Ministry of Health
National Tuberculosis, Leprosy and Lung Disease Program

TiBa

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World TB Day

Taking stock of strides made

USAID FROM THE AMERICAN PEOPLE
TB ARC II Accelerated Response and Care
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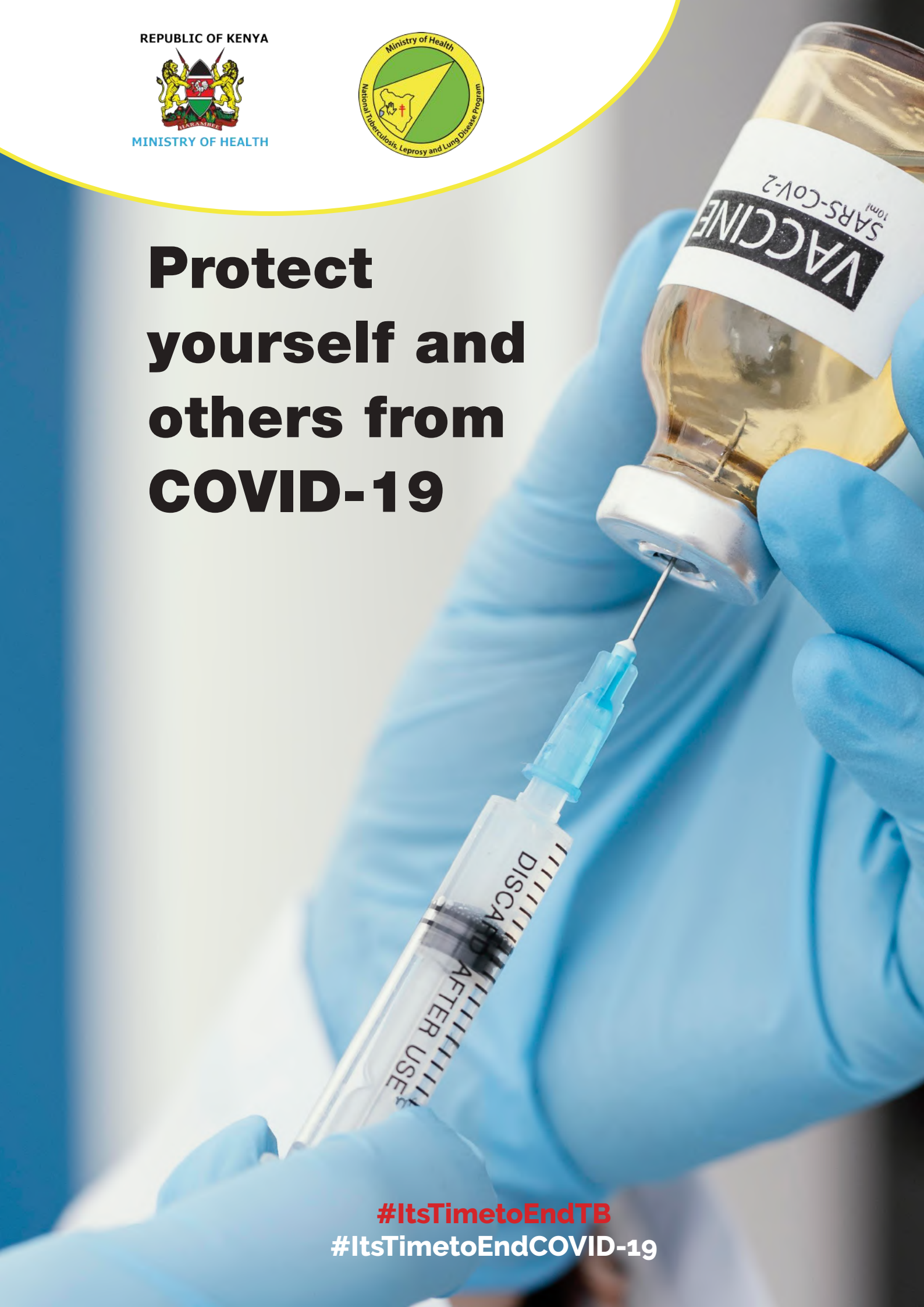
REPUBLIC OF KENYA

MINISTRY OF HEALTH

Protect yourself and others from COVID-19



#ItsTimetoEndTB

#ItsTimetoEndCOVID-19

inside

editorial team

Division of National Tuberculosis, Leprosy and Lung Disease Program,
Afya House Annex 1st Floor
Kenyatta National Hospital Grounds
P. O. Box 20781-00202 Nairobi, Kenya | **Cell:** +254 773 977 440

Website: www.nltp.co.ke
Facebook: NTLDKenya
Twitter: @NTLDKenya

The editor welcomes articles from readers and stakeholders of DNTLD-P

Word from...

Dr. Patrick Amoth,
Ag. Director General for Health

Dr. Waqo Erjersa
Head, DNTLD-P

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CHS Commemorates its 10th Year Anniversary

Word from the **Ag. Director General for Health**

Each year, we commemorate World TB Day on March 24 to raise public awareness about the devastating health, social and economic consequences of TB, and to step up efforts to end the global TB epidemic.

This year, Kenya joined the rest of the world to create public awareness that TB still continues to be a major cause of morbidity and mortality throughout the world. Globally, nearly 4,000 people lose their lives to TB daily and close to 28,000 people fall ill with this lethal, but preventable and curable disease.

Whereas there were elaborate plans to commemorate this year's event, it was not possible due the COVID-19 pandemic. Our spirit and dedication, however, to the fight against TB are not dampen. TB is still the fourth cause of death in Kenya, claiming nearly 33,000 lives annually. This calls for concerted effort from all partners to end the disease as guided by the 2035 End TB Strategy.

As a country, we have already made significant progress in the fight against TB. The adoption of the TB Preventive Therapy for those most at risk and Injectable Free Regimen which is more user friendly with no or very slight side effects highlights the progress so far. The provision of social protection to all drug-resistant TB patients who enroll for NHIF and monthly allowances to ensure they are able to access care without financial constraints underpins our commitment as well. We are looking forward to adopting the latest improved diagnostics for children which will use stool sample to replace the invasive sputum sample which has been difficult to obtain from younger children.

We are focusing our ammunition more on prevention and active case finding. As a Ministry, we will continue to work closely with county governments and our partners to ensure that TB diagnosis, treatment and care is brought closer to Mwananchi.

Dr. Patrick Amoth, EBS

Ag. Director General for Health

Word from the
Head of Division of National Tuberculosis Leprosy and Lung Disease Program

With gratitude for the confidence placed in me by the Cabinet Secretary for Health and Ministry's leadership, I humbly accept the appointment as the head of TB Program. I wish to extend my deepest respect and appreciation to all the staff working with the program at the national and county levels. The Program has had remarkable leaders before who have made important and lasting contributions to this dynamic institution. I greatly look forward to working with the team and all our partners for successful implementation of the TB agenda in the country.

The National TB Program is also tasked with the management of Asthma in the country. On May 5th, Kenya joined other nations in commemorating World Asthma Day under the theme, '*Uncovering misconceptions about Asthma*".

In Kenya, 3-4 million suffer from the disease accounting for about 10% of our population. The fight against Asthma is closely interlinked to the work we are undertaking in eradicating TB. These two diseases are respiratory illnesses and at times their symptoms are similar. Therefore, the National TB Program is actively involved in promoting initiatives that are effective in the treatment of Asthma. For instance, we are pushing for accurate diagnosis of Asthma and to enable the provision of appropriate treatment to all our patients, additionally, to the promotion of preventive services.

We are cognizant of the fact that COVID-19 pandemic has created uncertainty for many people around the globe including those with Asthma. Adherence to preventive measures including physical distancing and correct wearing of masks will play a critical role in ensuring our patients are not at risk. Further, it is important to prescribe to treatment, develop communication channels that help health care providers connect with those in need of Asthma services for them to be advised accordingly so that they are able to seek medical assistance promptly.

The Ministry is looking forward to adopting latest technologies for the diagnosis of Asthma in addition to bringing services closer to the people.

We are grateful to all our partners for their continued support. The 300 nebulisation machines and 300 nebulisation stations donated by AstraZeneca attest to our partnership and commitment towards this cause. This is in line with Africa PUMUA Initiative that aims to improve paediatric and adult Asthma management across Africa as part of its obligation in implementing innovative approaches, strengthening healthcare systems and broadening patient access to quality asthma care.

Dr. Waqo Ejersa

Head, National TB Program

Dr. Rudolf Eggers,

World Health Organization
Country Representative

WHO is honored to mark the World Tuberculosis day commemorated every 24th March. This year's theme *"the clock is ticking"* reminds us that we need to step up the efforts towards ending the TB epidemic by 2030, despite the challenges presented by the pandemic.

Tuberculosis is a preventable and curable disease, yet it is the leading cause of death due to a single infectious agent globally. It ranks fourth among the top five causes of death in Kenya. Kenya is among the top 30 high burden countries for TB, TB/HIV and MDR TB. It is estimated that every year, Kenya loses an estimated 20,000 people to TB. In September 2018, Kenya joined other UN member states in the first ever UN High Level Meeting for TB in making global commitments towards accelerating its efforts and investments towards ending the TB epidemic.

Although Kenya now ranks among the countries that have achieved the 2020 milestones of the END TB strategy, as evidenced by the declining TB incidence of 30% and deaths by 45%, between 2015 and 2019, a lot still needs to be done. To accelerate the efforts at the country level, WHO recommends a multi-sectorial approach and accountability framework that brings together all relevant sectors and stakeholders in the spirit of leaving no one behind in this fight.

Integration of TB screening, testing and contact tracing interventions into the existing COVID-19 response and vice versa, will go a long way in ensuring that we leverage on existing mechanisms to complement the efforts to control both life-threatening respiratory diseases.

We commend the efforts by Ministry of Health and all stakeholders in their response to address TB scourge by implementing patient-centred approaches and adopting high impact interventions towards finding missing people with TB and provision of quality treatment and care. They include innovative strategic initiatives and facility-based active case finding at the community and facility level respectively in response to the national survey findings and recommendations. Further, the expansion of diagnostic capacity and adoption of new diagnostic tools to strengthen the surveillance system has improved access to universal testing and accurate diagnosis increasing treatment coverage. The adoption of differentiated treatment delivery models and the roll out of new treatment recommendations, including: the paediatric formulation, new MDR TB injection-free medicine, rifapentine-based medicines for treatment of latent TB and integration of TB/HIV services has ensured that patients access quality care resulting in favourable outcomes.

The COVID-19 pandemic, now, threatens to reverse these gains by directly and indirectly, posing barriers to accessing TB care by creating fear, stigma and economic hardships by people with TB and mounting pressure to the health system and disrupting TB services. To ensure continuity and maintenance of essential TB services, we call for coordinated efforts and pooling of resources among all stakeholders towards safeguarding accessing TB services in the wake of an evolving pandemic. Integration of TB screening, testing and contact tracing interventions into the existing COVID-19 response and vice versa, will go a long way in ensuring that we leverage on existing mechanisms to complement the efforts to control both life-threatening respiratory diseases.

