



FACTORS THAT HINDER MDRTB ADHERENCE FOR HOMELESS PATIENTS IN KWAZULU-NATAL

Hlengiwe Pretty Nyilana, Jennifer Zelnick, Boitumelo
Seepamore



science & innovation
Department:
Science and Innovation
REPUBLIC OF SOUTH AFRICA

CAPRISA hosts a
DSI-NRF Centre of
Excellence in
HIV Prevention



National
Research
Foundation



UNAIDS

CAPRISA is the UNAIDS Collaborating
Centre for HIV Research and Policy



CAPRISA hosts a MRC HIV-TB
Pathogenesis and Treatment Research Unit

CAPRISA hosts a DoH-MRC Special
Initiative for HIV Prevention Technology



health
Department:
Health
REPUBLIC OF SOUTH AFRICA



UNIVERSITY OF
KWAZULU-NATAL
INYUVESI
YAKWAZULU-NATALI

Background

Prevalence of MDRTB in KZN, SA

- The province of KwaZulu-Natal, South Africa has one of the largest burdens of MDR TB worldwide, with an estimated prevalence of 30 MDR TB cases per 100,000 population
- MDR-TB is a form of TB that is resistant to the two most powerful first-line drugs used to treat TB including Rifampicin and Isoniazid
- Its treatment also involves a at least 12 or more tablets at time including concomitant medication (TB support medication) that one must take to get cured.

Just like HIV, there is a specific vulnerable population that is at higher risk of infection of TB and possible more challenges into adherence to treatment



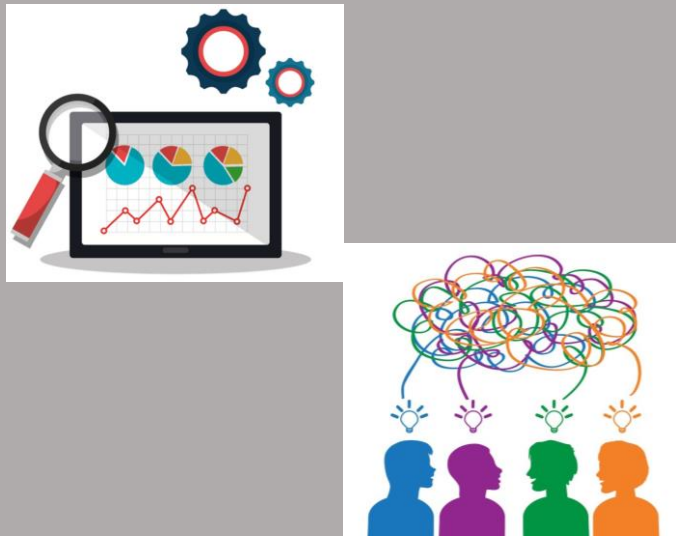
Homelessness as a social issue

- Economic factors
- mental health factors family
- social factors and substance abuse

Methodology

Structured literature review

Case Study Analyses



Filtering methods/strategies:

- Sample size: 12 articles were analysed for this article
- Articles for this article was searched through Pubmed and google scholar
- Keywords used : Barriers for homeless, MDR/HIV Prevalence in KwaZulu Natal, substance abuse, Vulnerable population to MDRTB treatment.
- Data Analyses : Different themes on barriers to treatment for homeless people were developed from analysing articles



FINDINGS

Qualitative insights:

Case Study of Mr SZ

- SZ who is a 32-year-old male who we met during screening for enrollment to the ADAP-TIV study
- Family relationship dynamics and impact on upbringing
- Loss and grief
- Substance abuse
- Homelessness, self disruptive choices
- HIV/MDRTB Infection, diagnoses and treatment

Barriers to care for homeless patients

Developed themes:



Access to healthcare

- Lack of personal identification (IDs) and physical tracking address
- Distance to clinic/hospital: a trip from for a homeless person on the street receiving care at KDH hospital is equal to a minimum shelter fee per night in town
- Inaccessible public transport due to cost and physical state
- Limited clinic operating hours
- Experiencing an averse reaction from other patients being averse to those living on the streets, etc.

