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TiBa

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YES! WE CAN End TB in Kenya

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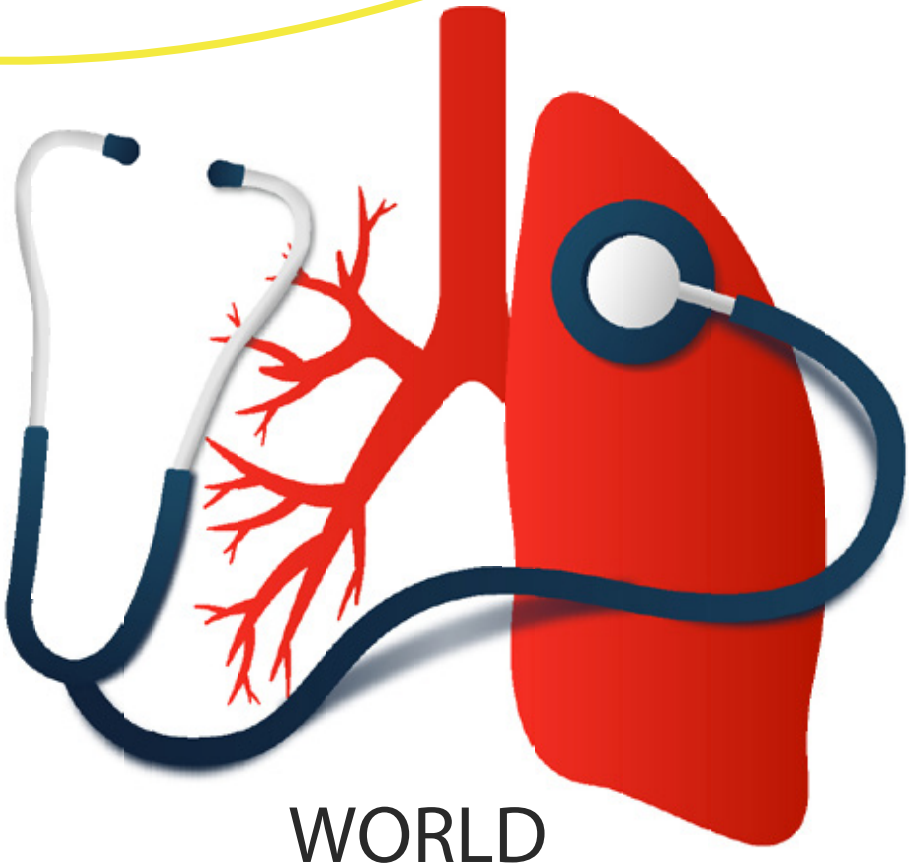

WORLD TUBERCULOSIS DAY

March 24th

YES! WE CAN End TB in Kenya

inside

editorial team

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

Word from...

Dr. Patrick Amoth,
Ag. Director General for Health

Dr. Jacqueline Kisia
Ag. Head, DNTLD-P

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

The 6th Kenya International Lung Health Conference (KILHC) brought together medical practitioners, public health specialists, scientists, scholars, community-based organizations, and other stakeholders from across the globe to learn and share experiences that promote lung health.

The conference took place in our beautiful Mombasa County. The motivation however, wasn't the breathtaking surroundings at the coastal region but the scientific merit of the conference. It attests to our commitment as a ministry that stakeholder's engagement and new scientific collaborations is core in achieving our goals.

The burden of lung disease in Kenya remains a public health threat in both adults and children. As a ministry, we strive for all persons in Kenya to access quality health services without facing financial catastrophic cost. Therefore, the conference was timely and resonated with our health and development goals.

The theme for the Conference "Healthy Lungs for a Better Future" explored different ways of approaching and tackling lung diseases in line with our health strategy. The experiences and best practices, including new innovations and technologies that will help us win the war against TB and other lung diseases were outstanding.

I was impressed with the packed scientific programme which captured most up-to-date content in the field of lung infection including some of the top researchers not only in Kenya but globally.

As a Ministry, we are convinced that the KILHC offers an excellent opportunity to boost young respiratory researchers' scientific careers. It also provides creative means for networking and building friendships for life. We commit to support the next conference and hope to see more young researchers participate in future years!

Dr. Patrick Amoth, EBS

Ag. Director General for Health

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

The National Tuberculosis Program is developing a new 2023-2028 National Strategic Plan (NSP) for Tuberculosis, Leprosy and Lung Health. The development of the key document is important as it will help guide the allocation of resources, prioritize interventions, and coordinate efforts towards improving lung health at a national level.

The process which began last year has brought together key stakeholders from national and county governments, development and supporting partners, private sector, civil societies as well as affected communities. The development will see the team set specific and measurable goals and objectives, identify gaps in knowledge and services, and outline strategies to address TB, lung health and leprosy issues in the country.

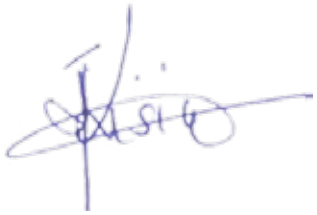
As a program, we pay attention to our needs. It is clear that having a national strategic plan will lead to better health outcomes, reduce the burden of TB and lung diseases, and improve the overall well-being of our population.

Kenya has a high burden of respiratory diseases such as TB, asthma, and chronic obstructive pulmonary disease (COPD) which further exacerbates lung health challenges in the country. Over the years, we have developed several initiatives to improve lung health and management.

As a Program, we provide TB care and treatment services through public and private sector health facilities across the country. Directly Observed Treatment Short-course (DOTS) has been an infective strategy for monitoring of patients to ensure they complete their full course of TB treatment. Through collaborative interventions, we have improved in the management of TB/HIV co-infected patients despite the country being high burden. Also, we have established MDR-TB management centers in several regions to provide diagnosis and treatment for patients with MDR-TB. The introduction of TB-LAM rapid diagnostic test which allows for rapid diagnosis of TB in patients with HIV has yield key results as we endeavor to give best care to our clients.

The development of the NSP is in line with the new World Health Organization (WHO) guidance that supports national strategic planning for TB response. The guidance encourages the use of a people-centric focus and highlights the importance of government stewardship and ownership. It also promotes alignment with national health strategy and other health programmes whilst emphasizing on multi-stakeholder and multi-sectoral engagement as one of the key steps for multisectoral accountability for TB.

We are grateful to our supporting partners. It is our hope that the strategic plan will translate global, regional and national commitments to implementable targets and activities at national and subnational level.



Dr. Jacqueline Kisia

Ag. Head, National TB Program

Pic: Courtesy

History of Tuberculosis in Kenya: A Story Retold 55 Years on

By Dr. Joseph Aluoch FRCP, EBS

The background of Tuberculosis in Kenya is of some interest, particularly to the writer. Its history is not very clear, but earlier medical workers did show that infection with TB has been prevalent along the Kenya coast line due to early contact with Europeans, Indians and Arab traders. It took some time for tuberculosis to spread in the hinterland, with the earliest records coming from post-mortem records in the late 1920s; even then, it was thought that TB was uncommon in Kenyan Africans.

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Pic: Courtesy

1978 IDH.TB LABS TB Programme Staff Bidding Farwell to Dr. Pierce Kent, Former Director TB Research and Handing Over to Dr. Joseph Aluoch.

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My first contact with a TB patient was in childhood, when one of my many aunts suffered and succumbed to the disease in 1951. I remember clearly the withering process she went through and the coughing up of blood.

From a clinical point of view, I encountered TB in my second year in university during clinical ward rounds and when I had a chance for vocational employment in 1964 at the Nyanza General Hospital in Kisumu. Interestingly enough, my father was working at Nyanza Hospital. He was in charge of TB services in the Central Nyanza District at the time. I travelled with him for field work and was able to observe TB screening services, which were carried out under tree shades using mobile X-ray vans that were taking mass miniature radiography (MMR) for screening for pulmonary TB. The team would also undertake ZN stain of sputum and examine it with a light microscope in the field.

My major encounter with TB patients was in 1971, when I was posted to the Infectious Diseases Hospital (IDH) in Nairobi as a medical officer (M.O). These were interesting days, with many advanced TB cases with extensive cavitation in the lungs and often with massive empyema. One would detect the smell of the TB patients as you approached the gate of IDH in Nairobi.

The treatment was for 18–24 months, and the pill burden was heavy, usually 1–2 months of daily streptomycin injections as an inpatient followed by oral tablets that included Isoniazid three tablets and para-aminosalicylic acid (PAS) six (6) tablets, ethionamide later thioacetazone, taken once a day for up to 2 years. The introduction of streptomycin for one month, often as an outpatient, and Thiazine as one tablet for 12-18 months improved the treatment regimen.

