



# A Health System Strengthening Approach to Person-Centred TB Care:

## Insights from Participatory Research with Healthcare Workers and Policymakers in Nairobi, Kenya



### Introduction

In Kenya, 350 people developed tuberculosis (TB) every day and 70 died because of the disease in 2022 [1]. Men are most affected, accounting for about 6 in 10 people with TB, followed by women (nearly 3 in 10) and children (more than 1 in 10) [1]. Countrywide, 1 in 3 people with TB missed out on treatment and care they needed [1].

Kenya's policies guide the delivery of people-centred healthcare, including TB prevention and care [2], through the Primary Health Care Networks comprising a primary health care referral facility (hub) and several other primary health care facilities (spokes) [3]. Most people with TB who access health services in Kenya, are widely managed the same way without a focus on the respectful and responsive care needed by affected individuals and communities [4].

Healthcare workers know and understand the every-day realities and challenges these individuals and communities face, but whilst being tasked with implementing "person-centred" TB care, healthcare workers are rarely involved in such policy development. For that reason, LIGHT Consortium partners in Kenya – African Institute for Development Policy (AFIDEP) and Respiratory Society of Kenya (ReSoK) – set out to understand the policy-practice gap from the perspective of healthcare workers and offer platforms for dialogue to support them to advance person-centred TB care in Kenya.

### Key messages

- Health system and societal challenges limit healthcare worker delivery of people-centred care for men, women, and children with tuberculosis (TB)
- Innovative strategies to reach and retain TB key populations in care established by healthcare workers offer good practice for learning and adaptation.
- Healthcare workers require effective and resilient health systems to advance person-centred care advocating for a health system strengthening approach to ensure no one is left behind.

## Research Overview

This study used a qualitative research method to engage healthcare workers from Embakasi, Kibra/ Langata, and Ruaraka sub-counties in Nairobi in three participatory workshops (2 with nurses and 1 with clinical officers and doctors) in March 2024, discussing their experiences, challenges and proposed solutions for differentiating TB care to people's realities. Participants involved 19 nurses and 10 clinical officers/doctors (20 women and 9 men) from 16 public, 5 faith-based, and 4 private health facilities. Their professional experience ranged from 6 months to 35 years of service.

Participants then shared their findings and agreed action in April 2024 through a workshop with 24 TB stakeholders, representing the National TB, Leprosy and Lung Disease Program (1), Nairobi County Health Management Team (18), the Sub-County Health Management Teams (4), and non-governmental organisations (1).

Discussions were transcribed and data analysed using framework analysis approach. The study was approved by the Kenya Medical Research Institute Scientific Ethics Review Unit, Liverpool School of Tropical Medicine Research Ethics Committee, Nairobi County Health Management Team, and the respective Sub-County Health Management Teams.

## Research Findings

Healthcare workers highlighted their challenges in responding to the needs of people with TB and shared their good practice in ensuring TB key populations do not miss out on TB care.

## Challenges

### *Diagnosing children*

Diagnosis of TB in children can be challenging as their TB symptoms are unique, for example sleepiness, headache, and seizures related to TB disease of the brain. Diagnostic tools for pulmonary TB in children such as chest x-ray and stool testing using GeneXpert are not widely available. Access to chest x-ray at selected health facilities has worsened after previous funding for chest x-ray in children and transport to testing sites ended. Occasionally, healthcare workers paid out of their own pockets for transport to referral sites.

### *Reaching men*

Men, especially those in casual, informal, or insecure employment, tend to prioritise income generation and providing for their families over their own health needs. They often have limited control over taking time off work, making it harder for them to seek and sustain healthcare during clinic hours. Healthcare workers' fixed working hours (often 8am-5pm) and lack of compensation for overtime prevent longer opening hours. Insecurity in the community and limited funds for healthcare workers' airtime (mobile phone bundles) and transport hinder outreaches. Consequently, men seek care when they are already very sick.

### *Retaining men*

Men may disengage from care if shortage of laboratory personnel or medication stockouts require them to visit health facilities more frequently. Men, who consume alcohol and other drugs, sometimes as a way to cope with stress, can miss clinic appointments, forget to take the TB medications, or even lose their medication.

### *Including all women*

Women use health services more frequently than men. However, women face unique challenges in accessing TB care not only for themselves but also their families due to their gender role. Self-employed women who rely on daily income like market vendors and sex workers, lack time to visit, or wait at, health facilities like working men.

### *Managing multi-morbidities*

Healthcare workers felt their medical training did not adequately prepare them to manage multi-morbidity. Staff shortage and disease-specific health system structure creates difficulties for patients, such as separate clinic days for different conditions and more frequent appointments during the intensive phase of TB treatment that are not aligned with those of their other conditions.

Some people with chronic conditions do not visit health facilities themselves but receive their medication through treatment supporters at their homes or workplaces. Whilst adherence is supported, these patients may miss out on health education and screening, potentially delaying TB diagnosis.

Many people struggle with the burden of taking multiple medications, especially when TB combination treatments are out of stock like in 2023.

### *Mitigating the effects of poverty*

Although TB testing and treatment are free, many people with TB struggle with cost of food, housing, and transport. In most facilities, only people treated for drug-resistant TB receive nutrition and transport assistance. Financial challenges to TB treatment are compounded by the shortage of nutritionists in TB clinics.

### *Reaching street families*

Homelessness, poverty, stigma, and discrimination create significant barriers for street families. They experience discrimination and stigma, including from other clients and security guards denying them access to the health facility due to their appearance. Healthcare workers found communication challenging as these groups use their own language. Street families lack housing to keep TB medication. Drug and alcohol use and food insecurity is a challenge to treatment adherence among street families.

