergyman at Pe-hill Parish of Kenya's Anglican Church (ACK) in Homabay County. Rev Susan takes us down memory lane to the year 1998 when she was a teacher at Homabay High School. That year she recalls, was a difficult one since it was the year she suffered from ill health due to TB.

Rev. Susan recalls, "My favorite meal is well-cooked liver and its accompaniments. I was so sick that the liver tasted like rubber. I remember experiencing tiredness, poor appetite and loss of weight." These symptoms persisted for almost a month, leading to her not being able to go to work. Back then her husband was pursuing his studies in theology and was in the final semester with only a month remaining before his final exam. When time allowed, he would go home from theology school to visit his family. Rev. Canon John recalls that when he went home their second-born daughter met him as he approached their house; "Daddy, their daughter said, mum is very sick. She can't stand or walk." He remembers being taken aback by his daughter's words and he wondered how bad the situation was. "I held my daughter's hand and walked towards our house only to find my wife lying down in the verandah. Indeed, she was very sick and could not stand on her own." The situation was a dire one that Rev. Canon John wondered what was ailing his beloved wife. He assisted her back into the house. "Being a God fearing man, I knew things were very bad. All I could think was that we needed God's guidance if at all we were going to succeed in fighting whatever it was that was affecting my wife's health." They prayed after which his wife narrated to him her ordeal. "Today we are fortunate we have mobile phones that have made communication easier. If we had them back then I



Rev. Susan Odanga and her husband Rev. Canon John Odanga at ACK St. Paul's Cathedral Homabay.

would have been home sooner rather than later to help my wife," says Rev. Canon John.

The following day Rev. Susan was taken to Homabay County Referral Hospital by her husband, which back then, was a district hospital. In the hospital, tests were carried out to determine what was ailing her. A chest x-ray was done which unfortunately was not clear forcing them to be sent to Kisii that was some 58 kilometers from Homabay where they resided to have one done. The need for a chest x-ray was further compounded by the fact that the sputum test for TB gave a negative result. Being the sole breadwinner then, Rev Susan had financial challenges, thus going to Kisii was going to be a tall order since they had to use public transport. The husband adds, "My wife was so sick that she could not walk. I had to carry her on my back like a child. You can picture me carrying my wife from the hospital to the bus stop to board a bus to Kisii." The husband continues, "You know, my marriage vows of for better or worse, in sickness and in health got tested that day." Recalling that made the couple burst into laughter.

In Kisii, the chest x-ray was done at Hema, a private hospital that helped confirm Rev. Susan was suffering from tuberculosis. They were sent back to Homabay County Referral Hospital

with the result. With the little money they had exhausted, they arrived back in Homabay, and since their home was far from the bus stop, Rev. Canon John had to carry his wife on his back to their home. Back then, HIV was ravaging the community; many were ailing and dying from HIV since there was no known treatment and what was there was out of reach. Having TB was associated with HIV since some of those with HIV were also being diagnosed with TB. In the village where they resided word had already begun going round that Rev. Susan was suffering from HIV since it was difficult to differentiate the two. Some villagers were saying, "Huyu mwanamke ameletea muchungaji wetu ugonjwa." (Loosely translating, "this woman has brought the disease to our pastor.") "I knew of my wife's fidelity to the extent that this speculation of my wife having HIV did not bother me," says Rev. Canon John.

The following day, armed with the chest x-ray findings, they went to the hospital where Rev. Susan was put on TB treatment for 8 months. She was given instructions on how to take her medication. Rev. Susan's husband took care of her while doing the house chores, something their children had never seen him do before. He would prepare meals and ensure the family ate together.

This encouraged his wife who was responding well to treatment. She followed the instructions faithfully and by the third week of treatment she could see significant improvement to her health. "We are grateful to God that I got cured and my health restored including my husband being able to graduate from theology school in flying colors." Rev. Susan said with a glowing smile. Rev. Canon John adds, "As a family we feel privileged to have my dear wife with us today considering how sick she was. I thank God for His mercies."

According to the couple, the cohesiveness of their family played a huge role in her recovery. To them, family support and care for tuberculosis patients plays a big role in treatment adherence while providing the emotional support and motivation needed to aid in a quick recovery. Rev. Canon John's view is, "psychological healing makes physical healing quicker."