I proceeded to the United Kingdom (UK) for specialization, first at the Brompton Hospital Institute of Chest Diseases, then on to Edinburgh, City Hospital under the renowned TB specialist Prof. John Crofton. In 1975, I returned to Kenya as consultant in charge of IDH Nairobi and chest consultant in charge of the Kenyatta National Hospital's chest clinic. Just before I left the UK, the World Health Organization (WHO) had initiated a pilot program for the National TB Control Program in Kenya (NTP). There were two districts selected, Machakos and Muranga, for the pilot projects, which proved successful, and when I came back, the late Dr. Koinange, who was my great mentor had established the department of Communicable Diseases Control under which the NTP was housed. I was nominated to be in charge of NTP as well as be the deputy director of communicable diseases.

Apart from two doctors seconded from the Netherlands, there were only two other doctors in full-time TB services, one at Port Reitz Hospital Mombasa and one at the Institute of Infectious Diseases in Nairobi. This shortage of healthcare workers in TB prompted me to work out alternative. I drafted a curriculum for clinical officers to be trained on TB and take charge of TB services at the district level. I designed a nine-month training course at the Medical Training College (MTC) which fortunately and

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happily adopted the programme. After discussion with the Directorate of Personal Management, it was agreed that this cadre, which I named COTULEP, short for Clinical Officers for Tuberculosis and Leprosy Services, would be considered for appropriate remuneration upon qualification.

Apart from lecturing at the university, I was also in charge of the COTULEP training program at the MTC. At the same time, I was deputy director of communicable diseases at the newly occupied Afya House (1976), national coordinator for the National TB Control Program, and a consultant at the IDH and at the Kenyatta National Hospital (KNH). Don't ask me how I managed, but I did.

In the 1970s, TB services in Kenya were greatly augmented by the TB epidemiological and chemotherapy research activities coordinated by the British Medical Research Council, TB and Chest Diseases Unit at the Brampton Hospital (MRC/TCDU), London. TB surveys done in Kenya are on record; but what stands out most internationally are the short-course chemotherapy studies for pulmonary tuberculosis that were spearheaded by the Tuberculosis Centre (EATIC) in Nairobi, which later became KETIC, where I was director for 10 years after the break of the East Africa Community, and the Respiratory Disease Research Unit of KEMRI.

The short-course chemotherapy regimen developed in East Africa; Kenya, Uganda, Tanzania and Zambia namely 2SHRZ and later 2EHRZ—remains the standard TB chemotherapy forty years down the line with little if any modification. I had the opportunity to be the first to try directly observing short course chemotherapy, currently DOTS, With the help of an Italian social worker, Analine Toneli (who was brutally murdered in Somalia). We established a TB Manyatta in Wajir, where the diagnosed sputum positive clients were kept for six months with directly observed TB treatment. It was difficult to follow up on the Somali patients due to their nomadic nature. TB patients were frequent. We kept TB patients in the Manyatta for six months, the duration of short course treatment, The Kenya Association for the Prevention of TB was established in 1968 and chaired by Dr. White, a Nairobi City Council employee. It was mainly dormant until 1976, when I returned from attending the International Union Against TB, Africa Region Conference in Tunisia, where Kenya was nominated to host the next conference in 1978. I was President-Elect for Africa at the time. A successful conference was held in Nairobi in June 1978 under my presidency.


Pic: Courtesy

Dr Aluoch, giving remarks during the 24th International Congress of the Union Against Tuberculosis, held in Brussels, Belgium on 5-9 September 1978.

The face of tuberculosis in Kenya took a serious turn in May 1984, when the first case of HIV was diagnosed. Subsequently, HIV cases kept rolling in and infectious diseases hospital in Nairobi became the isolation center for all HIV patients. This was understandable given that TB was present in more than 90% of HIV cases, particularly extrapulmonary TB (pleural effusion TB, adenopathy TB, and meningitis abdominal TB), which suddenly shot up and mycobacteria-negative PTB increased.

Severe Steven Johnson syndrome, which occurred in over 50% of the HIV TB cases presented to IDH at that time. This was, in fact, the most lethal, and it was later determined that this was due to an adverse drug reaction to Thioacetazone in Thiazina, which was then Kenya's standard national regimen for Tb treatment. WHO recommended the withdrawal of Thioacetazone from anti-TB regimens.

In 1986, I retired from public service but continued to have an interest in TB services, particularly in the development of the TB society and participation in public-private partnerships in TB services. ■


Pic: Courtesy

Delegates during the 24th International Congress of the Union Against Tuberculosis.

Mombasa family wins battle against TB

With the support of Mlaleo Constituency Development Fund Health Center staff, the family was able to overcome the initial shock of their diagnosis

By Mbetera Felix | DNTLD-P

Nancy from Mshomoroni narrates how her two and a half-year-old son battled TB. The visits she made to numerous clinics bore no fruit. She carried her son's pain. His neck was swollen. He had rashes, was coughing constantly, and had lost his appetite completely.

"I had taken him to another facility where an x-ray had been taken on the swollen neck, but nothing was found. We were given antibiotics and advised to go back home, wait and see what changes would happen to the swelling on his neck," she says. "This is when I started buying over-the-counter drugs from chemists, but my son's condition never changed."

At some point, a pharmacist said her son had a blood infection. He encouraged her to keep on giving her son the prescribed medicines, saying that with time, he would be well.

"There came a time when my son started vomiting whenever I gave him food. It was disturbing, but I resolved to keep on giving him his medication, hoping that he would get well.

Vincent, who is 2.5 years old, fell ill in March 2022. His parents struggled for a long time without knowing what exactly ailed their son until he was diagnosed with TB in October 2022. They were only three at home. They kept wondering where their son got TB.

> **"Before treatment, my son was dull, but now that has changed. He is very active and playful."**

The mother resolved to visit Mlaleo Health Center, where he was diagnosed with TB and put on treatment immediately. After a short while on medication, his condition improved. The swelling on his neck disappeared; he regained his appetite

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Baby Vincent at Mlaleo Constituency Development Fund health center.

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and became active and playful. Upon contact tracing, his father Charles Mulami was diagnosed with TB as well.

According to Mulami, he underwent untold suffering before he was diagnosed with TB. It all started with fever and would feel very tired and sweat heavily at night. His persistent cough was worrying. Like his son, he visited a number of pharmacies, but the more he took over-the-counter drugs, the more his condition worsened.

"My child whom I was close to became ill. When he was found with TB, the doctors requested that I accompany my wife and child to the hospital as we were staying together. I was diagnosed with tuberculosis after being tested. I was put under treatment as well, and so far, I can say that my condition has improved." Mulami says.

He perceives that his exposure to TB occurred during his short stay at Kajiado Prison.

"The person I shared a cell with had signs of TB based on what I know now," he adds, "but I didn't know it was TB because I hadn't seen a person who had TB before." When his wife informed him that their son had TB, he said to himself that he also had TB. His son might have gotten TB from him. He had his own fears and never wanted to be tested. He is thankful that the healthcare workers screened, tested, and counseled them about TB.

Even though he feels okay, he is still taking his medication as advised by doctors.

"I never knew that one could get cured of TB. "I assumed that once a person was diagnosed with tuberculosis, they would be on medication for life and would never recover," he adds.

He has since changed this perspective because his condition has improved after being on medication for a short while. Within two weeks of treatment, he had started seeing changes. The persistent cough and fever that had troubled him vanished. Due to stigma, he only shared his status with his mother and sisters.

> **"The person I shared a cell with had signs of TB based on what I know now..."**

Together with his wife, they offered him immense support. His friends knew nothing about his condition. He feared being judged negatively.

His predicament still clouds his happiness. With the persistent cough, it was nearly impossible to work in the kitchen as a chef. The scorching heat and smoke offered no remorse.

"I had to quit my job. It has now been two months. One day I was serving a customer, and I felt like coughing but tried not to. It was in vain; I ended up coughing for quite some time, and the customer asked me if I had a cold or if it was just normal for me to cough like that. I was very embarrassed. but I told him I was sick, and his reply was that I wasn't supposed to be handling food. That was the moment I decided to quit that job. It has become very difficult to find another job," he says.

The family, however, is grateful to God and the healthcare workers. They confess that they didn't know that TB is treatable and curable. The empathy and counselling gave them hope. Nancy is now happy that her son and husband are making good progress in their recovery.

"It is apparent he has made remarkable improvements. Before treatment, my son was dull, but now that has changed. He is very active and playful. He is still on treatment, but with the changes I have seen him make, I believe that by the time he is through with his treatment, he will be completely healed. Before, I couldn't believe this, but through my experience, I have a testimony," she says.

