



**Accelerating progress
to end TB**

8th SA

TB

Conference

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Durban ICC



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THE YIELD OF COMMUNITY-BASED TB SERVICES TARGETING MIGRANT WORKERS IN THE SOUTH OF MOZAMBIQUE, 2022.

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CONFLICT OF INTEREST DISCLOSURE FORM

I have no Conflict of Interest to report.

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BACKGROUND

- Despite considerable control efforts, Tuberculosis (TB) remains a substantial public health concern in Mozambique, with nearly 15,000 TB cases going undetected or unreported in 2021.
- It is evident that part of these patients not diagnosed pertains to high-risk groups, vulnerable populations, or individuals in hard-to-reach areas.
- TB is a significant health concern for migrant populations, who are particularly vulnerable to the disease. Mozambique has a history of labour migration to South African mines, and this trend has expanded to include plantation laborers, casual cross-border workers, and irregular migrants in recent years.
- As part of the efforts to align with the End TB Strategy's 90-90-90 targets, the Ministry of Health (MoH) in Mozambique and the International Organization for Migration (IOM) jointly designed interventions aimed at controlling TB among miners and other migrant workers.

IMPLEMENTATION APPROACH

Since 2020



Community engagement



Mapping



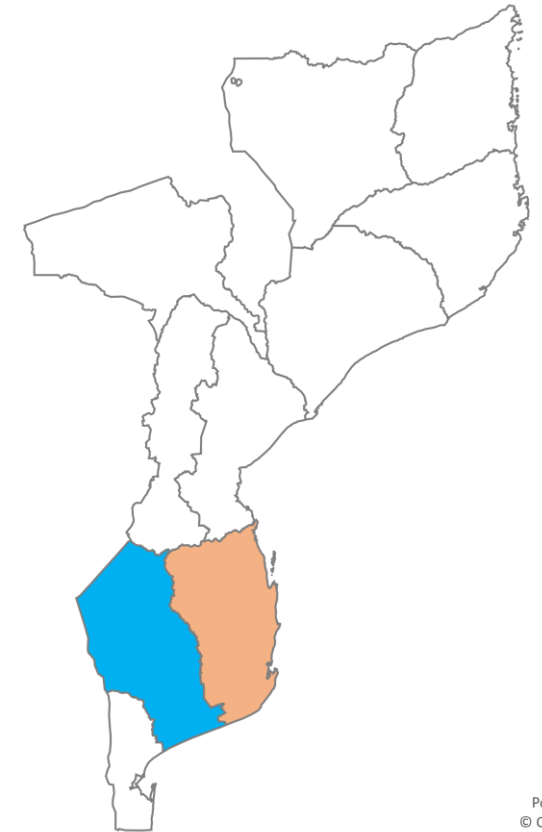
Screening for TB symptoms and referral for OLD screening



Referral of presumptive cases to TB testing (molecular or smear test)



