

**Vuka! Let's unite towards
a TB-free world!**

9th SA
TB
Conference
8 - 11 June 2026



**BEYOND SPUTUM: PERCEPTIONS OF EMERGING TB
DIAGNOSTICS IN SOUTH AFRICA THROUGH THE
TUTTPLUS STUDY**

MOHLAMONYANE M , MILOVANOVIC M , MLAMBO L , GENADE L , KAZADI A, SEBELE
P, BERHANU R , NZAMA S , MEEHAN S , MYBURG H , HESSELING A , LEBINA L ,
MARTINSON N

BACKGROUND

- TB diagnosis has evolved over time
- New testing and collection method
- Gold standard
- Sputum - NAAT and culture
- Alternative specimens/tests
 - Blood (IGRA), urine (LAM), chest x-rays & tongue swabs (xpert ultra)
- Each specimen/test has strengths and challenges
- Understanding perceptions is key to optimise TB diagnosis and improving patient care



METHODS

6 FGDS - HEALTHCARE PROVIDERS



24 IDIS - CLINIC PATIENTS



CONDUCTED BEFORE WE STARTED TONGUE

SWABS



CODING AND ANALYSIS

- A. Interviews and discussions audio-recorded
- B. A priori codes developed
- C. Codebook reviewed by 2 analysts before finalization
- D. Codebook and transcripts imported into ATLAS.ti©
- E. Emergent codes created during coding
- F. Coding performed by two analysts with regular check-in sessions to ensure alignment and consistency
- G. Codes were connected and summarized
- H. Themes were reviewed and discussed by team

THEME: 'SPUTUM IS KING'



PROS	CONS
Directly from Lungs	Difficulty and Non-Comfortability
Familiarity	Difficult to collect (children, sick elderly)
Reliability (Lab-confirmed)	Delayed results
	Stigma

“So, it is the sputum, if the sputum is negative, it is x-ray, and after that, we are sort of stuck, unless the patients are admitted to the hospital. Okay, I mean there is urine, but it is for certain group of people. If you look at private, people get biopsies, they get plural biopsies, they get chest, and for us that processes is almost like two months long, three months long. So, it means somehow, we need to also like realise that sputum is the best way, but there are also lots of other ways to make diagnosis”

Healthcare Provider FGD - WC



THEME: 'A GOOD TB TEST CAN PICK UP MORE THAN ONE THING'



BLOOD

"I believe that blood carries a lot of things...a lot of things can be found, cause back in the days, urine was the only thing that could be used to test for pregnancy...now blood can also be used to test for pregnancy. So, if blood can carry a lot of things, that means a lot of things could be discovered. So, if TB can be found in blood, then that makes things much easier, for people you know."

PATIENT IDI-KZN

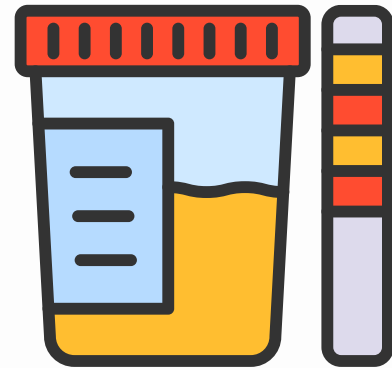


X-RAY

"Because for me... It is because I can literally see my lungs and everything...It is like a two in one because it can tell you my heart, it can tell if my lungs are wrong or if it is TB. So, there is more....."

PATIENT-IDI-WC

THEME: 'SIMPLE, QUICK AND CONVENIENT'

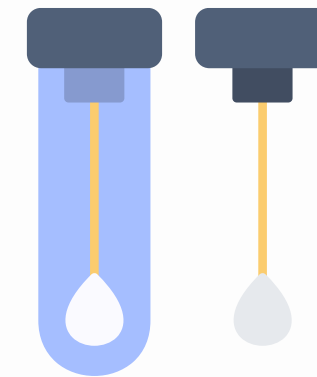


URINE

- Only for use by certain groups of people
- Same day results
- 'Like a pregnancy test'

"Urinary, for me, it is urinary, I do not know how the kidneys...And TB correlate. For me, I know that urinary is best for pregnancy...I am not aware of how it connects with TB."