Her message is that people should promptly go to hospital when they start experiencing TB signs or symptoms that they are not sure about. They should not fear getting tested, as accurate treatment saves one from agony and incurring a lot of unnecessary expenses. What amazes them more is that TB treatment is free at Mulaleo, a Government facility. Their happiness knows no bounds. They applaud the Government's initiative to provide free TB services to TB patients. ■

Paediatric TB Training Yielding Results

By Mbetera Felix | DNTLD-P

My name is Nicholas Kovari, a clinician at the Mlaleo Constituency Development Fund health center. I am based at the TB clinic. Vincent presented at the outpatient clinic with a history of left lateral neck swelling and coughing. His history and examination revealed that he had been coughing for a month. He had significantly lost weight and he had a very poor appetite. I noted that the left lateral swelling was non-mobile, slightly tender, and had some discharge.

Some vascular bruits were detected throughout the chest during auscultation. I asked if he had previously received medication or if they had sought medical attention for medication. They had been in and out of a number of health facilities with the same problem. Sadly, they were just given treatment, but the symptoms still persisted.

On assessment, we clinically diagnosed Vincent with TB. His chest x-ray was suggestive. The next day, we started him on anti-TB medication. Currently, there is a significant improvement. The neck swelling is no more. He has gained some weight and he is very playful.

His father was found to be positive through contact tracing and initiated treatment after counselling as well. We have been following up on the whole family.

A lot needs to be done in the fight against TB. All services in our facilities, including clinics such as child welfare, nutrition, and other departments, must be integrated. We need to advocate for paediatric screening as much as possible across all departments. Even in the outpatient setting, we need to intensify and fast-track active case finding.

According to our observations, many children are suffering silently from tuberculosis, and we have been missing them. Some are malnourished. The training on paediatric TB management came in handy in the diagnosis. There is a need for more capacity building. Since the training, we have intensified TB active case finding, especially in pediatrics, in our facility. Through integration, we are getting a lot of support from the nutrition department, where most of the malnourished cases are reported. Those suffering from malnutrition are referred to our department for further assessment and possible identification of TB.

The best the ministry has done is make diagnosis and treatment of TB free and provide support with regards to diagnosis. Unfortunately, some clients come from low-income families and cannot afford proper nutrition. They should be identified and supported throughout the treatment, whether through nutrition or making it easier for them to come and pick up their medication. We also need elaborate ways of tracing treatment defaulters. With support, I think it will be good. ■

Personal Experiences; Beating TB Amidst Stigma

By DNTLD-P Team

Rahma Wario and Guyo Kula Bora could have lost their lives to Tuberculosis (TB) if not for the expertise and extra effort offered to them by the health care workers. Both, from the Borana community in Isiolo sub-county in Isiolo county, inspire hope in the midst of recovery and rediscovering oneself.

In March 2021, Wario was diagnosed with spinal TB. She was feeling sick from a common cold. Self-medication with over-the-counter treatments did not help. For two months, her plight was characterised by coughing and frequent vomiting. She was in extreme pain. Her body became weak, which forced her to quit her manual job. Due to the recurrent backaches, Wario lost her mobility and was admitted to the Isiolo County Referral Hospital, where she was given a wheelchair and discharged.

The persistence of her mother and Mohammed Abkhur, a TB champion, was her first step into treatment and recovery. The champion linked her with health care workers at the TB clinic, commonly known as the Manyatta at the County Referral Hospital. Since she could not walk to the facility, Mohammed collected her sputum and delivered it for testing. She was later diagnosed with spinal TB and initiated on treatment.

At 24 years old and weighing 28kg, Wario had given up on herself. Stigmatization from the community broke her heart into pieces.

"Some people could not share utensils with me... I thought I was going to die. If not for Mohammed and the doctors, I could be dead. I was very thin and feeble," she narrates. "I was counselled. The doctor assured me that TB is treatable and curable, and everything is free. I was relieved."

Rahma Wario and Mohammed Abkhur, a TB champion in a health talk at Rahma's home

The TB champion made certain she took her medication and then porridge. Two months into TB medication, Wario could walk to the hospital for refills and routine checkups.

"Through continuous support and encouragement from the doctors, I am who I am today," she says.

She was advised to eat vegetables and fruits as nutritional supplements and now weighs 51 kg and happily wants to add more.

Just like Wario, 51-year-old Guyo Kula Bora, a husband and father, was diagnosed with TB. He believes smoking increased his chances of getting the disease and has since quit.

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> **"Through Some people could not share utensils with me... I thought I was going to die. If not for Mohammed and the doctors, I could be dead. I was very thin and feeble."**

Cont'd from pg 12

"It all began when I fell sick during covid. I was very scared," he explains. Guyo suffered from extreme fatigue, high fever, frequent coughs, and loss of weight.

He visited the Isiolo County Referral Hospital for TB testing with the help of a community volunteer. The sputum test confirmed he was drug resistant TB positive.

Through contact tracing, his family members were tested, and they were all negative. Guyo was immediately initiated on treatment and received routine monthly reviews.

Due to stigma, only a few members of his family knew his status. The guidance and encouragement from the health care workers motivated him to not give up. Today, he is better, healthier, and stronger, albeit still under treatment. He is strong enough to visit the TB clinic by himself for a review. Guyo continues to sensitise fellow men about TB, especially against stigmatization, and refers them for testing.

Both Wario and Guyo were beneficiaries of the government's financial support program for 4 months. Currently, they have both resumed work and are in great shape, advocating for TB screening among their peers.

Frank Marangu, the Isiolo subcounty TB and Leprosy coordinator also serving at the facility as a TB clinician, equates the success to improved quality of care. "Patients like Wario and Guyo are better today because of support and the team effort, especially through trainings on TB guidelines, best practices, and clinical reviews," he explains.

Over 50% of health care workers at the facility have been capacity-built greatly increasing active case finding. "We have weekly engagement community forums with TB patients at the manyatta through our senior nurse to create awareness on the disease and reduce stigma," he says.

"Patients like Wario and Guyo are better today because of support and the team effort especially through trainings on TB guideline, best practices and clinical review."

A team of TB experts lead by Isiolo town Sub County TB Coordinator Frank Marangu, USAID TB ARC II Upper Eastern Regional Officer Duncan Barkebo and Health Workers at Isiolo County Referral Hospital TB clinic.

Hope and Acceptance in Healing from TB as a Family

Irene Mirika at her home in Igembe South, Meru County during the interview.

By Nisa Masibo | DNTLD-P

Irene Mirika, 40, a single mother of three and manual laborer, is a former TB patient and now a champion. She hails from Igembe South, Meru County. Her condition began with a persistent cough and later, a rapid loss of weight. The initial diagnosis at a private hospital was Malaria.

To add to her quandaries, her 17-year-old daughter was also unwell during the same period. She was sent from school for checkup. When she took her to Nyambene Sub County Hospital, she tested positive for pulmonary TB.

When contact screening was done, Irene and her second born daughter also tested positive for TB. The three were all put on anti-TB drugs. "My oldest daughter took her medication with her back to school because she was feeling better," she says.

Irene speaks fondly of the help and extra attention they received from Esther, a community volunteer spearheading TB care on adherence, nutrition and contact tracing in their village. "Esther used to visit me and my children to follow up on our dosage and ensure we were taking our medication. She also encouraged us," she says. "She challenged me and I am now a champion like her"

As a result of her work, Irene has already referred clients to TB clinic, including her cousin, Caroline Kawira, who was diagnosed with TB. Kawira, a 34-year-old mother of two and a trained teacher works as a manual laborer, Her most difficult challenge prior to diagnosis was caring for her sick and partially paralysed brother.

"It began with coughing, and I looked weak...," she narrates. After a series of self-medications with lemon and ginger, she got worse. At some point, her sick brother lamented about her weight and deteriorating health. "I was scared for my health."

She even isolated herself and her family due to the stigma she was facing from the community. "People used to say I was bewitched and I was going to die," she says.

> "The success is as a result of active case finding, contact tracing and community education."

Caroline also advocates for increased attention in educational institutions. She anticipates a future where schools will be part of ending the TB disease through available and accessible TB health education, screening, and treatment.

Irene looks forward to a community that will be TB-free and healed just like her and her daughters. "I am glad my first-born daughter is well and active in community initiatives."

Annfridah Kawira, the Igembe South Sub County TB and Leprosy Coordinator, notes the success is a result of active case finding, contact tracing and community education.