WHO has released updated recommendations and implementation guidance on systematic screening for TB disease, including the use of chest radiography to improve early detection of TB.

Thank you.

U.S. Embassy Nairobi, Kenya

STATEMENT

The Clock is Ticking: Ending TB by 2030

By Eric Kneedler,

Chargé d'Affaires, a.i., U.S. Embassy Nairobi

Tuberculosis (TB) killed an estimated 1.4 million people globally in 2019, more than HIV and Malaria combined. World leaders committed to eradicate TB by 2030 and a sense of urgency is more important now than ever. This year's World TB Day theme "The Clock is Ticking" reminds us that we have less than a decade to eradicate the world's deadliest infectious disease. Kenya is a critical part of the global effort to eradicate TB through the National TB Program and the United States is proud to continue supporting Kenya through TB testing, treatment, and training for health care workers as well as public education campaigns.

TB treatment is free in Kenyan public health facilities, courtesy of the Government of Kenya and development partners, including the United States.

Kenya embraced the goal of ending TB by 2030 and is making significant progress, despite formidable challenges posed by the COVID-19 pandemic. However, the fear of contracting COVID-19 has discouraged many from visiting health facilities even if they display TB symptoms and precious time is being lost before testing and treatment can begin.

TB attacks the lungs and other organs, and in 2019 infected an estimated 140,000 Kenyans, including 8,393 children, with 33,000 people dying of the disease. HIV status does not determine your risk of contracting TB. Of the 33,000 Kenyans who died of TB in 2019, 20,000 were HIV negative. More than half of all TB cases are men and forty percent of new TB cases remain undetected in communities, putting all at risk of infection. The good news is that there is some evidence that mask wearing is reducing the spread of respiratory illnesses such as TB. But masks do not replace the need to identify, test, and treat all cases of TB.

The United States commits KSh 60 billion annually to combat TB, HIV/AIDS, and Malaria in Kenya. The U.S. Agency for International Development (USAID) and the U.S. Centers for Disease Control and Prevention (CDC) are at the forefront of our efforts to help treat Kenyans already infected with TB, test widely to stop the spread of TB, and support the Ministry of Health's prevention and control programs.

For example, USAID supported a mass media campaign reaching millions of Kenyans explaining TB symptoms and encouraging testing in response to the decrease in TB patients being identified during the COVID-19 pandemic. The United States trained over 2,000 health care workers and supported community outreach and screening efforts to find missing TB cases and raise awareness. As a result, USAID helped identify approximately 73,000 TB cases in 2020. USAID support also helps Kenyan TB patients complete their free treatment with about an 85 percent success rate. With U.S. support, Kenya is launching new policies to curb TB and rolling out new injection-free treatment with fewer side effects for drug-resistant strains.

CDC is supporting quality control of TB testing and helping create a patient-centered approach to treatment. With CDC guidance and expertise, the Ministry of Health's revisions to TB infection prevention and control guidelines include COVID-19 components and CDC is supporting counties' efforts to establish integrated TB and COVID-19 programs.

It is particularly difficult to diagnose TB in young children, as they require special testing and treatment. CDC research found that samples collected with less invasive techniques from children under five years old yielded similar results, making it easier to test young children. With USAID support, the Komesha TB campaign helped diagnose more than 100 children during the COVID-19 pandemic, thanks to a mix of subsidized chest X-rays, contact tracing, capacity building, and peer support. CDC has also adopted a "fish net approach" to find TB cases more effectively by integrating TB, COVID-19, and HIV screening, a benefit for all ages.

Jared Mbiuki is an example of the success of the U.S.-Kenya partnership in combatting TB. Jared, who had struggled with a persistent cough and fatigue, was heading home from his job at a slaughterhouse in Tharaka Nithi County when he was offered screening during a USAID-supported outreach effort. The 60-year-old was diagnosed with TB and immediately started free treatment. "I am no longer coughing, no more fatigue, and I have added some kilograms," a jovial Jared says. "I am more productive at work now."

We must recognize that TB can affect anyone, regardless of whether you suffer from other illnesses such as HIV. I encourage every Kenyan to learn about TB, recognize the symptoms, and seek help if you think you might be infected. We are all in this fight together, so please join the effort to end TB for good: *Pimwa TB, TiBiwa, Ishi poa!*

World TB Day

Renewed commitment to ending TB

Dr Mercy Mwangangi, Chief Administrative Secretary, MoH.

Dr. Rudolf Eggers, WHO - Kenya Country Representative

Dr. Maurice Maina, USAID and Dr. Elizabeth Onyango, former Head - DNTLD-P.

By Mbetera Felix | DNTLD-P

> ***"We are looking forward to adopting the latest improved diagnostics for children which will use stool sample to replace the invasive sputum sample which has been difficult to obtain from younger children."***

On March 24 each year, Kenya joins the global community to commemorate World Tuberculosis (TB) Day, an important moment to renew commitment to ending TB and raise public awareness about the devastating health, social and economic consequences of the disease.

Although preventable and treatable, TB remains one of the world's deadliest infectious diseases, taking the lives of approximately 4,000 people every day. The Ministry of Health uses technical expertise to drive innovation and advancement in TB prevention, care and treatment.

Whereas there was no major event to mark key TB events as has been the case in the previous years due to the COVID-19 pandemic, the Ministry of health leadership highlighted some of the milestones made so far in the country during the normal daily briefings.

During the commemoration of the World TB Day, 2021, the Cabinet Secretary, Hon. Mutahi Kagwe noted that TB is still the fourth cause of death in Kenya, claiming 33,000 lives annually. He called for concerted effort from all partners and stakeholder to end the disease as per the 2035 End TB Strategy.

In his speech which was read by the Health Chief Administrative Secretary, Dr. Mercy Mwangangi, Hon Kagwe noted that the country has made significant strides in the fight against TB.

"The adoption of the TB Preventive Therapy for those most at risk and Injectable Free Regimen which has very slight side effects highlights the progress so far. The provision of social protection to all drug resistant TB patients who enroll for NHIF and providing monthly allowances to ensure they are able to access care without financial constraints underpins our commitment as well," she read. "We are looking forward to adopting the latest improved diagnostics for children which will use stool sample to replace the invasive sputum sample which has been difficult to obtain from younger children."

The 2021 World TB Day was marked under the global theme, *'The Clock is Ticking'* and was domesticated by the Ministry of Health to fit and align with the goals that Kenya has set towards eradication of TB, thus the Kenya's theme to commemorate 2012 World TB Day was *'The Clock is Ticking – It's time to End TB'.* The public information campaign crafted around this theme and targeted at informing and encouraging people to be tested for TB was carried under the tagline, *'Pimwa! Tibiwa! Ishi Poa!'*

Some of the key guests present included Dr. Rudi Eggers, WHO - Kenya Country Representative and USAID Deputy Mission Director, Patrick Wilson whose excerpts reiterating their commitments have been published in this edition (see page 6 and 7), Dr. Maurice Maina (USAID), Edwin Kibet (ROCHE Kenya), Dr. Lorraine Mugambi (USAID TB ARC II), Philip Muchiri (CHAI) and Eveline Kibuchi (Stop TB Partnership-Kenya).

The County Focus

In Elgeyo Marakwet, the County leadership in collaboration with the Ministry of Health, Ampath plus and NIAK marked the World TB Day at Tambach GK Prisons where inmates were screened, tested and those diagnosed with TB initiated on treatment. The county has made some progress towards universal access in TB diagnosis and treatment by decentralizing TB services across all the four sub counties and to the lowest level of the health care system.

USAID Deputy Mission Director Patrick Wilson and Dr. Nazila Ganatra, Head National Strategic Programs.

Dr. Lorraine Mugambi, Chief of Party, USAID TB ARC II - CHS and Alexandra Mayer-Hohdahl, USAID.

Dr. Eunice Omesa (WHO), Dr. Jackline Kisia and Lillian Kerubo (DNLTD-P).

"Our behavior towards seeking health service has always been wanting, I am convinced that one of the quick wins for us is to intensify our efforts to find and seek all missing TB cases and ensure that each is treated and cured, ultimately reducing TB-related deaths and improving treatment outcome," said the Chief Officer of Health and Sanitation, Mary Kipchumba.

The county coordinator, Mr Jonathan Kwambai Murtich noted that the county has three GeneXpert sites that help in diagnosis. He thanked the partners particularly AMPATH plus for supporting sample referrals.

A total of 150 prisoners were screened, five were presumptive and one was initiated to treatment after his Gene xpert results were positive. Those present during the commemoration included the Chief Officer in charge of Administration - Josephat Maiyo, Director Medical services - Dr. Kosgei, Director Public Health - William Kendagor, among other health staff both from health and prison departments.

Elgeyo Marakwet World TB Day screening at Tambach GK Prisons.

Providing Technical Assistance for Better TB Services and Outcomes

Rhoda Pola from DNTLD-P offering Technical Assistance to a clinician in a health facility in Mombasa County.

By Mbetera Felix | DNTLD-P & KCCB

The Division of National Tuberculosis Leprosy and Lung Disease Program (DNTLD-P) provided Technical Assistance (TA) to eleven Counties and all Sub-Counties in Nairobi. The exercise is one of the strategies used by the Program to adequately address the constraints to the implementation of Tuberculosis management strategies in the country.

Through the TA, experts from DNTLD-P and partners engaged TB and Leprosy Coordinators, facility managers and Health Care Workers (HCWs) in a number of selected public and private health facilities in the counties. The experts were able to transfer working knowledge, skills and technical data to the HCWs with the aim of finding missing TB cases and enhancing effectiveness and efficiency in the management of TB and leprosy patients in the country.

The key areas of focus included ascertaining case finding efforts in the various service delivery points, strengthening laboratory capacity to ensure access to high-quality diagnosis both for drug sensitive and drug resistant TB, human resource capacity, national procurement and drug management systems for regular supplies of anti-TB drugs, monitoring and evaluation, pediatric TB, TB/HIV, multi-drug resistance TB, public–private mix as well as advocacy, communication and social mobilization.

The aforementioned areas are critical in the provision of quality service to TB patients along the care cascade. The TA also promotes one- on- one mentorship and on job training, thus an effective approach for building the capacity of HCWs. The exercise was supported jointly under the Global Fund Grant and USAID TB ARC II Activity. Other supporting partners who supported the Program during the exercise include Amref Health Africa and Komesha TB.

The counties covered included Nyandarua, Kilifi, Tharaka Nithi, Isiolo, Narok, Vihiga, Elgeyo Marakwet, Nairobi, Marsabit, Mombasa, Laikipia, Kericho, Uasin Gishu, Kakamega, Embu and Siaya.

