Reaching Men with TB Care and Support, South Africa

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TB In South Africa

- Leading cause of death in South Africa
- Responsible for large portion of differential life expectancy between men and women (Reniers et al., PLoS One. 2017;12(10))
 - 81% of 11.2-year life difference among those with HIV
 - 43% of 13.1-year life difference among those without HIV
- REMoxTB Study:
 - Men were 2.78 (CI: 1.59–4.84; < 0.001) more likely to have adverse treatment outcomes compared to women due to cavitation from previous TB infections (Murphy *et al.*, *BMC Med*. 2018;16(1))

TB in South Africa

 Eden District TB Outcomes Study found that male sex was independently associated with:

smear non-conversation (AOR=1.68; 95% CI=1.21-2.33, p=0.002)
 (Mlotshwa *et al.*, *BMC Inf. Dis.* 2016;16(365))

- Men are more likely:
 - to be lost-to-care
 - die while engaged in treatment

 In 2017, 63% of microbiologically confirmed cases of TB were among men

TB Incidence by Sex – South Africa, 2017



South African National Health Laboratory Service. TB Dashboard <u>http://www.nicd.ac.za/tb-surveillance-</u>

TB Incidence by Sex – Eastern Cape Province, 2017



South African National Health Laboratory Service. TB Dashboard http://www.nicd.ac.za/tb-surveillance-

South African National TB Prevalence Survey – 2018

	Prevalence per 100,000	95% CI
Overall	852	679 - 1 026
Sex		
Male	1 094	835 - 1 352
Female	675	494 - 855
Age category		
15-24 years	432	232 - 632
25-34 years	902	583 - 1 221
35-44 years	1 107	703 - 1 511
45-54 years	1 063	682 - 1 443
55-64 years	845	505 - 1 186
65+ years	1 104	680 - 1 528

Original WHO for 2018: 520/100,000 population

For ever 1 case of TB in women, there are 1.62 cases in men Given the global and South African specific gender disparities in TB prevalence, uptake of diagnostic testing, treatment initiation and outcomes, we sought to identify and implement an intervention that would address and decrease the serious disparities among men RESEARCH ARTICLE

Alipanah et al.

Adherence interventions and outcomes of tuberculosis treatment: A systematic review and meta-analysis of trials and observational studies

Alipanah *et al.*

Adherence interventions and outcomes of tuberculosis treatment: A systematic review and meta-analysis of trials and observational studies

Identified 129 papers relating to TB treatment adherence

RESEARCH ARTICLE

- None were male-centered interventions
- Reviewed papers after 2005 (n=76)
- Only 17 of 76 intervention papers disaggregated results by sex
 - 5 interventions reported significantly better outcomes for women, but no effect among men compared to the control
 - 8 reported improvement among men compared to control group, but women still did better than men
 - 4 reported no improvement for either men or women compared to the control

Alipanah et al.

Adherence interventions and outcomes of tuberculosis treatment: A systematic review and meta-analysis of trials and observational studies

At Worst: Uneven reporting of sex-disaggregate results perpetuate gender disparities

RESEARCH ARTICLE

At Best: Poor reporting of sex-disaggregated results makes it difficult to identify interventions that can be adapted or optimized to improve men's TB-related outcomes

still did better than men

– 4 reported no improvement for either men or women compared to the control

TOWARDS THE IDENTIFICATION OF PREFERENCES FOR AN INTERVENTION TO SUPPORT MEN'S ENGAGEMENT AND RETENTION IN TB CARE AND TREATMENT

Pilot Study: Design and Methods

- Buffalo City Metro Health District, Eastern Cape Province, South Africa
- Cross sectional, qualitative study
- Clinic-based recruitment of men engaged in the TB care cascade
 - men that successfully completed TB treatment (n=15)
 - men currently engaged in TB care and treatment (n=15)
- Guided by the Network-Individual-Resources (NIR) Model
- Developed and administered in-depth interview guides to explore men's:
 - Social network composition
 - TB testing and clinical care experiences
 - Disclosure to and support from family and friends
 - Treatment and support preferences
- Analysis used constant comparison approach informed by the NIR model

Results: Peer-to-Peer Support

Men described their desire and willingness to support other men during TB treatment with both mental and tangible resources:

"I would give him words that encourage him. Or in the case that he is shy to go pick up [treatment] at the clinic, I wouldn't have a problem with going and fetching the treatment for my friend."

- 40 years, in treatment

"They [men] need people to understand and have someone they can talk to. When you don't have someone to talk to, it is the same as if you are locked up within yourself. I would be happy if I knew that my friend is taking this treatment and is having a problem, so I could also advise him to try this way [taking his medication with a meal etc], as far as I can help him."

- 29 years, completed treatment

"I would show them [men] myself as I have walked the same path [experiencing TB treatment]. It is not easy taking this treatment, but I would show the friend a living example, which is me. I have completed [treatment] in front of him and pray that I will be a better example to him since I also come from the same situation. I have swam and crossed and he also can swim across."

- 26 years, completed treatment

Results: Engaging Men in Men's Spaces

Many men spoke about spaces where they felt comfortable talking about men's issues and suggested that these spaces may be conducive for a conversation about TB. A common theme was that these spaces were primarily dominated by males:

"We, as men, have a lot of secrets and more especially Xhosa men, they are stubborn, I do not want to say they are clueless, yes stubborn is the word. They need a comfortable environment like when we talk about things such as HIV. This is when we are drinking alcohol, that's when people can talk openly."

- 26 years, completed treatment

"There near the [community] toilets because that's where you normally find men sitting and playing dice. You know even if you come and stop here, and since you also know me my brother, it will be easy to come and start a conversation and a lot of people will listen."

- 29 years, completed treatment



Results: Isolation and Need for Connectedness

Men reported feeling isolated from their families and communities during TB treatment and advocated for community awareness to reduce their isolation:

And, the fact that my girlfriend left me, and my mother started to stay with her boyfriend, I really lost focus. I left treatment where I stayed because I was now alone. So, I decided to go back on smoking again and that was my mistake.

- 26 years, in treatment

"It is embarrassing to go to the next-door neighbours and ask for food...maybe there are a lot of people who want to take their treatment, but there are things that they wish they had but don't have, so they end up not taking this treatment."

- 29 years, completed treatment

"On weekends make something like a promotion for TB. You go there with a poster and things plugged on the walls that say 'let us prevent TB' and if you already have it here are the things you will face. Try make it something fun and also have a mobile testing station..."

- 24 years, in treatment

Conclusions

- Men experienced anticipated and enacted stigma
 - embarrassment to seek help
 - isolation perpetrated by family and community members
- Emphasized peer-to-peer support in order to navigate TB-related stigma and unhealthy masculinity norms
- Advocated for awareness events to educate their communities about the challenges men face when ill with TB
- Interventions should be delivered in familiar locations where men congregate
- To date, no TB treatment support interventions have included the preferred components or modes of delivery described by men in our study

Recommendation

- Global TB community must engage and consider men's voices when
 designing interventions to improve their TB health outcomes
- Empower men to challenge unhealthy masculinity norms that impact their health
- Men's unique challenges must be identified and addressed
- One-size-fits-all approach not working, and ignoring men's voices will sustain and worse the epidemic for all

Current and On-going Work

<u>Project #1:</u> Identifying Preferences for a Male-Centered Intervention to support Men's Engagement and Retention in TB Care and Treatment; NIH/NIAID (R21AI148852)

<u>Project #2:</u> Measuring Real-Time Influences of Mental and Tangible Resources on Men's TB Treatment Lapses and Adherence Behaviors; NIH/NIAID (R21 AI163977)

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