"Through Irene, the subcounty and Nyambene Subcounty Hospital received six more family contacts with TB, three of them being children and her cousin and nephew," she says. ■

Status of National Tuberculosis Epidemic and Response

Quarter Four 2022

Drug susceptible TB

25,878
Number of TB cases Notified

86%
Treatment success rate (All forms)

6%
Case fatality ratio

3,344
Number of children

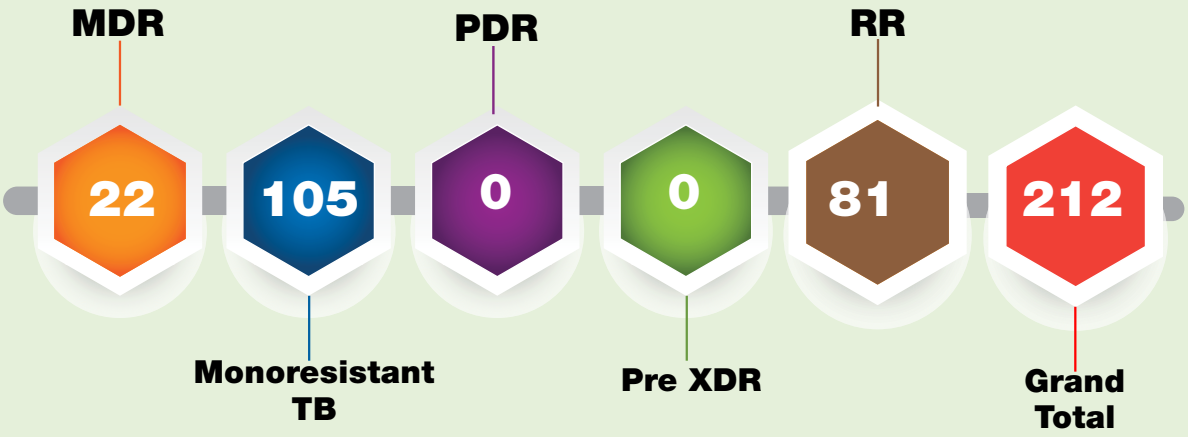
53%
Previously treated (DSTB) with DST results

23,360
Number of DSTB with Known HIV status

5.4%
Lost to Follow Up

96%
Proportions on ART

Drug-resistant TB



Leprosy

31
Number of Leprosy Cases reported

TB Prevention Therapy

4,544
Children <5 initiated on IPT (contacts of bacteriologically confirmed cases

Reaching the unreached populations: Public-Private Mix

Geoffrey Muemi, presenting TB tools and branded awareness materials to a private facility in Meru County.

By DNTLD-P Team

Collaborations between the government, counties and implementing partners aimed at ending diseases in Kenya continue to yield positive outcomes across the country. Key focus on Tuberculosis (TB) is to ensure all persons are reached and access universal health coverage in TB care and treatment.

Among the many interventions behind ending TB is the Public-Private Mix (PPM). It focusses on empowering private facilities to ensure they are involved in notifying TB patients in the private facilities.

In Meru County, PPM was rolled out in 2020 in three sub counties; Imenti South, Imenti North and Igembe South. The program was extended to all the nine sub counties in the second year targeting private clinics, institutions and stand-alone laboratories.

According to Geoffrey Muemi, the county PPM Coordinator, Centre for Health Solutions (CHS)-USAID TB ARC II activity, health care workers (HCWs) in the private sector were trained with specific attention to service delivery.

"With this project, we have done mapping of facilities, provided training of HCWs from all the mapped facilities, and established contacts and networks," he says.

"As a county, we are currently at 21% in terms of private data distribution. The target is to get to 30% by the end of 2023 and I am confident in our commitment in capacity building of health care workers, and performance we shall get there," he adds.

20 laboratory technicians were trained on FB microscopy in December 2021, covering Meru and Nyambene Sub County hospitals. The training, Geoffrey explains, was aimed at fixing the challenge in gene-Xpert use.

The sub county is relying on sample networking. So far, the partnership between the County and Gundua health center, a private facility in the area has yielded results. Four DR-TB patients were notified and initiated on treatment.

The PPM Coordinator highlights on the need for combined efforts on TB care and treatment, advocacy, creation of awareness and training of more HCWs in the region.

It is challenging, for example, to screen and reach all contacts in farms which are protected and have established clinics with only a nurse to care for and treat patients. According to the Geoffrey, some farms are not willing to provide extra health care for workers especially those with TB.

"Sick bays in flower farms do not have the technical know-how of patient care. Patient stigmatization has also made it difficult for patients in the region to disclose TB status," he adds. ■

Engaging Nurses Association in the Fight Against TB through Public-Private Mix

National and county teams supported by Amref Health Africa during the conference.

National and county teams engaging nurses during the conference.

The National Tuberculosis Program (NTP) in collaboration with Amref Health Africa engaged nurses and other health stakeholders at the 64th Annual Nurses Scientific Conference (ANSC) and General Meeting in Bungoma County.

During the three-day conference at St Patrick Pastoral Centre Kabula, NTP through the Public-Private Mix (PPM) desk empowered the stakeholders on the importance of partnerships in the fight against TB.

According to Nkirote Mwirigi the PPM focal person at the NTP, the engagement of associations reduces malpractice by fostering evidence-based TB diagnosis and treatment in line with the national TB guidelines.

"Nurses play a big role in the health sector. At the very least, they can create awareness on TB and screen all people who seek care at various service delivery points. Successful TB control is embedded in partnerships and not just between private and public health professionals. It encompasses quality public health practices, goodwill from professional associations, political uphold, continued funding and technical support," she adds.

Engaging all relevant healthcare providers in TB prevention and care through PPM approaches is an essential component of NTP's and WHO's End TB Strategy. The Program continues to engage all providers and strengthens the contribution of the private sector through the PPM.

The PPM approach entails diverse collaborative strategies between the Ministry of Health-National TB Program and the private sector with an aim of identifying people with TB symptoms as soon as possible, no matter where in the health system they first visit, and establishing mechanisms that allow for efficient and high-quality diagnosis and treatment.

The conference under the theme "A Voice to Lead – Invest in Nursing and respect rights to secure global health" brought together over 10,000 delegates from around the country with a mission to promote excellence in Nursing and Midwifery. NTP is pushing for screening of TB among all people seeking care and uptake of TB Preventive Therapy among healthcare workers. ■

Global Meeting of the Working Group on PPM for TB Prevention Care

Participants during the Publlic Private Mix global meeting at Trademark hotel, Nairobi.

By Mbetera Felix | DNTLD-P

Kenya in partnership with World Health Organization (WHO) – Global Tuberculosis (TB) Program co-hosted Global Meeting of the Working Group on Public-Private Mix (PPM) for TB Prevention.

Dr Andrew Mulwa, Ag. Director of Medical Services, Preventive and Promotive Health officially opened the meeting on the 2nd of November, at Trademark hotel, Nairobi. The meeting brought together national TB program managers, policy makers, representatives from the private sector and affected communities, civil society, academia, field experts, international technical partners and development agencies to share experiences and discuss strategies to accelerate public-private sector engagement efforts.

Globally, there has been notable progress in the fight against TB with 54 million lives saved since 2000. The burden of TB disease and death due to TB remains enormous. In 2020, up to 3 million of the estimated 10 million people with TB worldwide were "missed" by National TB Programs. Two-thirds of them are thought to access TB treatment from public and private providers who are not engaged by the National TB Program.

UPTO 3 Million
of the estimated 10 million people with TB worldwide were "missed" by National TB Programs.

> **"Engaging all relevant healthcare providers in TB prevention and care through PPM approaches is an essential component of WHO's End TB Strategy. The emphasis is the building of strong linkages with all healthcare providers."**

Engaging all relevant healthcare providers in TB prevention and care through PPM approaches is an essential component of WHO's End TB Strategy. The emphasis is the building of strong linkages with all healthcare providers.

The goal of the working group meeting was to create a venue for learning and knowledge exchange in order to increase private sector involvement in TB control. The meeting also offered a platform for participating countries to share and learn about best practices in private sector involvement in TB management. In addition, the achievements in private sector

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involvement in TB control, important new insights, and knowledge gaps were showcased.

The private facilities engaged in PPM and visited by the delegates during the conference included Rhodes Chest Clinic, Nyumbani Diagnostics, Mater, Coptic and St Mary's Hospitals.

1. *Anne Masese from USAID TB ARC II receiving a gift at the end of the conference.*
2. *Dr. Anastasia Nyalita - CEC Health, Nairobi County, Benson Ulo - Amref Global Fund Grant Manager, Dr. Lorraine Nyaboga - Chief Party, USAID TB ARC II in a pannel discussion.*
3. *Dr. Ndirangu Wanjuki - Country Director, Amref Kenya.*
4. *Wendy Nkirote, NTLD-P PPM focal person.*

5. 6. and 7. Delegates following proceedings during the conference.