USAID's KOMESHA TB program in collaboration with the National TB program and the County TB



Sensitization of muslim leaders on TB advocacy

and Leprosy Coordinators (CTLCs) has been sensitizing key opinion leaders, who include religious leaders in the hope of using them as TB advocates in the communities that they serve. Through working with religious leaders, the program is reaching the large constituency served through the religious platform considering over 95% of Kenyans are part of a certain religious faith (Christianity, Islam, Hinduism etc.). The program is creating TB awareness that aids in active TB case identification while demystifying TB in the community to create an environment of community ownership and participation in addressing TB. This will ensure early TB case detection; good and effective linkage to TB care services; favorable support of TB patients on treatment; good TB treatment outcomes; and the ending of TB associated stigma and discrimination.

KOMESHA TB FOCUS AREAS

COLLABORATION

Working with stakeholders to achieve the goal.

HEALTH SYSTEMS

STRENGTHENING

Building on the current health system to bring better outcomes

ADVOCACY

Engaging the FBO institutions to run with the agenda, Schools, colleges, hospitals, churches media

CAPACITY BUILDING

Train health care workers and even institution owners to drive the TB agenda



1

Health facility based service delivery:

Work with private sector, retail pharmacies informal care providers.

2

Use faith affiliated educational institutions

Screening high risk and vulnerable students, screen close contacts monitor crowded schools and offer TB education.

3

Use of churches and mosques:

Faith-based platforms to promote the uptake of TB services.

4

Use of churches owned media platforms

To promote Social and Behaviour change Communication (SBCC) to create demand and adherence to TB related services.

*I was told
someone had
cast an evil
spell on me,
and I needed
prayers.*



TB Myths and Misconceptions

By Komesha TB Program

Lilian Akinyi Odhiambo, 38 years of age, is a Community Health Volunteer (CHV) in Ranen Seventh Day Adventist (SDA) Health Centre in Kadera Lwala in Migori County. On the fateful day of January 3, 2016, she woke up with a cough. She decided to seek treatment in a nearby private health facility since she thought it was just the ordinary flu. "I was treated and given medication for the flu."

After a few days, there was no improvement. Lilian went to a nearby private chemist to get an over the counter prescription for her cough. The coughing persisted, and she started experiencing night sweats and weight loss. All this time, Lilian would go to different health facilities for six months seeking alternative opinions on her health. In one of the private clinics, she recalls one of the attendants making an insensitive remark. "I was disturbed when in one of the private clinics that I used to frequent, the attendant said, 'welcome customer.' Following

this unpleasant incident, Lilian finally decided to go to Awendo Subcounty Hospital where she was advised to take a tuberculosis test. She was issued with two sputum sample collection containers, one to collect a sputum sample at the health facility and another for the same but this time an early morning sputum sample. She collected the one at the health facility and the one at home which she brought back to the health facility the following day. "When I went back for the results, my result was negative." The news that she didn't have TB dumped her spirit since it made her wonder what she could be suffering from considering the numerous visits to different health facilities without a diagnosis. This made her more stressed and being a CHV made it even worse.

Being a CHV, she had some basic knowledge of tuberculosis. Lilian had heard of TB through the media and posters in the health facilities that the disease was treatable. She decided to share her health issue

with her colleague Emily Onyado a Community Health Worker. Emily told her that TB could be found in the lungs and advised Lilian to go for a Chest X-ray for confirmation. During that time, the doctors in public hospitals had gone on strike. The only option she had was to go to a private hospital where she ended up paying KES 3,500 for the X-ray that revealed her left lung had some abnormalities. She was referred to Eldoret Teaching and referral hospital, which is 261 km from Migori. She went back home pondering how she would raise funds to cater for travel and treatment costs. Lilian did not have any form of health insurance including the most basic one offered by the government through the National Insurance Hospital Fund (NHIF) that would cover her treatment.

As a mother, she would ordinarily wake up to attend to her daily chores. However, her health situation and persistent coughing had affected her daily and social life.

She could not interact with friends, sit in community health volunteers' meetings, attend church as she used to, since she felt embarrassed about the uncontrollable coughing. Lillian recalls one unfortunate and embarrassing moment when she was required to attend a parents' meeting at her daughter's school in Masaba, Kuria. On this fateful day, Lillian boarded a minibus which had its windows shut; inside the bus, the coughing became unbearable to the extent she vomited. This unfortunate and embarrassing incident forced her to alight at Awendo thus abandoning her journey. Lillian walked into a nearby chemist to buy some drugs to manage the cough. She inquired at the chemist for medication to control her cough, which was on the eighth month. She narrated to the lady at the chemist how she has gone for a TB test that turned out negative, and following a chest X-ray she had been referred to Eldoret but unfortunately she could not raise the amount required to travel. Following the narration she asked, "Do you have any drugs that you can give me to treat this cough?"