Status of National Tuberculosis Epidemic and Response

Quarter one 2021

Drug susceptible TB

19,933
Number of TB cases Notified

83%
Treatment success rate (All forms)

6%
Case fatality ratio

9.7%
Poportions of children

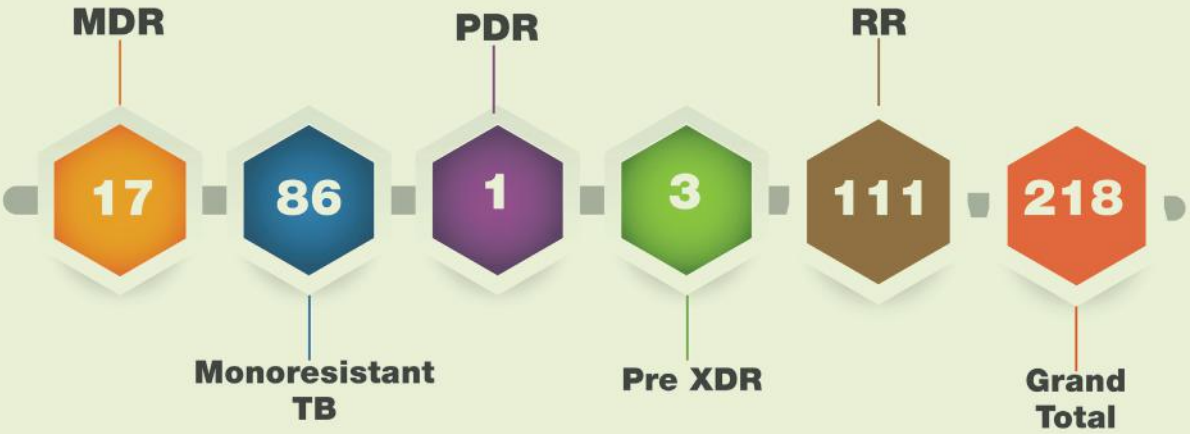
74%
Previously treated (DSTB) with DST results

97%
Proportion of DSTB with Known HIV status

5%
Lost to Follow Up

93%
Proportions on ART

Drug resistant TB



Leprosy

15
Number of Leprosy Cases reported

TB Prevention Therapy

1,441
Children <5 initiated on IPT(contacts of bacterilogically confirmed cases


chs
Years of
Service to Local
Communities

CHS Commemorates its 10th Year Anniversary

From left to right: Dr Paul Wekesa, CEO CHS, H.E. Hon Adelina Mwau, Deputy Governor Government of Makueni County, Dr Mercy Mwangangi, CAS Ministry of Health, and Dr Richard Ayah, Board Chair CHS during the CHS 10th Year Annivesary commemoration.

By Diana Kagwiria | USAID TB ARC II-CHS

On March 19, 2021, Centre for Health Solutions – Kenya (CHS) commemorated its ten years of existence, and service to local communities. The colourful event was streamed online to hundreds of guests from Serena Hotel, Nairobi.

Among the attendees were top delegates including Dr Mercy Mwangangi - Chief Administrative Secretary, Ministry of Health, H.E Hon Adelina Mwau - Deputy Governor, Government of Makueni County, Dr Marc Burtrlys - Country Director, Centres for Disease Control and Prevention Kenya (CDC-Kenya), and Dr Maurice Maina - USAID Kenya, Tuberculosis Team Lead, Health, Population, and Nutrition Office among other key delegates.

Speaking during the event, Dr Mercy Mwangangi appreciated CHS for being a trusted partner of the Ministry of Health since its inception in 2010. She added that CHS had offered immense support to the Ministry in HIV/AIDS and TB management on key areas such as laboratory and pharmacy systems, monitoring and evaluation, human resources for health, health care financing, and leadership and governance.

"Kenya committed to the UNAIDS 95:95:95 targets to fast track and accelerate action to end the AIDS epidemic by 2030. This can only be possible through continued collaborative efforts between the Ministry and key stakeholders including donor and development agencies, County Governments as well implementing partners like CHS," Dr Mwangangi said.

She further urged CHS to continue providing national support to TB and HIV programming in the high-burden counties.

H.E Hon Adelina Mwau, Deputy Governor, Government of Makueni County congratulated CHS for their great investment in service delivery, health leadership and governance, human resources for health, health infrastructure and equipment, health information systems as well as health products and commodity security in Kenya.

"Since CHS began its operations in Makueni County in October 2016, the Makueni County Department of Health has received an investment of KSH 572,256,556.00 towards stemming the HIV epidemic. In the current financial year, we have received USD0.99 million. This funding is channelled to the county through a joint sub-grant managed by CHS and the County Health Management Team," Hon Adelina said.

She added that CHS supports the Makueni County Health Departments to implement and expand high-quality HIV prevention, care, and treatment services across 68 health facilities. Through CHS support, the county has achieved a satisfactory outcome on viral suppression of 93% in adult males, 92% in adult females, and 80% in children (0-14 years).

Dr Marc Burtrlys, CDC Kenya Country Director noted that CHS has had a long-standing collaboration with CDC since 2011 in HIV control activities.

"CHS remains a highly valued partner to CDC in supporting its work in Central, Eastern and Nyanza regions. CDC has offered over USD144 million dollars direct funding to CHS," he said.

His sentiments were echoed by Dr Maurice Maina, USAID Kenya Tuberculosis Team Lead, Health, Population, and Nutrition Office, who noted that CHS has been their main partner in TB control activities which has seen an increase in TB case notification in the country.

"I would like to commend CHS for ensuring that TB activities with the National TB program are well planned, collaborative, strategic and give desired results. Being a local organisation offering indigenous solutions, we have used CHS as a showcase when moving a lot of our projects from international partners to local partners," Dr Maina said.

For a decade now, CHS has been optimising the delivery and use of health interventions to communities through evidence-informed solutions, innovations, and research to address existing and emerging public health needs.

"CHS has built strong relationships across the country that support the implementation of HIV and TB services including supportive functions such as laboratory and pharmacy systems, monitoring and evaluation, human resources for health, health care financing and leadership and governance."

While giving an overview of the organisation's third strategic plan, 2021-2025, CHS CEO, Dr Paul Wekesa reassured the guests that CHS would continue with its work of service to local communities while embracing the new changes in the work environment.

"We want to take this forward in this new period to demonstrate continuity and be informed by realities of today. We know today we have the reality of COVID-19, new technology and new work environment . The new strategic plan embraces the new changes in the work environment," Dr Paul said.

His reassurance was emphasised by CHS Board Chair, Dr Richard Ayah who noted that in building a better society, CHS had solved various public health issues over the 10 years of its existence, and would continue to do so.

CHS continues to grow as the preferred partner for health solutions by consistently focusing on the delivery of quality health services and continuous improvement. Guided by a vision of a world of healthy families through universal access to health interventions and services, CHS is a close and trusted partner of the Government of Kenya, working in partnership with the national and county governments, donors and other stakeholders in the delivery of sustainable health services.

CHS has built strong relationships across the country that support the implementation of HIV and TB services including supportive functions such as laboratory and pharmacy systems, monitoring and evaluation, human resources for health, health care financing and leadership and governance.

The last NGO's Coordination Board report recognised CHS as the 4th in the utilisation of funds on projects and 5th top funded NGO in the country.

KEY ORGANISATION ACHIEVEMENTS

HIV Care

- Leading partner in HIV care, taking care of approximately **15% (177,626)** People Living with HIV (PLHIV) in Kenya.
- Leading partner in implementing Electronic Medical Records (EMR) with **253** CHS-supported facilities implementing EMR constituting **19%** of the **1,304** EMR sites in Kenya.
- Leading sector player in the fight against HIV/AIDS (NGO Coordination Board Report).
- HIV positive clients and linked **88,578 (90%)** to life saving antiretroviral treatment (ART).
- Cumulatively provided HIV testing services to **7,165,401** people, identified **103,138.**
- **94%** PLHIV on Optimal ART are virally suppressed.
- Provided maternal and infant prophylaxis to **19,001** pregnant mothers and HEIs.
- Provided **141,469** Voluntary Medical Male Circumcision services.
- Reached **17,709** key population with a combination of prevention services (biomedical, behavioural, and structural interventions) in Machakos, Kitui, Makueni, and Muranga Counties.
- Supported **12,305** health care workers across the CHS supported health facilities in seven counties.

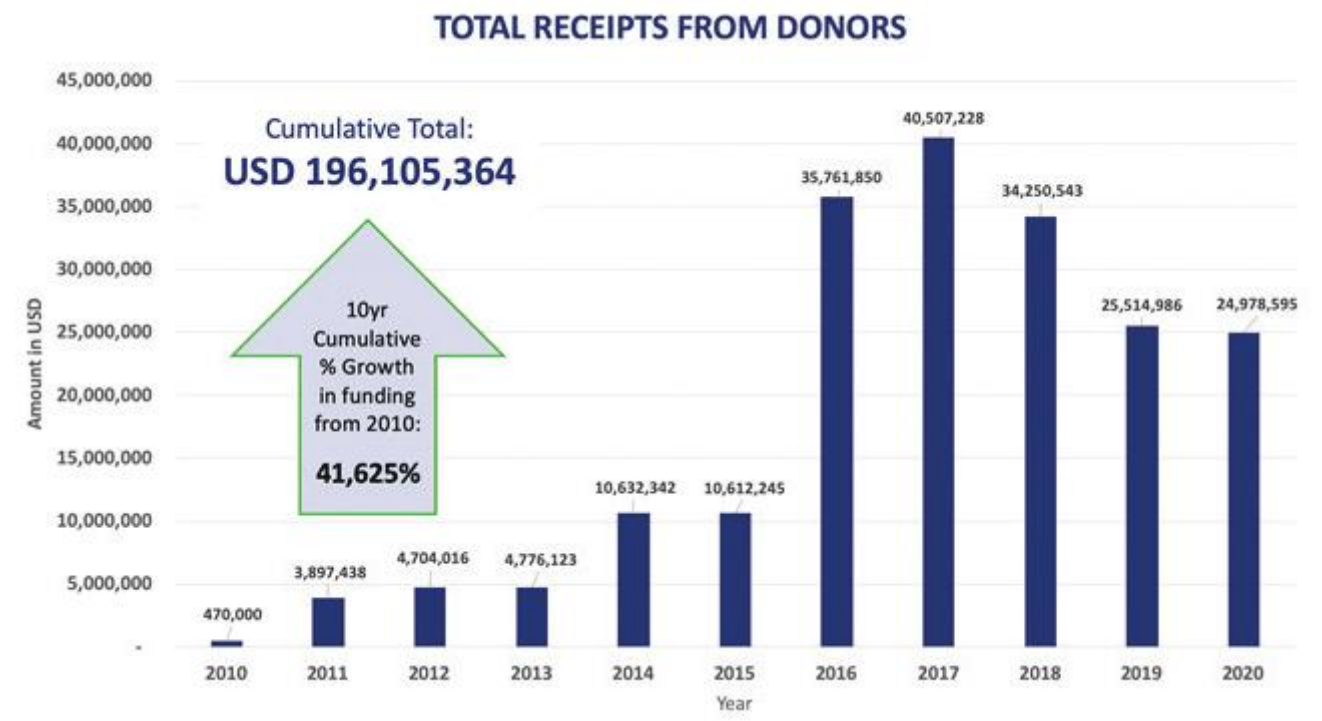
TB Care

- Through support to National TB Program **344,068** and **2,423** people were successfully notified and treated for drug sensitive and drug resistant TB respectively between 2016-2019.
- Improved access to TB diagnosis through scale-up of GeneXpert diagnostics by DNTLD-P in country from **10** in **2013** to **189** in **2018**.
- Between 2016-2019, **707,274** GeneXpert tests were conducted with **188,006** TB cases diagnosed through GeneXpert and **1,522** Riphampicin Resistant patients diagnosed.
- Supported the provision of evidence for contemporary TB programming through the planning and conducting the 1st Post-Independence Kenya National Tuberculosis Prevalence Survey 2016. As a result, Kenya registered a 12% increase in TB cases in 2017, increasing case notification for the first time in 10 years.
- Scaled up of the shorter-term regimen (STR) for eligible DR TB patients by conducting sensitizations in the 10 high burden DR TB counties that are responsible for 50% of the country's DR TB burden. Following these sensitizations **2,329** DR TB patients were initiated on the STR in 2019.