8. *Delegates visiting St. Mary's Mission Hospital, one of the PPM facilities in Nairobi.*

Aligning New National Strategic Plan with the National Health Strategy

Principal Secretary, Ministry of Health State Department for Public Health and Professional Standards, Dr. Josephine Mburu.

By Mbetera Felix | DNTLD-P

Principal Secretary Ministry of Health State Department for Public Health and Professional Standards, Dr. Josephine Mburu, in February, officiated over a stakeholder's meeting on the development on the 2023-2028 Tuberculosis, Leprosy and Lung Health Strategic Plan.

The Strategy which will draw from lessons learnt will guide the country to build on the milestones towards elimination of TB by 2030.

The PS called for ownership and alignment of the Strategic Plan with the overarching National Health Strategy. "Through ownership, the strategy will offer direction for the next five years. Let us come up with interventions that are resilient, sustainable and community centered," she urged.

The PS advised the forum to deploy strategies for early case detection, cutting transmission cycle at the community and screening through community health care workers to accelerate attainment of the Afya Bora Mashinani as envisioned by the Kenya Kwanza Government.

She committed to mobilize resources to ensure successful implementation of the strategy.

The exercise brought together key stakeholders from National and County Governments, partners and community representatives.

PS. Dr. Josephine Mburu addressing participants during the development of the NSP.

From left - Dr. Omesa Eunice, WHO-Kenya, Stephen Anguva, Netork of TB Champions, Dr. Maurice Maina, USAID Kenya, Dr. Josephine Mburu, PS Health, Johnson Sakaja, Governor-Nairobi County, Dr. Jacqueline Kisia- NTLD-P, Dr. Michael Macharia, KOMESHA TB, Dr. Lorraine Nyaboga , USAID TB ARC II, Dr. Sam Muga, USAID TB ARC II.

From left - Dr. Nazila Ganatra, Ministry of Health, Dr. Jacqueline Kisia- NTLD-P, Dr. Omesa Eunice, WHO-Kenya and Aiban Rono-NTLD-P during National Strategic Plan data synthesis workshop in Naivasha

From left - Beatrice Kinaya, Dr. Jane Ong'ang'o, Jacqueline Limo, Drusila Nyaboke, Nelly Mukiri and Rhoda Pola during the data synthesis workshop.

Going Social in the Fight Against TB

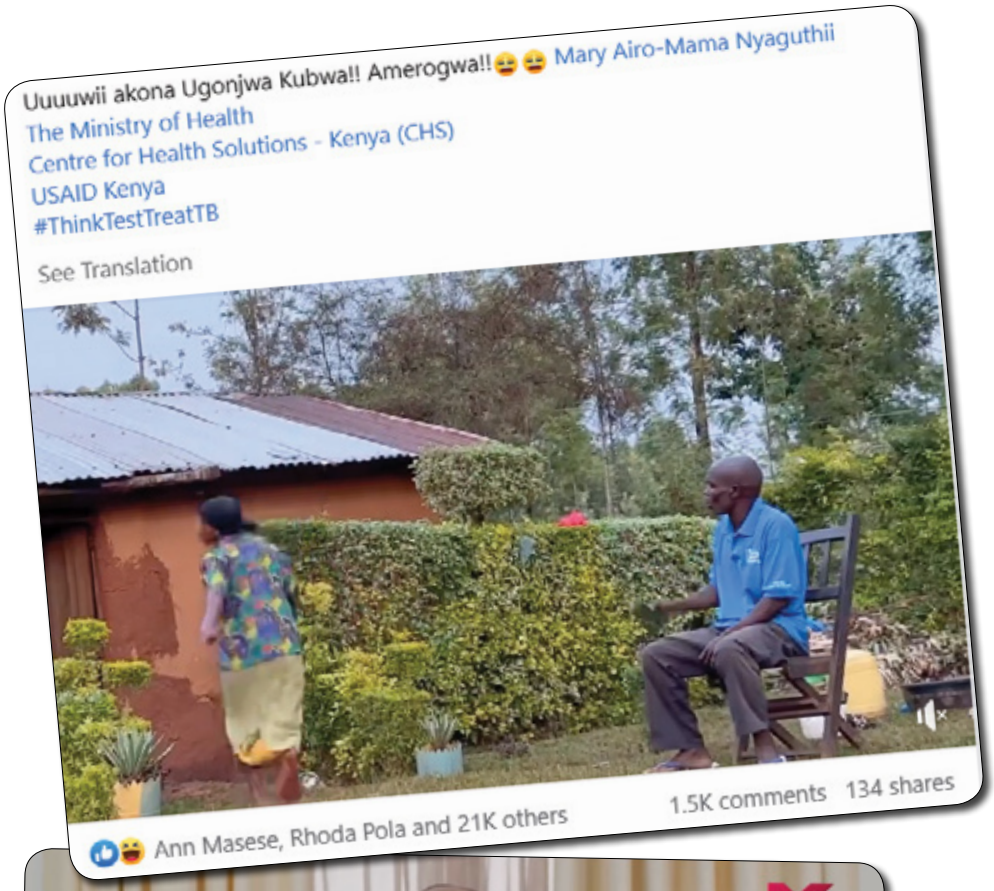
Social media use in public health education plays a key role in removing physical barriers that traditionally impede access to healthcare.

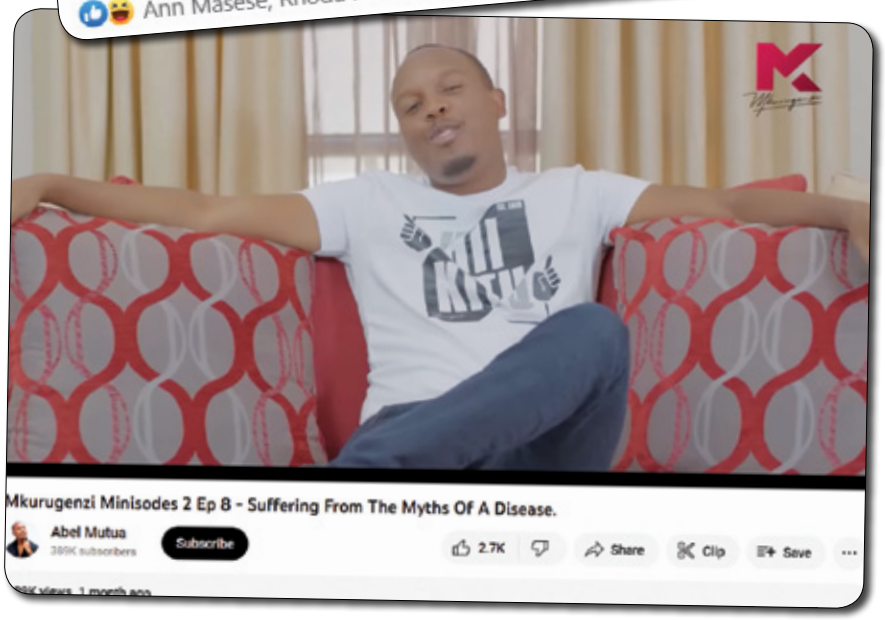
This year, the National TB Program in collaboration with USAID TB ARC II engaged three content creators; Jaymo Ulemsee, Awinja and Mkurungezi as part of the social media campaign strategy to optimize both online and offline consumer health experiences.

The Program has enhanced its updated communication and advocacy strategies by going social. It has increased social media access to TB information that is both actionable and impactful for diverse audiences. The approaches used by the aforementioned content creators has been engaging and the results astonishing.

A number of champions came out to share their stories and the support they got in the networks through comments were encouraging.

There is need for accurate and preventive health education that is easy to understand and accessible. The reality is, social media is providing new ways to connect more directly to our audiences and smaller communities in individual channels. Through well-developed and targeted social media campaigns, the Program can assess and develop effective health strategies to reach the unreached and improve the health and quality of our societies. Lets Go Social.





Wycliffe Poet 1 month ago

I got TB when I was a student, second year at KENYA INSTITUTE OF MASS COMMUNICATION. I was partly in Homabay (for college holidays) and partly in NAIROBI (when school opened)....I was diagnosed with the disease when in Homabay, started the medication Homabay then transferred to Mariakani Cottage Hospital South B. Nlimeza dawa religiously for 6 months (religiously) daily, na mwishowe tests zikafanywa nikapatikana negative. I have to say the hospitals are concerned. Hadi hua unapewa unga ya uji kilo sijui ngapi ...mob sana....I AM WELL TODAY.