The lady at the chemist said, "Madam, I don't think you have TB. If it were tuberculosis, you wouldn't be looking this healthy. I had a similar cough, and someone had cast an evil spell on me. Go for prayers; this is not the usual sickness."

Lillian disagreed with her informing her that she had lost weight since the onset of her ailment. She went back home and didn't share with her husband the events of the day. The following day she woke up very early to seek prayers as she had been advised since she had tried nearly everything and nothing seemed to work. Lillian engaged a motorbike rider 'Boda Boda' who took her to the so-called man of God. On arrival, she was informed he had relocated. She inquired from the locals where this man of God had relocated to but instead of being told where, some wondered who had told her that this man prays for people. Lillian didn't divulge how she had gotten her information about the man of God. Her inability to locate this man of God only fueled her determination to solve her problem. She was directed to another prophet known as 'Mama.' Upon arrival at Mama's place, the

husband to Mama welcomed Lillian, and when she stated the purpose of her visit, she was told the prophet had performed a ritual that made her unable to pray for Lillian and so she should come another day. Lillian left and she released the motorbike rider and decided to walk back home. The burden of not knowing what was ailing her and the toil of it was too much that she sat at the roadside and broke down into tears; her hopes of being healed had been dashed.

After a few days, she decided to go to Rakwaro mission health centre hospital on a Saturday afternoon. After explaining how she was feeling, she was told it could be probably pneumonia or typhoid. However, since the facility was closing, she was advised to return on Monday for a thorough check-up. On her way to the bus stop, she passed by the chemist since she had a few cough tablets remaining. She was asked by the attendant in the chemist to consider going for a TB test at Rongo sub-county hospital, but she was reluctant since she had done the test before.

At the bus stop, she engaged in a conversation with a woman as they waited to board a vehicle. The woman told her that the overgrown uvula at the back of the throat could be causing the coughing and thus should be removed. This age-old practice of cutting the uvula was performed in community by a traditional healer to cure throat and cough-related ailments. "I visited a traditional healer, who was armed with a razor blade and other paraphernalia. He cut off my uvula, and handed it over to me." Lillian went home and showed her family members what had caused her ailment.

To her surprise, the cough persisted accompanied by raging pain and a swollen throat due to the removal of the uvula by the traditional healer. Going through this tormenting ordeal, Lillian felt she would rather die than go through the agony of not knowing what was ailing her. With sheer determination, Lillian decided to go to the Rongo sub-county hospital for the TB test. Following having the TB test done, she was informed that she had TB.

Unlike most patients who would be shocked, she was excited since at last the source of her ill health was now known. The disease was not only treatable but curable as well. Lillian was put on TB treatment and after taking the treatment for 6 months she was declared cured of TB.

Lillian's story is just but one of many cases of TB that take too long to be diagnosed due to community myths and misconceptions as well as health provider gaps. These lead to increased undetected cases that contribute to the spread of TB in our communities.

Winfred Mogusu, Komesha TB Program officer for Kisii and Migori region, says they have been engaging private chemists to link them to health facilities in a hub-spoke model that will help with the referral of any presumptive TB cases. In order to address the community and health care provider challenges that hinder timely diagnosis of TB, KCCB's Komesha TB program in collaboration with the National TB program and the nine implementing counties, has been capacity building of health care workers and community health volunteers through integrated TB curriculum to improve their capacity in identification of presumptive TB cases including investigation and timely diagnosis of TB. Refresher training to laboratory technologists on Acid-Fast Bacillus (AFB) microscopy has been conducted to improve the quality of investigation aimed at ensuring the correct results upon testing for TB are got. To aid in timely diagnosis of TB, the program has embarked on targeted community outreaches in identified TB hotspots. The program also has been conducting sensitizations to community members aimed at addressing the myths and misconceptions associated with TB. All these activities are geared towards ending TB in Kenya.

Madam, I don't think you have TB. If it were tuberculosis, you wouldn't be looking this healthy. I had a similar cough, and someone had cast an evil spell on me. Go for prayers; this is not the usual sickness.

KCCB and DNTLD-P Joint Work Planning Workshop in Naivasha



Officers from the Division of National TB Program (DNTLD-P), County Tuberculosis & Leprosy Coordinators (CTLCs) from implementing counties, and Komesha TB team during joint work plan development held in October 2020.



Dr Muga Samson, Program Manager KCCB Komesha TB



Participants during the workshop at Lake Naivasha Resort, Naivasha



Rev. Fr. Peter Waweru
OFM Cap



Very Rev. Fr. Daniel Rono - KCCB
General Secretary



Dr Nazila Ganatra, Head National
Strategic Programs



Dr Elizabeth Onyango, Head
DNTD-P



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