CHS Efficient Utilization of Funds

CHS has demonstrated its ability to utilise resources in the implementation of HIV and TB programming in the country.

The last NGO's Coordination Board report recognised CHS as the 4th in the utilisation of funds on projects and 5th top funded NGO in the country. The figure below highlights the CHS funding portfolio over the last 10 years.



Finding Missing TB Cases through Community Outreach:
Victor Odhiambo's Story

Victor Odhiambo going about his fishing hustle at Lake Victoria.

By Diana Kagwiria | USAID TB ARC II-CHS

While fishing in Lake Victoria one day, Victor Odhiambo began experiencing chest pain and a persistent cough. He associated this to the cold weather at the lake and went on with his work with the hope that the symptoms would soon clear.

However, his condition worsened with each passing day forcing him to cut short his two-week fishing plan and come back to the shore to seek medical attention.

"Immediately I arrived at the shore, I visited a chemist and bought over the counter medicines. The chest pain and the cough reduced after taking the medication but reoccurred once the dosage was over," Victor recalls.

He visited the chemist again and requested for more packs of the medicines to sustain him as he went back to fishing to feed his young family.

"I took the over the counter medication for almost a year to relieve the chest pain and coughing that kept recurring once the medicine was out of my system. Once the medicine was over, I would go for a refill to at least push me through," he opens up.

One day while at the Mvita Beach preparing to go for fishing, Victor attended a USAID TB ARC II supported TB screening and testing community outreach, held in collaboration with the National TB Program and Homabay County.

"There was a health talk on the symptoms of TB and the importance of screening and testing. They told us if you are having weight loss, fatigue, night sweats, lack of appetite, cough of any duration, chest pains to go for screening which they were offering free of charge. I decided to give it a try at least to minimize the pain I was going through," Victor says.

Upon screening, Victor turned out presumptive for TB and was requested to take a TB test which involved putting his sputum in a tube.

"Once I gave them the tube with the sputum, they told me they would call me to give me the tests results. A few days later, they called requesting that I go to the health facility," Victor shares.

Victor's sputum test with a GeneXpert machine had confirmed that he had tuberculosis. When he got to the facility, he was informed that he had TB, counselled, and immediately initiated on treatment.

"When I was told I had TB, I got shocked as I knew the disease kills. I was worried of dying and leaving my family alone as I am the bread winner. The doctor reassured me that if I take the medication as instructed, I would get completely cured as TB is a treatable and curable disease. He also told me that I would take the medicine for six months while having clinical reviews in between the months," Victor says.

He adds, "Since I began taking the medication, I have really improved. The coughing has reduced as well as the chest pains and the night sweats are completely gone. I feel more energetic while going about my work."

To ensure that he doesn't miss his medication Victor shares that, "I carry my medicines in the boat and take them as instructed since sometimes we go off the shore for more than three days."

Due to the nature of their work that requires regular travel, USAID TB ARC II in collaboration with the National TB Program and Homabay County has linked fishermen TB patients, like Victor, to various facilities to be enable them pick their refills when need be.

"I usually come for refills every two weeks. If the refill day finds me in the lake, I usually present my clinic card at the nearest health facility which is mostly in an island and I am given the medicines as required," Victor shares.

Just like the rest of the world, Kenya continues to battle with COVID-19 pandemic. There has been reported reduction in the number of people visiting health facilities, for among others, TB diagnosis whose symptoms mimic those of COVID-19. This could lead to an increase in community spread as well disease progression among the affected but not on medication. To minimize this, since the onset of COVID-19 USAID TB ARC II in collaboration with the National TB Program and various county governments have accelerated community outreach missions in hotspot areas to finding missing cases like Victor and initiate them on treatment.

Capacity Building Health Workers to Find and Treat TB Cases:

Silpher Okore's Story

By Diana Kagwiria | USAID TB ARC II-CHS

57 year old Silpher Okore, the TB nursing officer at Siaya County Referral Hospital has been a practicing nurse for the last 20 years. This has been mostly in the wards making the job a routine in that she could recall what is expected of her even in sleep. This changed two years ago when she was transferred to the TB clinic.

"When I was brought to the TB clinic, my work life became very difficult. I could not differentiate the medicines especially those of the children nor know how to manage patients. To avoid doing guess work. I used to disturb the clinician here who also doubles as the skin clinician on what to do and incase of his unavailability, I would call the county TB coordinator," Silpher shares.

This changed when she got a training on TB treatment and management with support from USAID TB ARC II in collaboration with the National TB Program.

"My world brightened up after a on job training by the Siaya County TB Coordinator and the USAID TB ARC II Nyanza regional officer. The training has empowered me to a TB expert. I now know how to confirm TB, difference between smear negative and smear positive, GeneXpert diagnosis, how to interpret culture, when to start a patient on intensive phase, when to change continuation phase among others," a happy Silpher says.

Silpher who serves at least 6 patients on normal day has now been capacity-built to review the patients without necessarily relying on anyone.

Silpher Okore, TB nursing officer, Siaya County Referral Hospital. Silpher has been capacity-built to offer TB services while ensuring quality of care for patients by USAID TB ARC II in collaboration with the National government.

Silpher is not keeping the knowledge earned to herself. She mentors her colleagues in the other departments on TB active case finding and conducts health education on TB prevention, management, and TB myths and misconceptions not only to the patients but also the community at large.

"My biggest motivation is getting a patient cured, aid in the reduction of the pain they are going through," Silpher concludes.

> ***"My world brightened up after an on job training by the Siaya County TB Coordinator and the USAID TB ARC II Nyanza regional officer. The training has empowered me to a TB expert."***

If not TB, what could it be?

Planning for non-TB Abnormalities During Chest X-ray TB Screening Activities

Dr. Brenda Mungai,
Director of TB and Lung Health,
Centre for Health Solutions - Kenya

Historically, miniature radiography for mass Tuberculosis (TB) screening activities was widely utilized in high-income countries throughout the 20th century. In lower-and middle-income countries (LMIC), like Kenya, chest X-ray (CXR) has been used primarily as a complementary tool to support clinical diagnosis of TB. With findings of CXR being a good screening tool during the TB prevalence surveys, the conversations have shifted to having CXR screening earlier in the screening and triaging cascade.

World Health Organisation (WHO) in 2016 developed a guidance of CXR use for TB screening and triaging. Subsequently this year (2021), further guidelines on systematic TB screening were released recommending TB screening using a symptom screen, chest X-ray or molecular WHO-recommended rapid diagnostic tests, alone or in combination. The advent of ultra-portable digital X-ray machines and computer aided technology will quickly lead to the actualisation of these guidelines. How will the implementation be done? What other conditions will the use of CXR identify? How should health systems be prepared for these conditions? These are among the questions that arise as countries plan for the implementation of CXR for TB screening.

In 2019, we conducted a study to describe and quantify non-TB abnormalities identified by TB-focused CXR screening during the 2016 Kenya National TB prevalence survey. We reviewed a random sample of 1140 adult (≥15 years) CXRs classified as "abnormal, suggestive of TB" or "abnormal other" during field interpretation from the TB Prevalence Survey. Each image was read by two expert radiologists, with images classified into one of four major anatomical categories and primary radiological findings. A third reader resolved discrepancies.

From our findings, we identified other conditions, especially those related to complications of a rising burden of non-communicable diseases (NCDs). These included cardiomegaly (enlarged heart), suspected chronic obstructive pulmonary disease, post-TB lung changes and other non-specific lung patterns.

Implications of our findings

In sub-Saharan Africa, the commonest causes of cardiomegaly are conditions of significant public health importance associated with premature mortality, including: hypertensive heart disease; cardiomyopathies; cor pulmonale; chronic rheumatic heart diseases; and ischaemic heart diseases. (2, 3) Cardiomegaly has been associated with both higher body mass index (BMI) and higher median systolic blood pressure (BP).(4) The high prevalence of cardiomegaly in our study supports exploration of the benefits of CVD screening during TB CXR screening as a potentially affordable public health intervention.(3, 5) Health messaging on prevention of NCDs through recommendations on diet, such as reduction of commercial sugar and high salt diet, could be considered for integration in such programmes.(3)

We recommend that clear referral pathways, diagnostics and follow-up plans for non-TB pathology be incorporated during the planning of TB active case finding activities.