Show less

107 Reply

3 replies

Mark Gachiri 1 month ago

This very important information cause Ile science iko huku inje inaletanga stigma even leading to Depression.Asante Mkuru

2 Reply

KEVIN AVEDIE 1 month ago

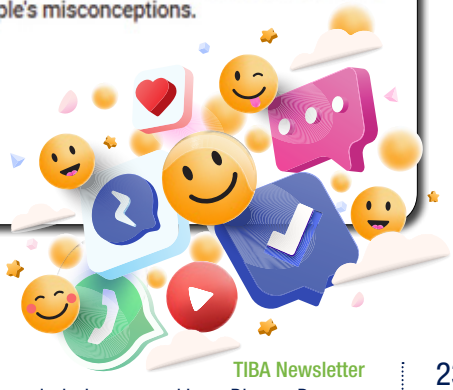
I can relate to everything mkurugenzi says. My mother and fatger died of TB in 2001 and 2003 respectively. But most people alleged that they died of HIV ama walirogwa. I wish they suffered it today, things could have been very different. It saddens me whenever I hear of TB. Let's encourage people to seek medication for the disease. Someone can easily die due to people's misconceptions.

2 Reply

1 reply

Camila Nkwenti 4 weeks ago

Pole....



Olal Ledon and his family. Olal tested positive for TB, and after contact tracing his three children were also found to have the disease. They have all been initiated on treatment and are progressing on well.

Ending TB through Contact Tracing: Olal's Story

By Diana Munjuri | USAID TB ARC II

When 29 year old , Olal Ledon, a father of three and a teacher by professional started having cough that was often accompanied by chills in September 2022, he associated the symptoms to pneumonia.

"I thought my routine of riding the motorcycle to and from school early morning and late in the evening when it is cold had led me to having pneumonia. I bought over the counter medicines and stopped riding the motorcycle and instead used a public service vehicle to commute to school," Olal shares.

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He was wrong because instead of improving, his health kept on deteriorating as days passed.

'This progressed to having night sweats. I would wake up to wet bed sheets and also started losing weight at a high rate," Olal adds.

Seeing the suffering their kin was going through, his family persuaded him to visit the nearest hospital, Homabay County Referral Hospital.

At the hospital he was screened at the outpatient clinic and referred to the TB clinic due to the symptoms he was exhibiting.

"This really scared me. I thought people would laugh at me if they found out I had TB. They would say I am also HIV positive. I even contemplated going back home but my siblings who had accompanied me persuaded me to go to the TB clinic," Olal says.

He adds, "Contrary to my thoughts, the health workers at the TB clinic received me warmly. I was not laughed at, or shown any form of stigma. Upon examination, I was requested to produce sputum that was taken to the laboratory."

Olal's sputum sample was analyzed in a geneXpert machine, the most advanced rapid test for the diagnosis of TB and rifampicin resistance when compared to smear microscopy and culture. After one hour, the test results were out, confirming he had TB.

"When the news came back I had TB, my heart sunk. I knew this was the end of me as I had heard people say people with TB die. Seeing the worry in me, the clinician counselled me. He began by explaining to me what causes TB, how it is spread and it is a treatable and curable disease. He also explained to me the importance of completing treatment and coming for the regular drug refills and reviews. I was also tested me for HIV which turned out negative," Olal shares.

After the diagnosis, he was immediately initiated on treatment. His household members were also screened and tested for the infectious disease whose bacteria spreads when a person with active TB disease coughs, laughs and or sneezes and his/her close contacts inhales the droplets.

"I was requested to bring my wife, children and brother in law whom we were staying with for screening and testing. Only my wife turned negative, the rest had the disease. They were counselled and put on treatment like I was," Olal says.

Due to treatment adherence and regular clinic reviews, they have all been responding well to treatment.

"Since we began treatment, we all have been progressing well. Personally, the symptoms are gone. I no longer cough, sweat at night or have chills. My weight has improved from 52 kilograms to 65 kilograms. My children look healthy also. None is coughing or having lethargy as was the case before treatment," he adds.

Olal is grateful to everyone who has supported him and the family in the treatment journey.

"Were it not for the timely free treatment received my family would have been wiped out by this disease and people would have blamed it on witchcraft or curse. My sincere appreciation goes to the health workers and the donor for supporting us. You saved my family and I. Keep up with the good work you are doing."

> **The National TB Program expanding and strengthening TB diagnostic network to increase timely use of quality TB and drug resistant TB treatment to patients as well as ensuring proximal access to laboratory tests for all DR-TB patients.**

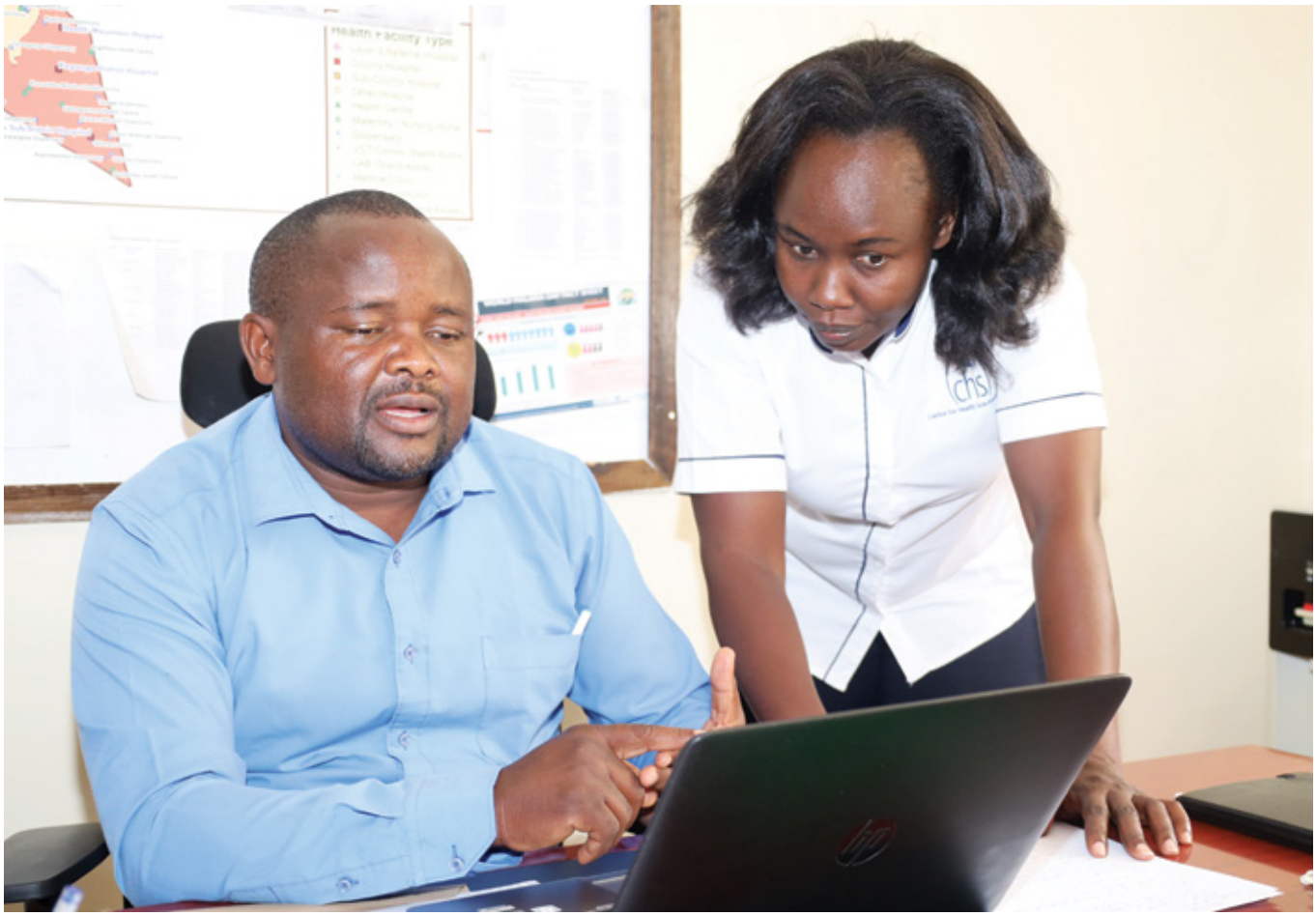
> **Were it not for the timely free treatment received my family would have been wiped out by this disease.**

USAID TB ARC II activity collaborates with the Ministry of Health National TB Program and various county governments to ensure TB patients like Olal access early diagnosis, treatment and are provided quality of care. This is by strengthening health care providers and facility performance in TB treatment and management through didactic classroom sessions, Extension for Community Healthcare Outcomes (ECHO) sessions, and facility based continuous medical education sessions trainings, on job trainings and clinical reviews.