PATIENT-IDI-KZN



TONGUE SWABS

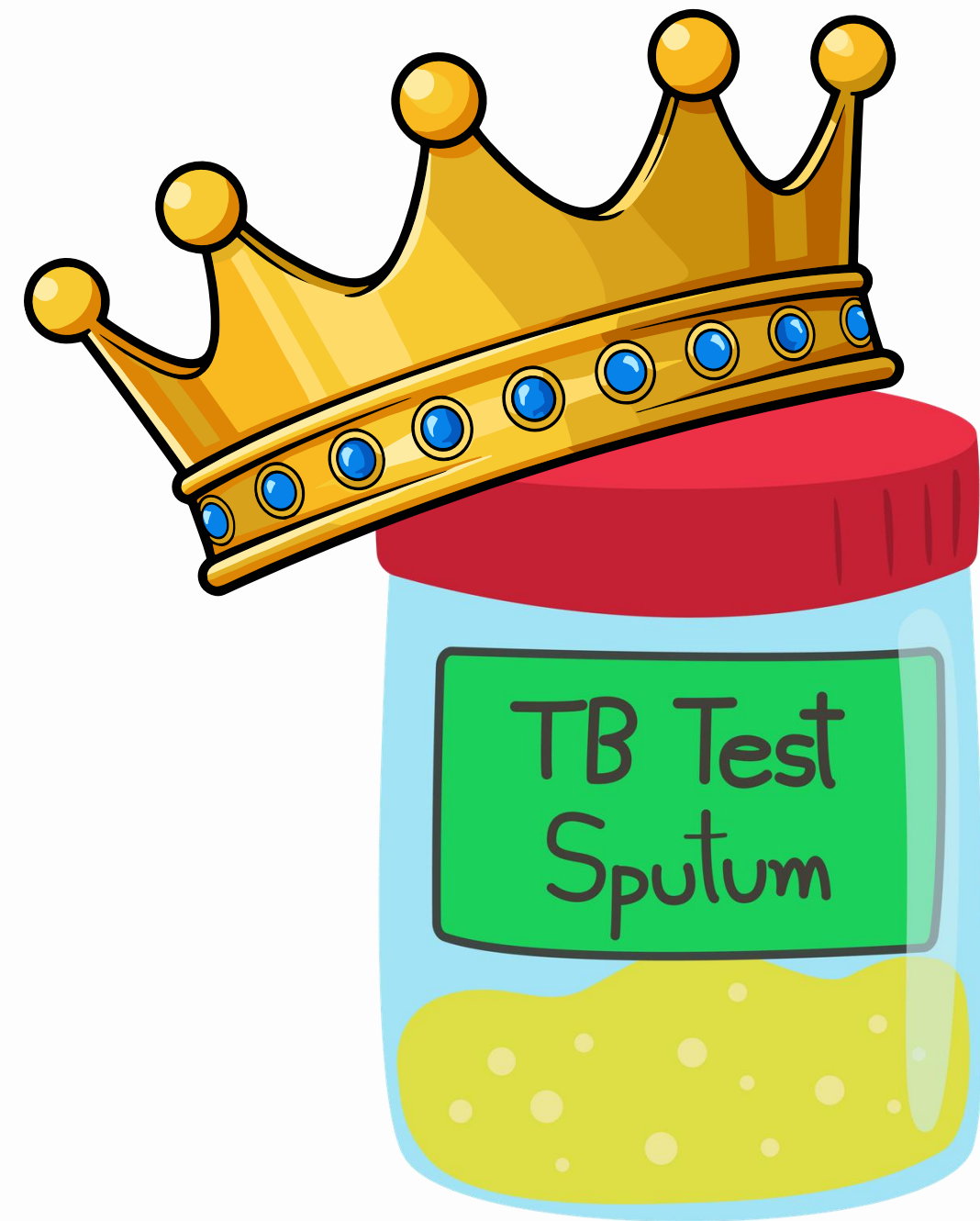
- Broader use amongst vulnerable and hard to reach
- Easy, quick, no-invasive and pain free
- Fear about swab re-use, contamination and lab handling

"...how can you check TB from the tip of the tongue while you are checking for something that is inside the lungs. So, I don't think it is reliable."