The findings from our study were published in 2021 https://pubmed.ncbi.nlm.nih.gov/33504563/ (Mungai BN, Joekes E, Masini E, et al. 'If not TB, what could it be?' Chest X-ray findings from the 2016 Kenya Tuberculosis Prevalence Survey. Thorax. 2021).(3)

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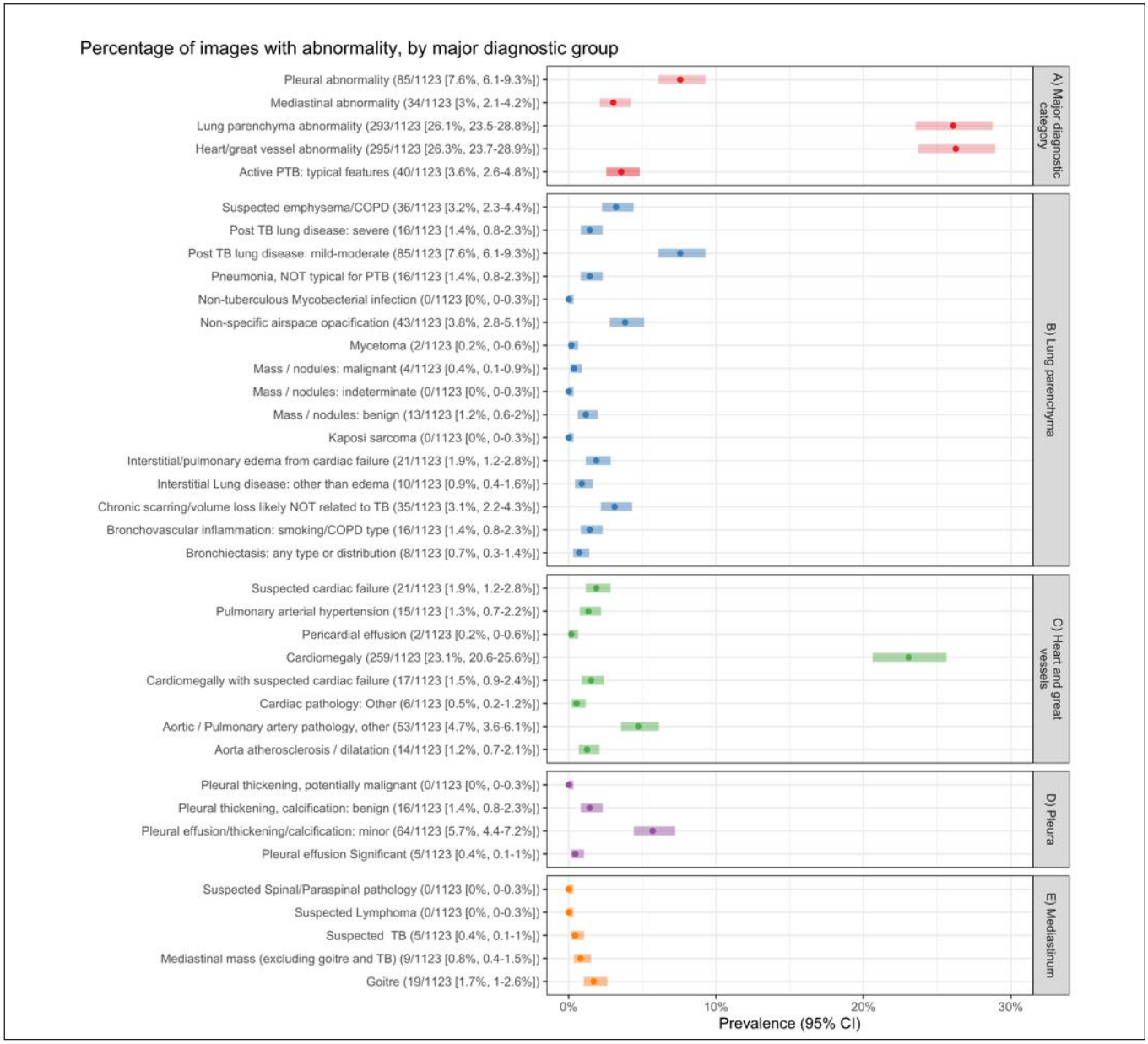

Prospective data collection about non-TB conditions identified during TB screening, characterisation of these patients, exploration of individual and health systems implications of these diseases could assist with further planning. Our findings were consistent with complications of potential underlying NCDs, including chronic respiratory disease in the population. At primary care health facilities, prevention efforts for NCDs should be strengthened including health messaging, BP and BMI monitoring.

In conclusion, mass radiography can be used to tackle "fundamental problems of disease in the chest, both of the respiratory system and also of the heart" and "aid in detection of early and treatable non-TB disease".(5) As countries embark on TB ACF activities, they need to be aware that other respiratory and non-respiratory pathologies are likely to be as, or more prevalent, than active TB. Mass screening with CXR therefore offers opportunity to plan for and address multiple important diseases.

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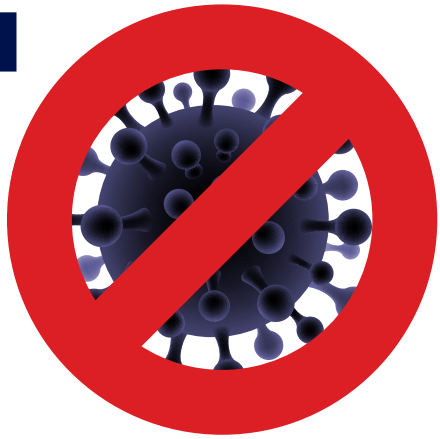

REPUBLIC OF KENYA

MINISTRY OF HEALTH

#ItsTimetoEndTB
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Ministry of Health
National Tuberculosis, Leprosy and Lung Disease Program

First National Conference for TB Champions in Kenya: Building Stronger Voices for TB Communities

By Mbetera Felix | DNTLD-P

Engagement of infected and affected communities in advocacy has proven to be successful in many health issues. The advancement in HIV response for example, and the consequent successes have been largely attributed to the strong aggressive advocacy from communities affected and infected with HIV. This is a result of persistent engagement in the response and constant capacity building strengthening and empowering their voices for advocacy.

For a long time, Kenya lacked a coordinated engagement of TB community voices. In response to this gap, in 2019, TB communities under the leadership of Stop TB Partnership-Kenya established the first ever National Network of TB Champions. This is an organization that brings together TB communities who want to use their experiences with TB for advocacy and community engagement with the aim of contributing towards achievement of both the National and Global TB goals. With the network established, there was need for continuous capacity building for engagement in TB activities. The network members have undergone various capacity building sessions which include enhancing their participation in the Global Fund processes, county budgeting processes, advocacy and leadership among others.

Eunice Kanana, Meru County TB coordinator and other TB champions signing a declaration for Kenya infected and affected communities.

In February 2021, the Stop TB Partnership-Kenya with support from Stop TB Partnership Global held a national conference that brought together TB communities from all the 47 counties. The conference which was held in Meru County aimed to mobilize TB community voices for enhanced community engagement in TB response towards Ending TB by 2030 in Kenya. Members also shared their experiences on TB community engagement and advocacy, strategized on the community's contribution to the National and global TB targets, harnessed their efforts to link to the National reporting mechanism and strengthened their leadership and administrative function of the network.

National, Regional Desk Meeting held

The National TB Program held a national regional desk meeting that brought together all county TB and Leprosy coordinators, supporting partners and specialists from the program. The regional desk tracks regions' performance viz-a-viz national targets with a view to support the regions towards attaining and or maintaining targets. Through the meeting, the teams reviewed the terms of engagement and individual county performances and developed strategies for continuous engagement and program targets. The technical staff members from the national office were assigned regional desks to support on matters quality of care, commodity management, advocacy and demand creation, and capacity building. The national meeting which was held at the Lake Naivasha Resort in Naivasha was supported by USAID funded TB ARC II activity.

Participants during the regional desk meeting.

Development of IPC Guidelines

Effective infection prevention and control (IPC) is essential to providing high quality health care for TB patients and a safe working environment for health care workers in facilities. As a scientific approach, it as practical solution designed to prevent harm caused by and is grounded not only in infectious diseases but also in social science, epidemiology and strengthening of health systems. To achieve this, the National TB program and PACT Endeleza Project, University of Maryland in partnership with Amref health Africa held a four day workshop in February to finalise on TB IPC guidelines. With the new developments attributed to the management of COVID-19 pandemic, it was deemed important to update the guidelines and include lessons learnt and new strategies that will help manage the two diseases.

Misoi - DNTLD-P, Sarah - Meryland, & Edward- Amref Kenya.

Finding Missing Cases through Community Outreaches

Kakamega County Director of Health (In a red tie) being taken through the screening process in one of the sites.

By Mbetera Felix | DNTLD-P & KCCB

USAID's KCCB Komesha TB Program, in collaboration with the Division of National Tuberculosis Leprosy and Lung Disease Program (DNTLD-P) and County Governments of Kakamega, Siaya, Homa Bay, and Kisumu, intensified community TB screening in quarter one of 2021 (January to March).

The targeted outreaches were part of buildup activities towards the March 24th World TB Day commemoration, 2021. The screening targeted communities in both urban and rural informal settlements that were identified as TB hotspots. Targeted TB outreach programs play a critical role in reaching those underserved with TB services through advocacy, health education, case management, screening, and linkage to TB services.

According to Josphat Mutua, the DNTLD-P community engagement focal person, the outreach targeted high burden TB villages, slum dwellers, alcoholic dens, cane cutters, and the transport industry.

"The 2015/2016 TB National TB prevalence survey revealed that majority of the asymptomatic TB patients are in the households or workplace and do not think that their symptoms are severe to warrant them to seek prompt care. Thus, the need to take interventions closer to communities as part of strengthening targeted outreaches to find the missing people with TB," he said.

According to Hazel Oyungu, an officer at the KCCB-KOMESHA TB, the Program has a core mandate to support TB control activities at the facility and community level in the Western and Nyanza regions.

"Targeted community outreaches aides identification of missing TB cases considering that approximately 40% of TB cases are missed by the healthcare system annually", the program officer from the faith-based organization added.

During the outreach services, the National TB Program used mobile digital x-ray machines to screen those exhibiting TB symptoms such as cough of any duration, weight loss, night sweats, and fever. Those found to have chest x-rays suggestive of TB were required to produce a sputum sample for a Gene Xpert test- a sputum test used to detect TB causing germs. Those testing positive for TB were linked to health facilities nearest to where they reside for TB treatment and care through the support of the County and Sub-county TB and Leprosy coordinators.

Through the outreaches, a total of Kisumu (22), Siaya (25), Bungoma (12), Homa Bay (59), Kakamega (63) were found to be having TB and are currently on treatment. The Komesha TB program plans to continue with data-driven targeted TB screening in the community to identify the missed adult and pediatric cases in collaboration with DNTLD-P, County, and Sub-county TB teams.

> ***KCCB has a core mandate to support TB control activities at the facility and community level in Western and Nyanza regions.***

Health Journalism: Mainstreaming TB Issues in the Media

Dr. Samson Muga, KCCB Program Manager during the training in Kisumu.

Journalists in one of the training sessions.

Saada Hassan, from KTN facilitating one of the sessions in Migori.

By Mbetera Felix | DNTLD-P & KCCB

A joint Division of National Tuberculosis Leprosy and Lung Disease Program (DNTLD-P) and USAID's Komesha TB training program on mainstreaming TB issues in the media was successfully held in March 2021.

For one week, 135 health journalists and reporters, representing different media outlets in Migori, Kisii, Homa Bay, Siaya, Kisumu, Busia, Bungoma, Kakamega, and Vihiga counties underwent sensitization on the impact of mass media reporting on TB awareness, health-seeking behavior, and service utilization.

The sensitization forum aimed at enhancing media involvement in highlighting TB issues, mainstreaming media coverage of TB in the Western and Nyanza regions. It further sought to promote TB health literacy by building a pool of journalists with the capacity and skills that would enhance media effectiveness in TB content creation, thereby providing citizens with accurate and reliable information they need in the fight against TB and thus the media would play a critical role towards ending TB in Kenya.