Additionally, the National TB Program expanding and strengthening TB diagnostic network to increase timely use of quality TB and drug resistant TB treatment to patients as well as ensuring proximal access to laboratory tests for all DR-TB patients.

It is currently bundling 189 GeneXpert machines countrywide in public facilities on monthly basis for patient results to reach the clinicians and sub-county TB coordinators on time for patient management; supporting 48 GeneXpert machines super users for basic equipment maintenance in improving functionality of the machines hence enabling results flow in and processing on time in 223 GeneXpert machines sites; and by supporting sample referral of all TB patients culture to the National TB Reference Laboratory and KEMRI – Kisian Laboratory, and DR-TB patients sample referral to Lancet Laboratories for baseline and routine hematological and biochemical laboratory investigations to evaluate potential adverse drug effects in line with National TB Program guidelines.

Fighting TB in Migori County: A Story of Efficient Collaboration



David Nyamohanga, CTLC Migori County and Stella Omulo, USAID TB ARC II Nyanza Regional Officer.

By Diana Munjuri | USAID TB ARC II

Over the years, Migori county, one of the top four high TB/HIV burden counties in Kenya, has recorded poor TB diagnosis and treatment outcomes. The county has been reporting a significant number of TB cases, averaging between 1000-2000 per year. This is, however, changing as a result of the county government's political goodwill, commitment, and collaborative effort in the fight against TB with the National TB Program and its partners, the CHS - USAID, funded Tuberculosis Accelerated and Response II (TB ARC II) activity.

"Before our collaboration with the National TB Program and CHS-USAID TB ARC II in the fight against TB, which entails coming up with sustainable patient-centred approaches, we experienced various challenges in the provision of TB services, " says David Nyamohanga, the Migori County TB Coordinator.

1000 - 2000

Average number of cTB cases reported in Migori county per year

The challenges they experienced included:

- Inadequate knowledge of TB identification, treatment and management among health workers.
- Limited resources to conduct capacity building and training activities for health workers.
- Delayed rollout of new approaches in the county, e.g. new TB tools, new regimens, and new treatment formulations.

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David recalls over time they have managed to tackle these challenges through the following ways;

Training of Health Care Workers

Capacity building of health care workers to provide quality TB services through didactic on-the-job training, regular facility-based and virtual continuous medical education, including sessions on the new integrated TB curriculum, paediatric TB, and non-injectable TB regimen, among others.

Continuous Medical Education (CMEs) at the sub-county and facility level by targeting sub-optimally performing facilities and engaging them has enabled the Health care workers gain skills and knowledge in TB case finding, diagnosis, and management, thus better quality of care to the patients.

This has resulted in a recorded increase in the index of TB suspicion among health workers and number of TB cases being reported and initiated on treatment. The county's quality of care for TB patients and treatment success rate has improved to 92% as per 2022 data.

Support for Timely TB Diagnosis

TB diagnosis in Migori County was a challenge; despite having access to GeneXpert machines these diagnostic tools were not fully utilised. Through a technical working group formed with support from the National TB Program and CHS-USAID TB ARC II, David and his team zoned the machines and networked the samples to the various hubs.

The county was further supported with a super-user who assists in the maintenance of the GeneXpert machines. All the GeneXpert machines are bundled monthly to provide real-time results to clinicians for early diagnosis and routine treatment follow-up to patients.

Initiation on TB Treatment

Efficient initiation of treatment and management of TB patients has been realised through the provision of reporting tools and TB medicine across the county. "In instances where a certain drug is lacking, a phone call or email to National TB Program and or CHS-USAID TB ARC II suffices and the matter is handled swiftly,' David says.

Management of DR TB Patients

The county is supported to conduct clinical review meetings where various experts physically come together to review drug-resistant TB patients, case by case hence effectively monitoring the progress and response of a patient to treatment and in case of a challenge handling it as a team.

Targeted Outreaches

The National TB Program and CHS-USAID TB ARC II supported the county in carrying out targeted TB screening activities among TB vulnerable populations like the miners in the county hence finding missing TB cases and treating them.

Documentation of Best Practices and Lessons Learnt

Some health workers providing TB services in the county have been supported in documentation of TB best practices through research papers some of which have been presented in various forums including scientific conferences for adoption and scale up in TB control.

Logistical Support

The County and Sub county TB coordinators are provided with transport reimbursement to provide TB technical support supervision to various facilities and on job training.

"CHS-USAID TB ARC II goes to the extreme of providing its project vehicle and personnel to provide support supervision in the hard the reach areas. They have supported the distribution of commodities from the overstocked facilities to understocked ones. They also have supported the distribution of reporting tools across the County. None of our facilities lacks TB reporting tools and with capacity building of our health workers, they are able to utilise them effectively improving data for decision making," David says.

The county's collaborative effort with the National TB Program and USAID TB ARC II has played a pivotal role in making TB control relevant. TB control has been effectively prioritized at all levels, way from the county to the facility level.

"To ensure the sustainability of TB services in the county even after the exit of partners like CHS-USAID TB ARC II, there has been an increased allocation of TB resources. We are also partnering with other sectors and line ministries to ensure collaboration, David shares.

He adds, "Through the journey we have walked over the years, we are seeing positive results. Our indicators have improved, improving our county ranking as one of the best performing counties in TB control. In 2020, we were ranked position 19 but now we are position 2 nationally according to the National TB Program 2021, TB score card."

"Teamwork is pivotal in everything we do in health care. The synergy felt between our collaboration with the NTLD-P, other implementing partners and CHS-USAID TB ARC II is the drive towards the accelerated fight against TB in Migori county," David concludes. ■

"Teamwork is pivotal in everything we do in health care. The synergy felt between our collaboration with the NTLD-P, other implementing partners and CHS-USAID TB ARC II is the drive towards the accelerated fight against TB in Migori county."

Inter-Ministerial Collaborations in the Fight Against TB in Tharaka Nithi County

(From left) USAID TB ARC II Upper Eastern Regional Officer, Duncan Barkebo, Maara Health Centre Nutritionist and Maara STLC, Martin Mawira receive foodstuff from Muthambi Sub County Deputy County Commissioner, Anthony Gatoni.

By Diana Munjuri | USAID TB ARC II

Tharaka Nithi County is one of the Arid and Semi-Arid counties in Kenya. Multi-dimensional poverty remains high in this county with the majority of the residents struggling to afford basic needs such as health, water, sanitation, nutrition, and housing. Though there has been recorded progress in the fight against communicable diseases like TB in the county, the disease burden is still high.

"TB disease is still a problem in this county. Our fight against the disease is often met by many obstacles, nutrition being among them. In Maara Sub County hospital for example, the 2021 TB case audit and management showed majority of TB patients had a challenge in nutritional support," says Martin Mawira, the Sub County TB and Leprosy coordinator and Maara Sub County hospital incharge.

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To address some of these challenges, the county TB unit in collaboration with the National TB Program and USAID TB ARC II activity has been engaging other sectors. One such sector is the Ministry of Interior where they lobbied for food support from the Ministry's existing relief food program to cover drought seasons for the needy and vulnerable populations.

"When they presented the challenge they were facing to us, we saw the need to collaborate as the health providers have direct links to the people in need, in this case the patients. Since then we having been supporting Maara Sub County hospital with dry food stuffs to give to TB patients with malnutrition," says Anthony Gatoni, Maara Sub County Assistant County Commissioner.

The collaboration has born fruits has there has been recorded improvement in TB outcomes in the facility.

"Since we began the feeding program, there has been a decrease in death from 8.4% in 2021 to 4.4% in 2022. Our treatment success rate has also improved to 92% in 2022 from 91% in 2021," Mawira shares.

> **"Since we began the feeding program, there has been a decrease in death from 8.4% in 2021 to 4.4% in 2022"**

Purity Kanana is one of the collaboration beneficiaries shares how the food support received assisted her in completing TB treatment.

"Before I started receiving the food stuff from the TB clinic, sometimes, I would skip taking the TB medicines because anytime I tried taking them on an empty stomach I would vomit, have a burning session in the stomach and lightheadedness," Kanana shares.

She adds, "The food support was very beneficial as I didn't skip medicine due to hunger. It helped me take the medicines as advised, to get cured and that's why I am here today."

The collaboration has extended its scope on TB control behold food distribution. During community dialogue meetings, health workers are given an opportunity to educate participants on TB prevention, diagnosis, treatment, myths and stigma.

USAID TB ARC II activity, Upper Eastern Regional Officer Duncan Barkebo calls for scale up and adoption of this best practice in other counties and countries facing similar challenge.