Linkage to TB services in Mozambique or South Africa



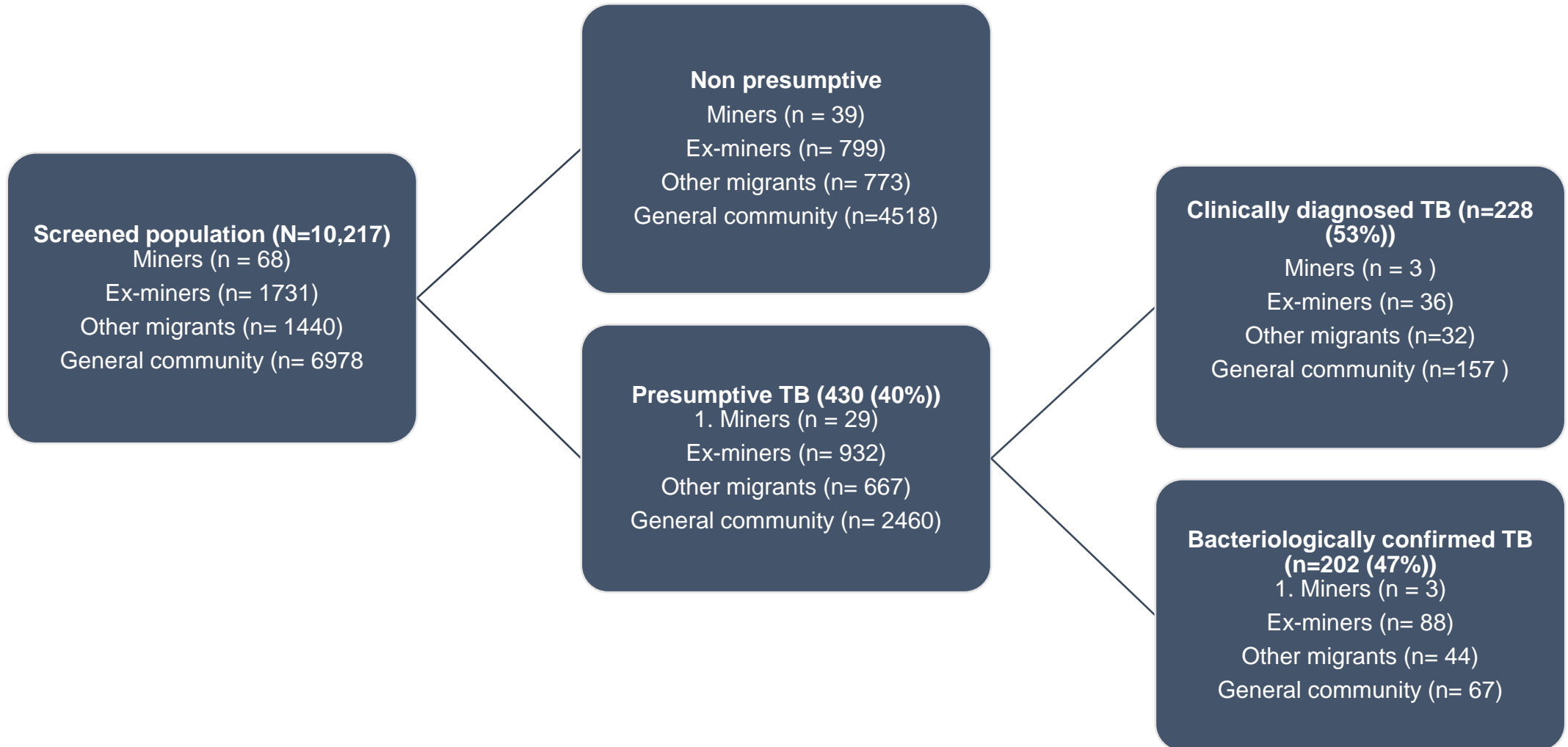
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AIM & METHODOLOGY

- Assess the sociodemographic and clinical profiles of TB patients, analyse the prevalence of TB among migrants and the general population, and assess the effectiveness of interventions on TB case notification

Method	Description
Design	Retrospective cohort study Secondary data analysis
Setting	Gaza and Inhambane Provinces
Data analysis	MS Excel -> JASP 0.16.4 <ul style="list-style-type: none">• Descriptive statistics• Pearson Chi-Square Test• Time Series Analysis

KEY RESULTS – CASCADE OF TB SCREENING



SOCIODEMOGRAPHIC AND CLINICAL CHARACTERISTICS

Table 1. Sociodemographic and clinical characteristics of the patients diagnosed with TB

Category	Miners	Ex-miners	Other migrant populations*
Sex			
Male, n (%)	6 (100)	121 (98)	43 (57)
Age (years)			
Mean, n (SD)	50 (5.7)	65,7 (10.5)	44.9 (13.2)
Work experience in mine (years)			
Mean (SD)	20 (10.1)	17.8 (11.2)	NA
History of previous TB treatment			
New patient, n (%)	6 (100)	101 (82)	70 (92)
TB category			
S-TB, n (%)	6 (100)	113 (93)	69 (91)
HIV Status			
HIV – Positive, n (%)	4 (67)	16 (13)	21 (28)

* Include, irregular migrants, labour migration such as seasonal workers and others with variety of professions (hairdresser/barber; carpenter; domestic worker; electrician, etc.)