PATIENT-IDI-KZN

SUMMARY

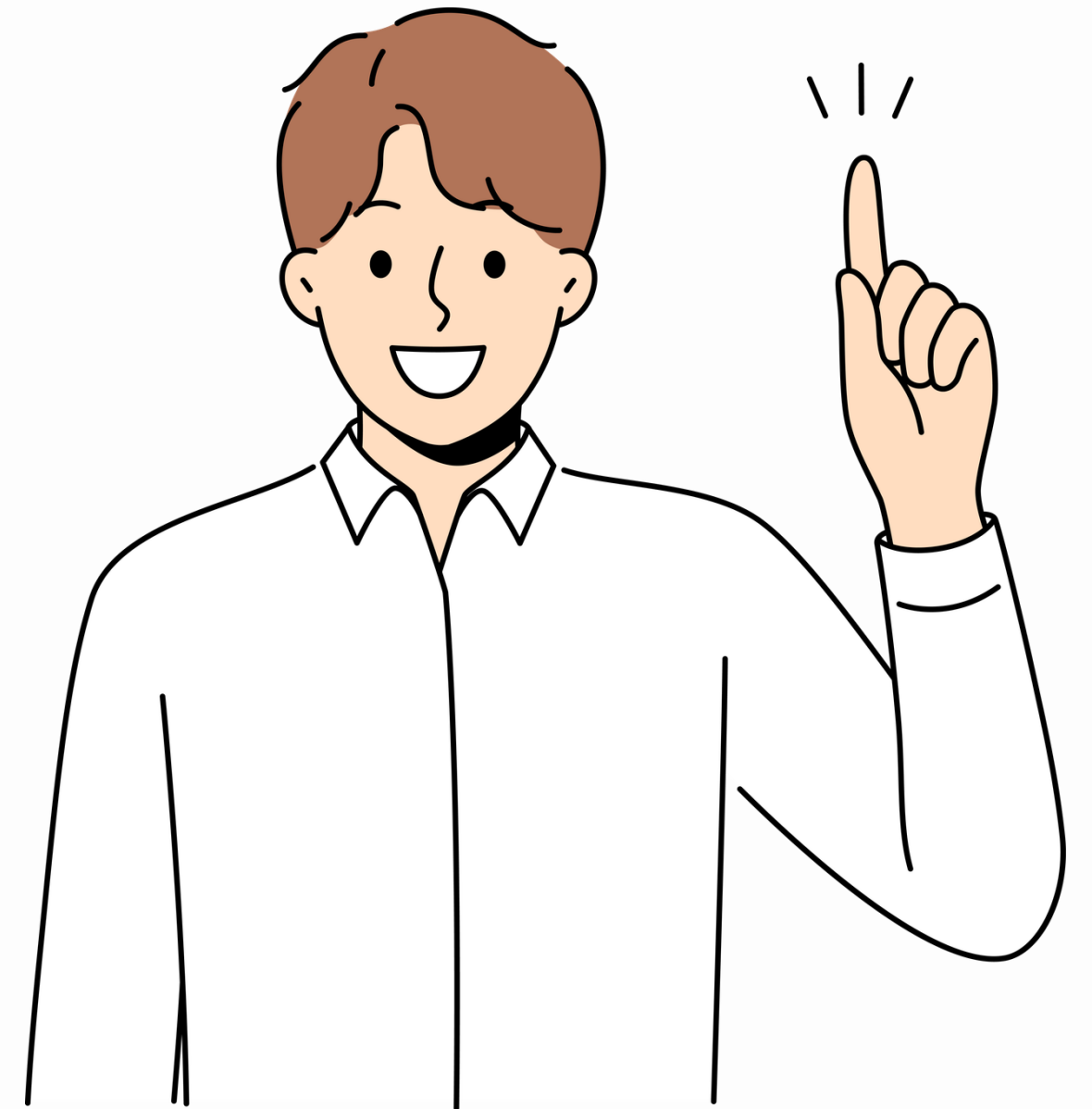
- Each specimen has perceived, unique merits
- No specimen is perfect, trade-offs exist
- Acceptability linked to: trust, privacy, convenience & perceived accuracy
- Body and disease impact patients perceptions



RECOMMENDATIONS



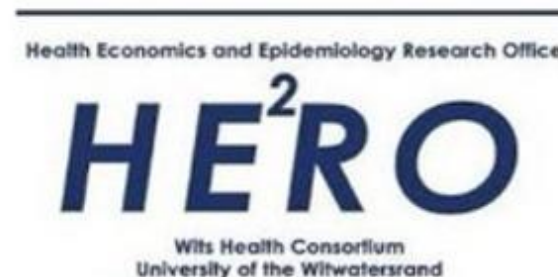
- **Education and communication**
- **Suitability will depend on context**
- **One- size-fits-all / single approach**



Acknowledgements



Gates Foundation



BETTER TOGETHER.



forward together
sonke siya phambili
saam vorentoe

TUTTPlus Presentations at the 9th SA TB Conference



118	EVALUATION OF THE ROLE OF TONGUE SWABS TO OPTIMIZE TUTT IMPLEMENTATION - AN OBSERVATIONAL STUDY (TUTTPlus) - Kwa Zulu Natal Data
263	Pooling sputum specimens of people at high risk of TB reduces costs of Xpert Ultra TB testing: Results from the TUTTPlus study in South Africa.
287	Beyond Sputum: Perceptions of Emerging TB Diagnostics in South Africa through the TUTTPlus study
295	Rethinking Sputum Quality: Diagnostic Yield of “Salivary” Specimens Collected After Forced Cough Effort for TB Nucleic Acid Amplification Testing
307	Clinic referral cards, contact tracing investigations for tuberculosis screening in South Africa – A TUTTPlus Substudy - Poster
308	Pooling sputum specimens of people at high-risk of TB reduces testing burden without compromising diagnostic concordance. The TUTTPlus Study
342	EVALUATION OF THE ROLE OF TONGUE SWABS TO OPTIMIZE TUTT IMPLEMENTATION - AN OBSERVATIONAL STUDY (TUTTPlus) - Overall