"The fight against TB should not only be limited to Ministry of Health. There's a need to involve other sectors who when effectively engaged will strengthen TB prevention, treatment and management as the disease is a threat to each and every one of us," Barkebo advises. ■

Accelerating the Fight Against TB in Kenya through the Roll Out of the Latest Diagnostic Tools

Esther Munywoki, Laboratory Manager, Mikinduri Sub County referral hospital prepares a sample for analysis by a Truenat machine placed at the facility by the Introducing New Tools Project to support TB diagnosis.

By Diana Kagwiria | USAID TB ARC II

Meru county is ranked among the high TB burden counties in Kenya. Among the areas reporting a high prevalence of the disease in the county is Mikinduri ward located in Tigania central sub county.

Until last year, the sub county lacked TB diagnostic tools. TB patients had the option of either travelling for kilometers to the access TB testing services at the Meru County level five hospital or go back home to wait for their fate as they unknowingly spread the disease to their contacts.

When the Ministry of Health National TB Program in collaboration with USAID funded Introducing New Tools Project

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(iNTP) rolled out the latest innovations in diagnostics, treatments, and digital health technologies to strengthen TB care in Kenya in July 2022, they prioritized the sub county.

"Through National TB Program and iNTP support, Mikinduri Sub County Referral Hospital was assessed for capacity to accommodate molecular diagnostic tool - Truenat assay. The objective was to help increase access to TB testing given the long distances patient had to travel to access molecular test and the fact that sample referral was still not optimized," says Benedict Mutuku, Sub County Medical Lab Coordinator .

He adds, "Once the assessment confirmed that the facility was in a position to accommodate the Truenat assay machine, the laboratory staff were trained to carry out TB tests using the machine."

The TB testing equipment has been embraced. By September 2022, 192 patients had been tested with 41 testing positive for TB and one drug resistant case reported.

"Before the installation of the Truenat, patients would wait for results for more than a week given that we used to refer samples or we would refer the patient to the level five hospital which is kilometers away. After the machine was installed, we have 1 – 2 hours test turnaround time for all the samples received," says Esther Munywoki, Laboratory Manager, Mikinduri Sub County referral hospital.

48-year-old Simon Murungi had been unwell for one month with a cough, chest pains, night sweats, loss of weight, and fatigue.

"I visited various private hospitals and was given antibiotics with no improvement. On 31st August, 2022, I went to Mikinduri Sub County referral hospital where upon examination, the clinician sent me to the laboratory. At the laboratory I was asked to produce a sputum sample for testing. Testing was done and after one hour the results were out indicating I had TB," says Simon.

Simon adds, "I was counselled on what causes the disease, how to preventing spreading the disease to others ,and the importance of adhering to treatment, and initiated on treatment the same day. Since I began treatment, I have been improving as days go by. I am no longer coughing, having chest pains, night sweats or fatigue. I feel more healthy and I have gone back to my causal work to provide for my family."

The battery powered Truenat machine has not only been beneficial to the patients like Simon but also the health workers at the facility.

"The adoption of the use of the Truenat has reduced our workload. Our testing rate has increased to 80 – 100 tests per month compared to 40-50 while we were using the microscope. The efficiency brought by the machine provides us an opportunity to attend to other activities like reporting and documentation which was a challenge due to lack of time as a result of high work load," says Esther Munywoki, Lab Manager, Mikinduri Sub County referral hospital.

"The adoption of the use of the Truenat has reduced our workload. Our testing rate has increased to 80 – 100 tests per month compared to 40-50 while we were using the microscope. The efficiency brought by the machine provides us an opportunity to attend to other activities like reporting and documentation which was a challenge due to lack of time as a result of high work load."

Absalom Wambua, Mikinduri Sub County hospital manager and TB clinic incharge notes that the adoption of the truenat machine has improved the management of drug resistant TB patients in the facility.

"One of the biggest advantage of Truenat machine is that it is able to detect the drug resistant TB bacteria. By having the machine in the facility we are not only able to carry out drug resistant TB tests which is very rampant in the area and initiate patients on treatment early hence controlling disease progression in the patient's body and spread in the community, we are also able to monitor drug resistant TB patients treatment response and manage them effectively. Previously, we encountered a lot of challenges as we used to refer their samples to Meru County Level hospital, the nearest geneXpert site and wait for days before for the results," says Absalom.

Through iNTP, Kenya has also adopted the following latest WHO approved tools for TB screening, diagnosis, and prevention;

- Treatment courses for TB preventative therapy: 3RH regimen to benefit 13,000 persons
- Eight digital chest X-ray equipment kits with accompanying software for the computer-aided detection of TB
- Two interferon-gamma release assay (IGRA) machines to aid in the detection of TB infection
- Medication sleeves for 5,000 patients with TB as part of digital adherence technology and,
- Connectivity solution for all TB diagnostic equipment known as TIBULIMS.

Turkana Adopts Latest Technology in the TB Fight

Turkana County government with support from development partners has adopted an ultra-portable digital chest X-ray machine for the diagnosis and treatment of Tuberculosis (TB).

The county TB prevalence rate stands at 18 per cent, higher than the recommended 15 per cent by the World Health Organization (WHO).

This is even as residents from areas presumed to be high disease burden areas in Turkana Central and Turkana West benefit from free TB screening and outreach activities.

According to the County TB Coordinator, Dr Job Okemwa, computer-aided digital chest X-ray is an important tool for triage (a process to identify risk and select the most appropriate care pathway when a person presents with symptoms) and proactive screening for pulmonary TB in adults, children and people living with HIV.

"Alone, it does not lead to a confirmative diagnosis of TB, but it is a highly sensitive tool that can pick up early forms of TB, including in people without symptoms. Accurate and fast information at this first step can potentially reduce the number of tests and costs associated with confirmatory testing," Dr Okemwa told Healthy Nation.

He said they rely on computer-aided detection to interpret chest X-ray images of patients either as a replacement for human readers or as a first triaging step to enable more people to be screened for TB.

The chest X-ray machines emit lower doses of radiation and can be packed into backpacks and thus are so easily transported into the field to facilitate the detection of TB in hard-to-reach populations that currently face barriers in accessing services.

Mr Jonas Ngasike, Turkana Central TB coordinator, said the outreaches are aimed at finding available TB cases so that patients can enrol for free treatment. "We are also creating awareness about the infectious disease with assistance from community health volunteers to get more people to get tested," he said.

Last Saturday, Canaan village residents turned up in large numbers for TB screening following successful community mobilisation and sensitisation.

"I have been coughing for over a year now. I'm here to be screened because I've never been tested for TB before," said Epungure John, a resident.

The county government is partnering with World Relief, the National Tuberculosis, Leprosy and Lung Disease Program and Amref Health Africa in Kenya to reach out to more targeted settlements in Lodwar, Kalokol, Natira, Kakuma and Nameyemen.

In August, healthcare workers in the county had identified villages neighbouring Uganda and South Sudan and the densely populated Kakuma Refugee Camp as high TB burden areas. They noted that patients have been discontinuing treatment whenever they migrate to South Sudan or Uganda in search of water and pasture for their livestock.

At the refugee camp, the team cited overcrowding as a major challenge in the fight against TB, noting that gains have always been reversed with cases of reinfections.

Article first published on https://nation.africa/kenya/health/turkana-adopts-latest-technology-in-tb-fight-4019690

REPUBLIC OF KENYA

MINISTRY OF HEALTH

TB in children is a public health problem of special significance because it is a marker for recent transmission of TB.

TB-Free Future for our Children

We can End TB in Kenya

6th Kenya Lung Health International Conference

Delegates following proceedings during the opening ceremony .

Dr Irungu Karuga, USAID TB ARC II making a presentation on operational research.

FIND representatives following the proceedings.

Dr Jane Nabongo, KEMRI making a presentation.

Delegates following proceedings on childhood tuberculosis.

6th Kenya Lung Health International Conference

From left- Dr Jacqueline Kisia, Ag. Head NTP, Evelyne Kibuchi, Stop TB Partnership Kenya, Hon. Stephen Mule, MP Matungulu / Chair Africa Parliamentary TB Caucus and Dr Nazila Ganatra, Head of Department – National Strategic Public Health Programs , MoH during the opening ceremony.

From left- Dr Saumu Wayuwa, Paediatrician-Port Reitz Sub-county Hospital Mombasa, James Marcomic, FELTP Resident at NTP, and Hon. Stephen Mule, MP Matungulu / Chair Africa Parliamentary TB Caucus.

A panel discussion during one of the sessions

REPUBLIC OF KENYA

MINISTRY OF HEALTH

Division of National Tuberculosis, Leprosy and Lung Disease Program,

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