### *Reaching older people*

Healthcare managers stressed that older individuals may face age and gender-related barriers to TB and that the needs of older women and men are commonly overlooked.



## Good practice

Health facilities have implemented innovative strategies to overcome these challenges. Yet, these efforts lack consistency.

### Children and youth

Healthcare workers utilise TB diagnostic tools more suitable for children like chest x-rays and stool testing using GeneXpert. They conduct health information sessions in schools, fast-track students who present to the health facility wearing their school uniform, and provide TB medications for a full school term to those in boarding schools. Donor-funded health facilities run skills-building sessions for youth and have organised football matches to provide health education and TB screening to young people.

### Men

Many health facilities have attempted to reach men through outreach activities in popular gathering places, offering health information and TB screening services, but lacking consistency as they rely on donor funding. Additionally, health facilities in the Kibra/Langata sub-county have developed collaborations with Savings and Credit Cooperative Organisations (SACCOs), main employers in the transport sector, to provide TB awareness, screening, testing, linkage to care, and follow-up services to matatu drivers and touts.

### Women

Some health facilities have set up temporary information tents at markets to provide health education and TB screening to market women. Building on HIV programmes, healthcare workers have engaged peer educators, like “queens” (senior female sex workers), to raise TB awareness, conduct screenings, and refer women to health facilities. In rare cases, some

healthcare workers delivered drugs directly to women with TB who are too busy to visit the health facility.

### People with other health conditions

Healthcare workers leverage regular clinic visits for these patients to provide health education and TB screening. Health facilities adapted WHO guidelines and integrated diagnostic testing for TB with the lipoarabinomannan urine test (LAM) in their HIV services. Healthcare workers strive to ensure that patients with multiple conditions can receive all services in one clinic or at least on the same day through collaboration and coordination within the health facility.

### Poverty

Some health facilities offer small incentives like food and transport assistance to mitigate poverty's effects, depending on the availability of donor funding.

### Street families

Some health facilities have implemented supportive measures, such as instructing guards to allow street families access, fast-tracking their care to reduce stigma, and engaging community health promoters to collect sputum samples off-site when necessary. They also store TB medications for street families and offer daily directly observed treatment at the facility, as these individuals often lack safe storage for drugs.

## Recommendations



Collectively, healthcare workers recommend the following for health systems to function effectively to advance person-centred care for TB to reach all men, women, and children and ensure that no one is left behind:

### Strong leadership and collaboration

- Leverage primary healthcare networks to strengthen intersectoral collaboration including education, labour, social protection, religious institutions, and NGOs
- Maintain robust relationships with people and communities affected by TB for deeper understanding of their challenges and grassroots support for tailored TB interventions
- Adapt the model of collaboration with SACCOs to other sectors like industries, *boda boda* stages, and market associations for screening, referrals, and treatment support

### Sustainable health financing

- Use real-time data to intensify advocacy for sustainable funding
- Increase both domestic and international TB funding to aid access to and retention in holistic TB care among TB key populations



### Conducive health infrastructure

- Improve physical spaces to promote patients' rights and dignity and quality of TB services



### Strong health workforce

- Increase the health workforce and strengthen their capacity to reduce the burden on existing staff and allow for more individualised attention
- Enumerate and empower close-to-community providers who bridge gaps and improve trust between healthcare providers and underserved groups, including men
- Form interdisciplinary TB team including nutritionists, mental health professionals, social workers, and TB champions alongside clinical and close-to-community cadres
- Offer fair compensation, including overtime pay and special clinic allowances, to improve TB healthcare workers' job satisfaction and retention
- Integrate gender and human rights in medical and on-the-job TB training



### Comprehensive service delivery

- Integrate support groups and mental health services like group therapy, stress management, and rehabilitation services in TB care



Provide nutrition counselling and food packages to people affected by poverty and food insecurity



Implement differentiated treatment models including treatment supporters, services outside regular clinic hours, and directly observed treatment in some instances.



Lobby for broader social protection, housing, and employment measures that could offer long-term preventive benefits



### Reliable medical products and technologies



Strengthen supply chains to ensure a constant supply of TB medications and essential commodities



Expand diagnostic capabilities, roll out GeneXpert and x-ray systems at lower-level, high-volume facilities, and employ trained staff to operate these technologies effectively



### Effective health information systems



Use data to manage supplies and strengthen programming and budgeting



Support quality improvement teams for monitoring TB services and addressing gaps



Ensure people with TB know their rights and protect their privacy and confidentiality

## References

1. World Health Organization [WHO], *Global Tuberculosis Report 2023*. 2023, WHO: Geneva.
2. Ministry of Health (Kenya), *National Strategic Plan for Tuberculosis, Leprosy and Lung Health 2023/24 – 2027/28*. 2023, Ministry of Health: Nairobi.
3. Ministry of Health (Kenya), *Primary Health Care Network Guidelines*. 2021, Ministry of Health: Nairobi.
4. Ministry of Health (Kenya), *Report of the End-Term Review of the National Tuberculosis, Leprosy and Lung Health Strategic Plan, 2019-2023*. 2022, Ministry of Health: Nairobi.

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Leaving no-one behind: Transforming Gendered pathways to Health for TB (LIGHT)

LIGHT, a six-year cross-disciplinary global health research programme, funded by UK aid, aims to support policy and practice in transforming gendered pathways to health for people with TB in urban settings in several African countries. This approach leads to enhanced health, well-being, and socio-economic outcomes and contribute to ending TB.