TB BURDEN AMONG MIGRANT POPULATIONS vs GENERAL POPULATION

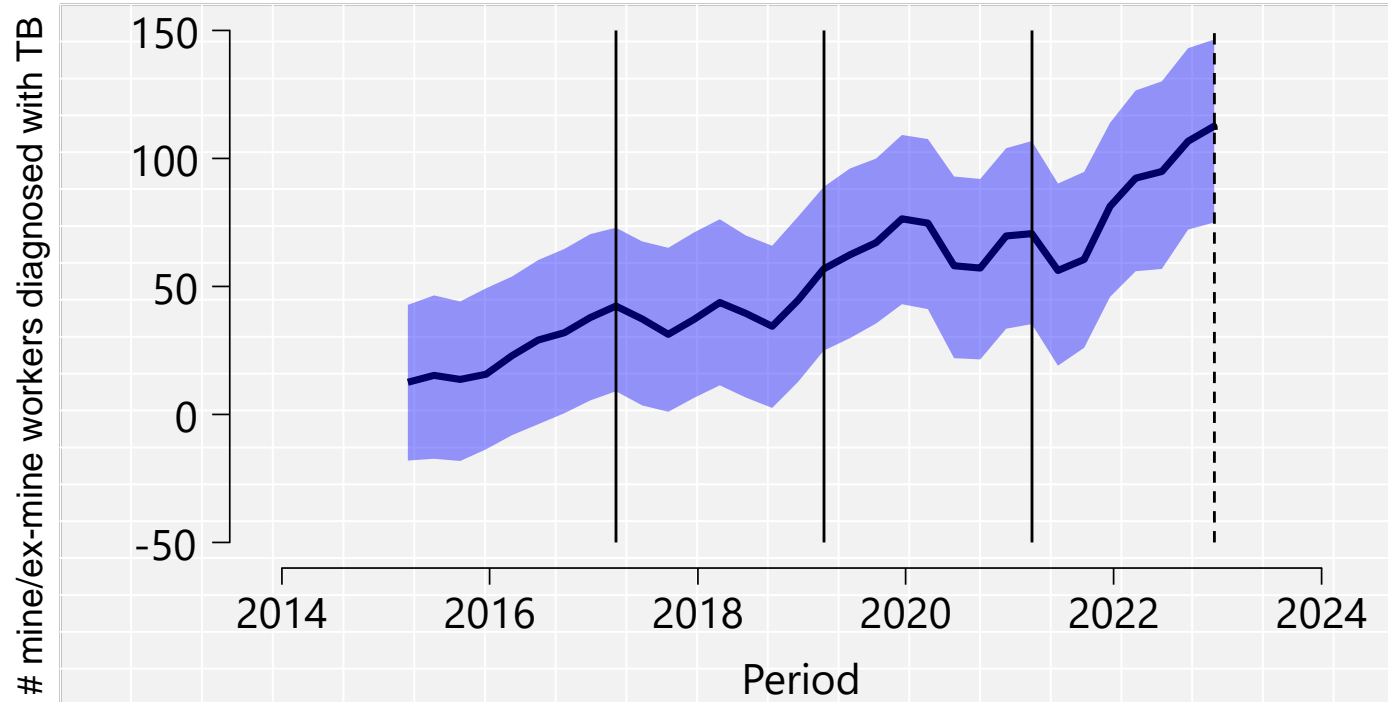
Table 2. The burden of TB among migrant populations compared to general population

Category	Miners	Ex-miners	Other migrant populations	General Population	p-value**
Prevalence of TB*	8823,53	7163,49	5277,78	3256,76	< .001
Prevalence of TB/HIV (%)	67%	13%	28%	25%	.002
NNS	11	14	19	31	< .001

NNS - Number needed to screen; *Per 100K; **Pearson Chi-Square test, significance at 0.05

TREND OF THE TB NOTIFICATION AMONG MINE & EX-MINERS IN THE IMPLEMENTATION SITES

Fig. 2. Trend of TB notification among mine/ex-mine workers, posterior and checkpoint summary



Growth rate
 Mean = **0.675**
 • SD = 0.148
 • 95%CI = 0.385 - 0.965

Changepoint Posterior Summary Table

Changepoint	Change in growth rate (δ)		95% CI	
	Mean	SD	Lower	Upper
2017-03-20	-0.018	0.070	-0.181	0.118
2019-03-20	-0.010	0.067	-0.174	0.113
2021-03-20	2.992×10^{-4}	0.069	-0.155	0.150

DISCUSSION

Understanding the dynamics of TB among migrants is essential for a global perspective on TB control, as the movement of people across borders can impact TB transmission on a broader scale (Pareek et al., 2016; Woldesemayat, 2021).

Comprehensive occupational health examinations are likely to increase TB case notification among migrants including men. Therefore, narrowing the gap of missing people with TB (Dhavan et al. 2017; Lin et al. 2023)

Tailored public health measures targeting migrants, such as screening programs, latent TB infection treatment, and health education is a must to avert cross-border transmission (WHO, 2015; Pareek et al., 2016)

Collaboration among governments, healthcare providers, and organizations is vital to address the TB challenges faced by migrants (Woldesemayat, 2021).

CONCLUSION

Tuberculosis control measures targeting migrant populations, not limited to miners, have the potential to reduce the number of undiagnosed people with TB.

Establishing well-defined policies and guidelines that are tailored to the healthcare needs of migrants can greatly enhance tuberculosis control initiatives.

Additional research is required to gain insights into the tuberculosis dynamics among internal migrants, which can inform the customization of public health measures and on the cost-effectiveness of these interventions..

THANK YOU!