Mass media use for advocacy is an important strategy in communicating behavioral change related to TB prevention and treatment. DNTLD-P has been using media, such as television, radio, newspapers, and the internet, to disseminate TB information to vast audiences, achieving remarkable results in raising awareness of TB-related issues and thus changing the public's knowledge, attitudes, and practices regarding TB.

Health journalists, if engaged well, not only communicate to inform but also to educate societies on healthy living. With good delivery, they can promote people-friendly TB policies and support the National TB Program to achieve its social and behavior change communication objectives.

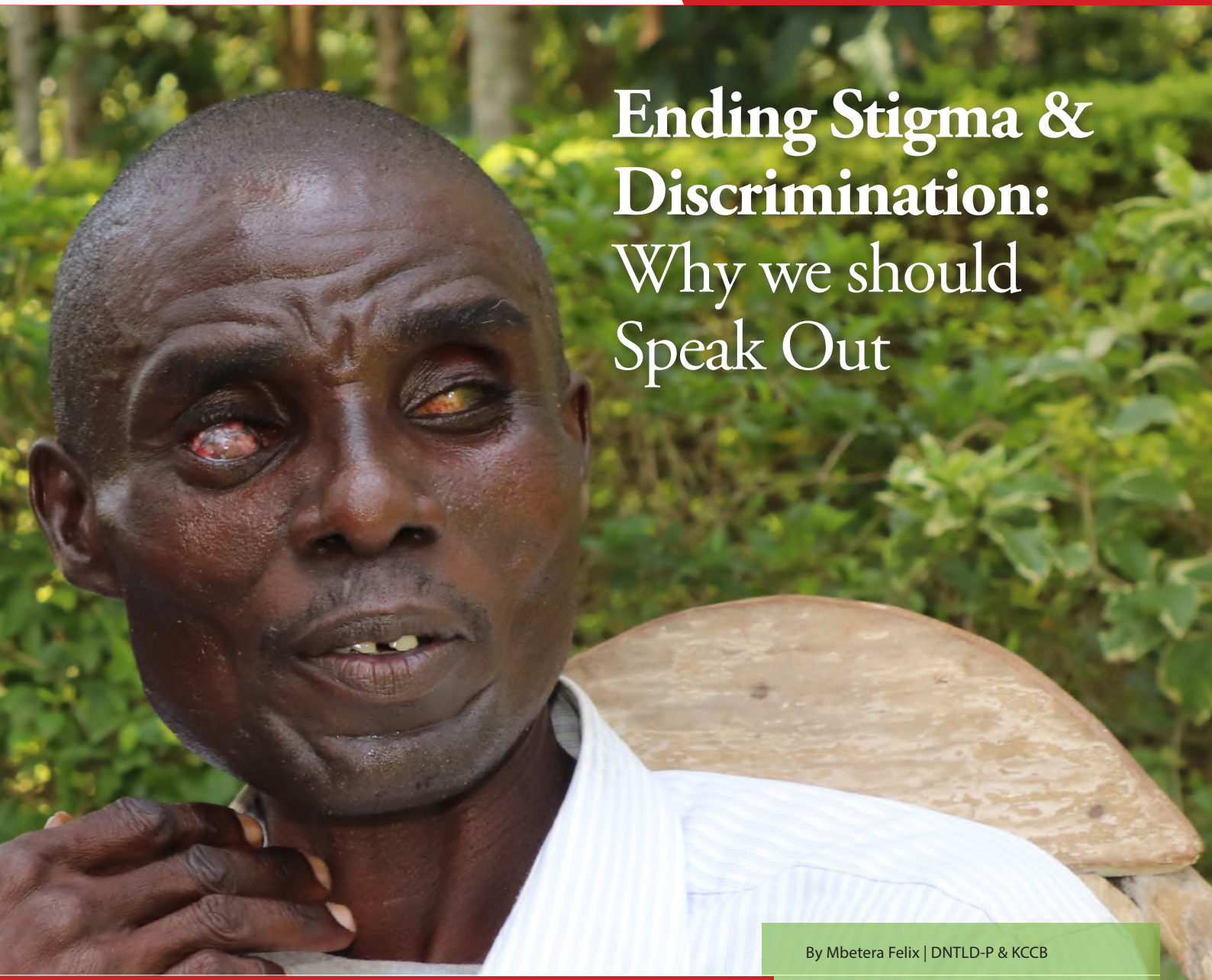
The journalists engaged were encouraged to document stories that will increase demand and support for TB services through ethical and responsible reporting. Professionalism, neutrality, honesty, and in depth and balanced investigation were among the core areas covered during the training.

By empowering the media, DNTLD-P and USAID's KCCB - Komesha TB Program aimed at reducing the stigma associated with TB while promoting the importance of TB treatment adherence, human rights issues, and existing services for TB diagnosis prevention and treatment.

The sensitization yielded positive results. There was increased coverage of TB during the world TB commemoration, particularly on local and community radio stations in the two regions. As a follow-up, the Komesha TB team will strengthen the relationship between individual county media outlets and TB coordinators, health promotion, and county communication teams geared towards achieving TB-free counties.

We have seen a closer collaboration with the media and the interest exhibited in TB matters. TB is preventable, treatable, curable, and treatment is free in all government, and faith-based facilities. It is information that is not known to many in the region. Through media friends of Komesha TB, we hope to create a synergistic solid bond that will highlight TB issues in individual counties while replicating this friendship to create friends of DNTLD-P among media outlets across the forty-seven counties. This will energize the fight against TB through a synergistic way that complements other TB ending strategies already in place leading to a TB-free Kenya."

Dr. Samson Muga, KCCB Program Manager



Ending Stigma & Discrimination: Why we should Speak Out

By Mbetera Felix | DNTLD-P & KCCB

The cyclical relationship between TB and HIV and how stigma weaves into them, making them intertwined, cannot be reiterated. Despite the achievements made so far in the fight against the two diseases, marginalization and discrimination against people who suffer from these diseases are still prevalent. In this edition, we have adopted a human rights approach with the best interests of eradicating this smirch. Through David Amoyi Omenda's testimony, we are encouraged to support all those affected and awaken our thoughts on how treating them with dignity and respect would contribute to their wellbeing for a better society.

My name is David Amoyi Omenda. I was born in Mumias East Sub-County, Kakamega County. I heard about HIV and TB for the first time in the year 2000. Back then, we used to get information and education on the importance of knowing one's HIV status early from radio and health workers, but we feared getting tested.

By the year 2005, HIV had ravaged communities, and many people were dying. I decided to get tested for HIV to know my status and make the right choices over my health. As challenging as it was I talked with my wife, and we reached an understanding to be tested together. We had no symptoms to show that we were sick and our health

was good, but the urge kept on growing, until that day when we had the test at St. Mary's Hospital in Mumias. The results were a shocker, it turned out we were both HIV positive. Despite being counseled before the test, nothing could limit the heavy impact of how the news affected us. As there was nothing we could do to change our situation, we took the first step of faith and our courage grew day-by-day with the realization that our condition wasn't the end of life.

We were initiated on HIV treatment. We adhered to our clinical appointments. My condition improved until early 2017, when I started experiencing body weakness. After a while, I started coughing, sweating a lot at night, experiencing shortness of breath and chest pains. I went to a chemist and bought Malaria drugs, but I never got well. My condition worsened, and I went to the hospital and explained how I felt, and a decision was made to test for TB.

I did a chest X-ray and my sputum sample was tested too. The following day, the doctor called me and requested I go to the clinic since my test results were out. I was informed that my sputum results came back positive for TB. This news was devastating because people used to say having TB and HIV was a death sentence. Many thoughts crossed my mind; was I going to live, and what would happen to my wife and children? The doctors counseled me, and many of my questions were answered and this was reassuring. I visited the hospital every week for the first two months and subsequently every two weeks until I completed my medication. During these visits, I would pick my supply for TB treatment, and they would also monitor my HIV treatment. After six months of TB treatment, I was declared cured and returned to my routine chores back at home since I felt strong and energetic.

Sadly, in October 2018, I was diagnosed with TB again, this time around, it was awful. My health was progressively getting worse and went to the hospital to be checked. I could not understand why, yet I was adhering to my HIV medication. I was tested for TB, the samples were taken to Kisumu and it took me three months before the hospital called for the results. Saying I was shocked when I was told I had TB which was worse than the one I had before is an understatement. I was diagnosed with drug-resistant TB. "Kwisha Mimi (I am finished)," I said to myself. My wife, who had accompanied me, could tell how worried I was, but just like my doctor Douglas, she reassured me that all would be well."

This time around, the treatment took longer than the six months of the previous TB episode. The regular visits to the TB clinic were disheartening. It was a tough and difficult journey considering I had to go to the hospital every day to take my TB medicine. My faith kept me going since my wife, and I are believers in the word of God. I adhered to my medication as advised by Dr. Douglas and realized I could lead a normal life despite my condition. With time I started getting better, so much so that in November 2019, I was cured and have been TB free since then.

I am grateful for the support I received from Rebeca, the TB County coordinator, and my doctors at St. Mary's Mission Hospital Mumias. They were concerned about my wellbeing, and during the entire duration of treatment, they closely

David Amoyi and his wife undertaking thier routine household chores.

follow me up and ensured I was okay. Denial of one's health status is the greatest difficulty affecting most patients. I have come across people with serious symptoms, but when I talk to them about getting tested, they tell me, "No, I would rather die. I don't want to get tested then be found with this or that problem as it would make me die fast."

There is stigma and fear among people, and many suffer without looking for help. Don't keep it a secret, fearing that you will be ridiculed. When you don't speak out, you will be more stressed, aggravating your condition. By sharing with people close to you, family and trusted friends, they will support you in any way they can and this counts a lot on the wellbeing. When I was diagnosed with TB, I informed my wife, my two brothers, as well as two friends. They were my support system. However, it was very hard for me when I was diagnosed with TB for the second time because I couldn't do anything. Being a farmer and very weak, you expect nothing from the farm, but through their support and the Ksh 6000 monthly stipend I got from Amref, I recovered well.

Currently, I can only see with one eye. I had a small swelling on my right eye, which started around April 2020. At that time, the first wave of COVID-19 pandemic was at its peak, and most of us feared going to the hospital. I thought it was as a result of dirt in the eye. I just bought some medicines from the chemist; unfortunately, it got worse. I was to be operated on early this year, but my blood pressure was too high, and by the time I went to Moi Teaching and Referral Hospital in March 2021, the growth had spread, and the only solution was surgery to remove it with the eye. My life's journey has not been an easy one, but I am grateful to God for the far I have come. Despite the challenges I have faced, I would like to work as a TB champion supporting the Komesha TB program to empower people in my community on TB and helping those who have the disease in their treatment journey giving them hope that TB has a cure, and one can live despite the challenges it poses to one's health.

Tribulations of a sex worker diagnosed with Tuberculosis

By Mbetera Felix | DNTLD-P

Peninah Nduku, 22-year-old, a sex worker in Likoni, Mombasa County, was clinically diagnosed with TB in early 2021. A spirited lady she is. She refers herself as a hustler or *bangaiza*, a term that connotes a sex worker.

The struggle with poverty and destitution gave her no option, having lost her parents at a young age. She needed to earn a livelihood and provide for her young child. Her health predicaments disrupted her business for a while. The TB bacteria was ravaging her lungs, destroying the cells that line the airways. She used to hear about TB from other people but never believed it existed.

"I had been to many places but had never contracted TB. I used to get a cold with cough but would never go to hospital, the disease would just get cured without visiting a hospital," she narrates.

"When I contracted TB, I coughed very persistently for almost one year. I would self-medicate through over the counter medicines and wouldn't get better. I didn't have an appetite and I weighed around 30kgs. I was very emaciated and some people looked forwards to the news of my demise," she adds.

Before diagnosis, Peninah used to drown herself in alcohol and pain killers. She continued with her hustle despite the persistent cough. Some of her clients were worried and kept requesting her to seek treatment. Her visits to a number of health centers led to misdiagnosis as well. There was a time she was told she had Pneumonia–the assumption being her nature of work exposed her more to cold–but after treatment her condition didn't improve.

During a routine screening by "Tibika" champions – trained community health volunteers whose members also include former sex workers, Peninah was sensitized and screened alongside her peers. She was listed as presumptive.

"I met with Mwanakombo, a Tibika champion, when they came for a community outreach. She interrogated me and I told her that I had severe chest pains with no one to help me with my little child. I am a hustler and would sleep where I hustled in Mangweni (chang'aa den). I don't have a place to stay," says Peninah.

> ***I didn't have appetite, and I weighed around 30kgs. I was very emaciated and some people looked forward to the news of my demise.***

Her sputum, however, turned negative. Upon further review by a clinician, a chest X-ray was recommended. Being a single mum, weak, emaciated and with no income, she wasn't able to afford the x-ray.

"I started fundraising through well-wishers. I would sometimes carry my child and walk with a form to ask for contributions from people. Other times, I would leave my child with my neighbor and hustle" she narrates.

With support from the Tibika champions, she was able to raise enough funds from her fellow sex workers for the X-ray. The results indicated that she had TB. She was shocked. She didn't believe she had the disease. She was in so much pain, struggling to breathe as well. The counselling and constant reminder from her friends that she needed help made her accept her condition and began treatment.

"I drunk a lot because of stress and confusion which started with the death of my parents" says Peninah.

With treatment came new hope in her life. April 2021 was her second month under medication. Following the doctor's advice, she hasn't taken alcohol since her diagnosis. The cough and the chest pains have subsided. She is slowly regaining her strength and very thankful to her neighbor who has been supportive as she recovers from TB.

She narrates that she was stigmatized even by some of her friends. "Some of my friends wanted nothing to do with me when they found that I had TB. I was hurt but I would tell them that anyone can get TB. I am better off having been tested and found to have TB which is treatable and luckily I am on treatment. One doesn't get TB because she is a 'bangaiza'. The disease is airborne, thus discriminating is wrong" she says. "When you are unwell and resort to buying medicines from the chemist, you don't know what disease you are treating. It is better to go to a hospital, get tested and assured of the accuracy of the treatment."

Peninah is on road to recovery and speaks openly about her predicaments. Her friends have also noticed she is now stronger and healthier since she started treatment. She is glad that she is living by God's grace and she is able to take care of her baby.

According to Sandra Wesa, North Star Alliance project coordinator, Tibika champions play a big role in finding missing people with TB. The champions are selected from the target groups that North Star is trying to reach out to.

North Star Alliance is a non-governmental organization whose mission is to provide quality health care to mobile workers and their communities. It has set up clinics in Mombasa, Emali, Mlolongo, Salgaa, Maai Mahiu, Burnt Forest and Malaba. Its network expands across Uganda, Tanzania and South Africa

North Star is supported by Amref Health Africa in Kenya to implement a Global Fund TB project in Mombasa County. The project, in partnership with the county governments, aims to find missing people with TB amongst mobile workers such as truck drivers and key populations.

Sandra Wesa, North Star Alliance Project Coordinator and Penninah Nduku during the interview.

North Star Alliance: Finding Missing TB Cases among Key Populations in Mombasa

James Mochama, Mvita Sub-County TB and Leprosy Coordinator and Margret Munyao, a nurse at Railways Health Center during a Technical Assistance at the facility.

> *As people move around for work or maybe leisure, there is the risk of spreading TB diseases. We thus reach to the mobile populations and offer them health services to reduce the spread of diseases.*

By Mbetera Felix | DNTLD-P

The 2016 Prevalence Survey findings ranked Mombasa as one of the high burden TB counties in Kenya. The National TB Program with supporting partners proposed a number of measures to bridge the gaps that were identified with the aim of finding missing TB cases.

One of the strategies identified was the Kenya Innovation Challenge Tuberculosis Fund (KIC-TB) which is geared towards finding the missing people with TB among the vulnerable and high risk populations. The strategy which is funded by the Global Fund under the strategic initiative and managed by Amref Kenya is designed to inspire innovation and ambitious, evidence-based programming approaches, in order to maximise impact in specific strategic priority areas.

North Star Alliance was selected to find missing people with TB in Mombasa and link them to diagnostic and treatment facilities in Jomvu and Changamwe Sub-Counties in Mombasa. Sandra Wesa, North Star Alliance Project Coordinator notes that the non-governmental organisation is based along the transport corridor. The organisation gives services to mobile populations which includes truck drivers, female sex workers, people who inject drugs (PWID), men who have sex with men and the corridor community.

"As people move around for work or maybe leisure, there is the risk of spreading TB disease. We thus reach to the mobile populations and offer them health services to reduce the spread of diseases," says Wesa.

The project has "Tibika" champions who are members drawn from the target population to support in screening and referring those presumed to be having TB to selected health facilities. Since the program started in August 2019, North Star has managed to notify 406 TB cases including 43 truck drivers, 265 corridor community and 94 Key populations.

One of the facility supporting the project is the Railways Health Center, a public dispensary which is a treatment site. The nurse at the TB clinic has been sensitized on the innovation as well as documentation and reporting tools and thus able to identify clients referred by North Star and manage those found with TB. She ensures that the patients adhere to treatment through phone call follow ups and reminding them of their appointments.

According to James Mochama, Mvita Sub-County TB and Leprosy Coordinator, the innovation has really impacted positively on TB case finding at the facility with over six-fold increase.

"The facility has diagnosed 20 patients between January and March 2021 of whom 19 were referred by North Star," says James. "Before North Star came, we used to rely on the facility's Active Case Finding and the number of patients had gone down. We have shortage of staff so we couldn't send our staff for outreaches. The pandemic and strikes have also affected service delivery. Through partnering with organizations like North Star, we are now able to deliver TB services to the community."

"Before we used to get like two new patients per month, sometimes none, but since we started working with North Star, the numbers increased.

Sandra Wesa, North Star Alliance Project Coordinator.

His sentiments echoed by Margret Munyao, a nurse who has been working at the TB clinic for more than four years.

"North Star is doing a good job because since they started supporting our TB department, we have increased the number of new diagnostic TB cases," she says.

"Before we used to get like two new patients per month, sometimes none, but since we started working with them, the numbers increased. We are getting between six to twelve clients a month, this implies an upward trend in TB case notification" she adds.

The project has however has faced a number of challenges. Some of the key populations such as people who inject drugs (PWID) live in informal settlements that are illegal. Their life is characterized with cat and mouse games with the police. More often, they are evicted from their shanties thus migrating and defaulting treatment. Whereas GeneXpert is free, majority who are clinically diagnosed cannot afford to pay for their X-rays. Due to their economic struggles, some find it hard to afford basic necessities including meals, and the little money they earn is channeled to drugs.

With truck drivers, they are always on the move thus put on differentiated care where they are given drugs that will last until their next visit. This makes it hard to monitor their adherence. Tracking drivers from the neigbouring countries is also problematic. Others switch off their phones making it hard to reach them.

The recognition of key populations and mobile workers makes them feel like they are part of the health care system. Thanks to the Global Fund, Amref Kenya, DNTLD-P and Mombasa County for supporting the initiative. It would be great to allocate more resource and replicate the project in all border counties for such initiatives.

Line Listing:
Improving TB Preventive Therapy Coverage in Homa Bay County

By EGPAF Team

Sometimes or most of the time, the source of TB infection for children is usually an adult in their household who has active TB. However, it is important to address latent TB infection (LTBI) because one quarter of the world's population is estimated to have LTBI and 5-15 percent of those will develop active TB disease over the course of their lives. This is usually within the first 5 years after initial exposure. LTBI occurs when a patient is infected with mycobacterium tuberculosis bacteria, but does not have active tuberculosis.

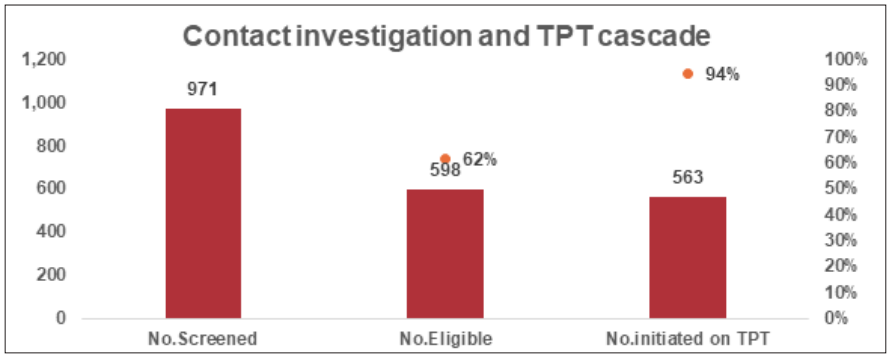
Children are particularly vulnerable because of rapid progression to active TB disease and greater risk of developing more severe forms of TB disease. Unfortunately, diagnosis of TB in children is difficult as young children often cannot produce sputum for testing. Even when a sample is taken for GeneXpert, the quantity of TB bacteria in samples from children is often lower than in adults, making TB more difficult to detect. Younger children and HIV-infected children develop forms of TB outside of the lungs, which are harder to diagnose as they rely on more complex sample collection techniques.

World Health Organization (WHO) Latent Tuberculosis infection (LTBI) guidelines 2018 recommend TB screening for all children 0-14 years old who are household or close contacts of adults with bacteriologically confirmed pulmonary TB and TB preventive therapy (TPT) for those who screen negative. Symptomatic screening should be conducted to all at risk population and TPT provided to the asymptomatic contacts using low cost preventive medication available to prevent cases of TB in children at risk of contracting TB.

Ministry of Health and Homa Bay County, in partnership with Elizabeth Glaser Pediatric Aids Foundation (EGPAF) CaP TB project aims to increase coverage and uptake of TPT among under 5 years' child contacts. Efforts have been on intensifying TB contact identification through listing and tracing to improve access and coverage of TPT.

No.	Year/ Period	Bacteriologically Confirmed TB	Expected number of <5 Yrs for TPT (3:1)	No. of Children <5 Years started TPT	% age coverage
1.	2019	860	286	375	131%
2.	2020	792	264	662	250%
3.	1Q, 2021	232	77	143	186%

TPT enrolment achievements 2019 - Q1 2021 Homa Bay County.



Contact investigation and TPT cascade achievement April 2019 to December 2020 from 24 CaP TB supported sites.

According to Dr. Mboya Phelix, Country implementation manager CaP TB, contact investigation is an important key intervention both for TB active case finding and scaling up TPT and requires investments in human resource and building their capacity.

His sentiments were also reaffirmed by Mr. Carolly Omondi, Homa Bay County TB and Leprosy Coordinator who noted that contact listing is conducted at the time of TB treatment initiation in the contact management register, conducted by clinicians and supported by cough monitors who inquire about the patient's household contacts.

"Clients usually meet the providers who diagnosed and initiated them on treatment and tend to be more open as a rapport is developed. This strategy has been observed to yield more contacts compared to when it's done in the course of TB treatment. There has been progressive improvement in uptake of TPT among the under five years as measured by the standard ratio of 3:1," he notes.

Uptake of TPT is however compromised by factors like perception of health care workers to exclude active TB disease through symptom based screening; sub optimal identification of eligible contacts; and weak systems to facilitate follow up of referred cases from the community. These factors should be addressed at every service delivery point to ensure optimal TPT implementation.

It is also important that patients and caregivers receive education and participate in psycho-social support groups to ensure retention in treatment.

Younger children and HIV-infected children develop forms of TB outside of the lungs, which are harder to diagnose as they rely on more complex sample collection techniques.

ELIZABETH GLASER PEDIATRIC AIDS FOUNDATION

TB Contact Tracing in Hard-to-Reach Areas:

A Gateway for Active Case Finding and TPT Initiation - Case of Turkana County.

According to 2020 National TB report, Turkana had the second highest TB burden of 413 children. There was need, therefore, to intensify efforts of reaching these infected children as well as testing their contacts while administering therapeutic prevention treatment to protect the uninfected contacts from contracting TB as others precautionary measures are taken into force.

CHVs conducting contact investigation in a village in Turkana County.

By EGPAF Team

Hard to reach areas by definition is the true reflection of the situation in Turkana County, the vastness of its geographical areas, tough terrain, pastoralists communities moving from one place to another and the scorching effects of the sun among other characteristics makes it qualify as a hard-to-reach area by all measures in relation to contact tracing.

According to 2020 National TB report, Turkana had the second highest TB burden of 413 children. There was need, therefore, to intensify efforts of reaching these infected children as well as testing their contacts while administering therapeutic prevention treatment to protect the uninfected contacts from contracting TB as others precautionary measures are taken into force.

The efforts of EGPAF-CaP TB Programme in Turkana have played a critical role in capacity building of the CHVs on community contact tracing, health education on TB, making referrals for TB index cases to facilities for screening, investigation, rapid diagnosis and treatment and initiation of children aged five years and below for TPT.

Above all preventive measures of TB, contact tracing remains superior of all measures of prevention, due to the threat that the known index case exposes the rest of his/her contacts.

Our interest to know the effectiveness of the currently established contact tracing model for TB patients led us to Napeikar Village, situated 50Km from Lodwar town. After two hours' drive through a tough terrain, high temperatures and dusty rough roads, we eventually arrived at Napeikar Village at 12 noon. We were warmly received by Mr. Peter Ekiru, a Community Health Volunteer serving in Napeikar Village. Mr. Ekiru led us to visit one TB client that he has been closely monitoring.

"My role as a CHV is identification of those exhibiting symptoms of the diseases and referring them to hospital for testing and treatment. CHVs also monitor progress of the TB patients as they undertake medications, advising patients on recommended nutrition practices and importantly contact tracing" noted Mr. Ekiru.

Mr. Ekiru emphasized on the key role played by the contact tracing exercise, noting "a known index case pose a very great threat to the people they interact with on daily basis. These people can be the ones at the household level, workmates or other acquaintances, thus contact tracing plays big role as a major milestone in the fight against TB in here in my village"

Upon reaching Mr. Daniel Ekai's homestead, we were happily received by his family. After few minutes later, Ekai joined us and we could see the joy on his face. He had been under medication for the past three months and we could tell that he was progressing on well.

The middle-aged man told us, "I was leading a normal life until June 2020 when I started coughing a lot, lost weight and would sweat at night. At first, I thought it was normal cold and as usual I sought some antibiotics. The condition did not improve, the cough persisted for almost a month prompting me to seek advice from a CHV".

The CHV told him that he could be having TB and thus recommended more screening. Ekai couldn't believe this. He wondered how he could have contracted TB. 'To the best my knowledge TB is closely associated with HIV and poverty. The last time I checked I was HIV negative, it was so difficult to come to terms with the possibilities ahead. I had nothing to do but to comply with the advice from my Village CHV", says Ekai

CHVs meeting at KMH with the Turkana TB County coordinating team.

At Lodwar County and Referral Hospital (LCRH), a number of tests were done on him. And this heavily weighed down on him, he never imagined one day he would be a TB patient. He wondered if TB was treatable, the cost he would incur or if there is a specific lifestyle he could adopt to get better. The psychological support he received at LCRH strengthened him.

'My attitude and inner strength to bear the treatment was fortified by the counseling that I was given at the health facility and I carried all my medicines home with a resolve to taking them all', says Ekai. From then the CHV has been closely monitoring Ekai's situation and according to the client, the CHV has been very supportive.

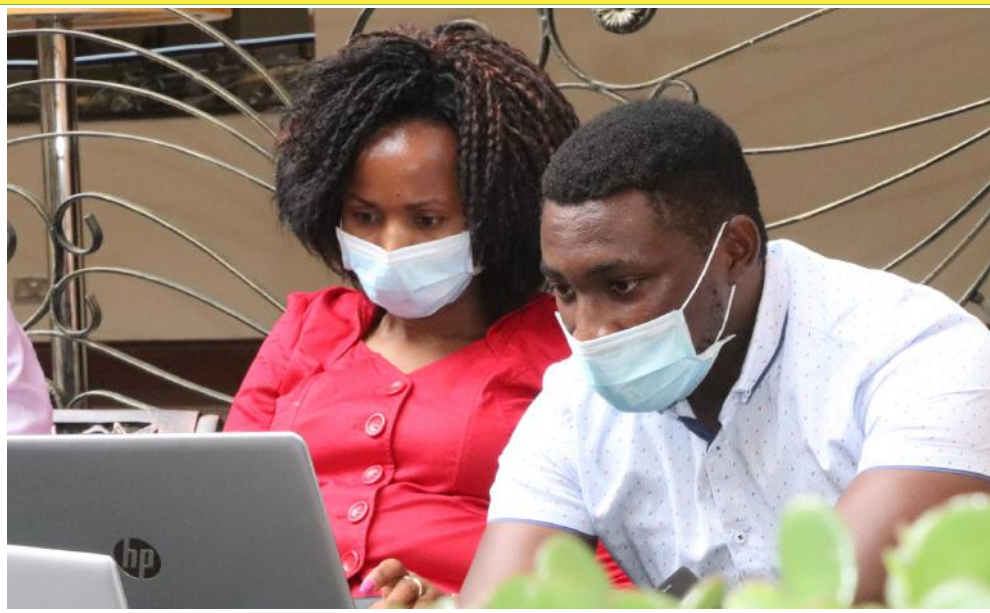
The CHV, Peter Ekiru notes that Ekai has stayed positive since the time he was suspected to have TB up to now when he is about to complete his medication.

Peter Ekiru says contact tracing is another major thing that the CHVs do, commending the Ministry of Health for equipping the CHVs with this skill-set that helps protect the people that the clients interact with. Clients are educated by the CHVs on the significance of contact tracing. Ekai says he was adequately briefed that all people close to him; family and friends were to be tested to find out if they had been infected. He was also reliably informed that they were going to be given some medication that would prevent them from easily contacting TB. 'Personally, I took that initiative positively, I like the idea that the contact tracing model was much concerned with the protection of those close to me, noting no member of his family nor his friends were found with TB', says Ekai.

Peter Ekiru, the CHV observes that community perception towards TB in the village are changing. He says, initially people used to believe that if you have TB then definitely you were HIV positive. This misconception perpetuated stigma but has changed with awareness created as portrayed by the willingness of people like Ekai in seeking treatment and openly talking about their condition. 'This adoption of good health seeking behavior shows that efforts expended in the fight against TB by the Ministry of Health through the National TB Program as well as the concerted efforts of partners in this cause are bearing fruits', says Ekiru.

National Regional Desk Meeting at Lake Naivasha Resort- Nakuru County

Dr Stephen Wanjala, Deputy Chief of Party, USAID TB ARC II - CHS.



Lillian Kerubo and Elvis Muriithi from DNTLD-P representing Eastern Region.

Dr Elizabeth Onyango, former Head of DNTLD-P addressing participants during the meeting.

Eastern Region team setting 2021 targets.

Kakamega KCCB-Supported TB Targeted Outreach

Hazel Oyungu, from KCCB-KOMESHA TB coordinating screening in Mumias town.

Kakamega County Director of Health (In a red tie) being taken through the screening process in one of the sites.

A presumptive client being screened using a mobile digital X-ray machine.

Technical Assistance in selected facilities in Mombasa and Nairobi Counties

(From left): Anne Masese (USAID TB ARC II - CHS); Evelyn Vilita (KEMSA), Ndeche Sanga (former CTLC Kilifi); Jackie LImo (DNTLD-P); Geoffrey Anaya (former SCTLC Kaloleni), Bosire Duke (RCO Bomu Medical Centre (BMC) Rhoda Pola (DNTLD-P); Edward Beja (SCMLC Kaloleni), Godana Mamo (USAID TB ARC II - CHS) at BMC Kilifi.

Jackie Limo from DNTLD-P offering Technical Support to a lab technician at Miritini Health Centre, Mombasa.

Cosmus Mwamburi (CTLC Mombasa), Barnabas Kisang (SCTLC Jomvu) and Rhoda Pola (DNTLD-P) at Miritini.

(From left): Julliet Kajuju (SCTLC Embakasi); Anne Masese (USAID TB ARC II - CHS); Aggrey Okumu (CO), Mercy Nyangaresi and Drusila Nyaboke (DNTLD-P) at SOS Buru Buru.

Christine Mwamsidu and Mercy Nyangeresi at Dandora EDARP.

REPUBLIC OF KENYA

MINISTRY OF HEALTH

Division of National Tuberculosis, Leprosy and Lung Disease Program,

Afya House Annex 1st Floor | Kenyatta National Hospital Grounds
P.O. Box 20781-00202 Nairobi, Kenya | **Cell:** +254 773 977 440
Website: www.nltp.co.ke | **Facebook:** NTLDKenya | **Twitter:** @NTLDKenya