Stigma and discrimination

- Stigma faced by homeless individuals
 - Being homeless
 - Physical state
 - Perceptions about homeless people
- Discrimination from healthcare providers
- Negative perceptions from the community



Social determinants of health

- ❑ Impact of social factors on health outcomes
 - ❑ Limited or no family support
 - ❑ Family relationships absent or broken down

- ❑ Poverty and malnutrition
 - ❑ Limited access to nutritious food
 - ❑ Eat when in hospital and when discharged

- ❑ Substance abuse and mental health issues



Policy implications

- ❑ Using these findings to inform the health care policy
- ❑ How to improve care and access for homeless individuals with MDRTB/HIV
- ❑ Some interventions such as Denis Hurley Clinic are specifically for those living on the streets
- ❑ There are also soup kitchens and maybe facility based organisations which assist
- ❑ establishing and enhancing health care wing on facilities for people living on the streets

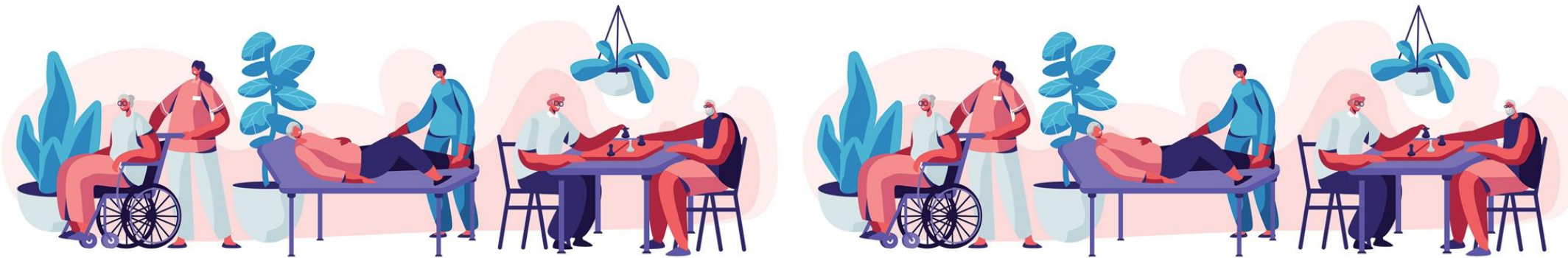


Social work/ Community interventions

- ❑ Potential community-based solutions: Volunteering social work skills in providing psychosocial support for vulnerable population
- ❑ Strengthening partnerships with NGOs and shelters : e.g Denis hurley, strollers, Bellheaven reduction shelter, which currently renders services for homeless people
- ❑ Investing and improving mobile healthcare units and tracking systems

Social work role

- ❑ Social Justice: To work in eliminating barriers to care and ensure that homeless individuals receive the necessary medical and psychosocial assistance.
- ❑ Self-Determination: Social workers to empower homeless MDR-TB/HIV patients by involving them in treatment planning and decision-making. They respect patients' autonomy and help them make informed choices about their healthcare, considering their unique circumstances and preferences.
- ❑ Developmental Interventions: Social workers provide a range of developmental interventions for homeless MDR-TB patients, including housing assistance, mental health support, substance abuse treatment, and skills training. These interventions aim to not only treat the disease but also address the underlying factors contributing to homelessness and TB vulnerability, fostering overall well-being and stability.



Acknowledgements

- Case study participant SZ
- Co-authors Karl Ries, Jennifer Zelnick, Boitumelo Seepamore

References

1. Martyn E, Eisen S, Longley N, Harris P, Surey J, Norman J, Brown M, Sultan B, Maponga TG, Iwuji C, Flanagan S, Ghosh I, Story A, Matthews PC. The forgotten people: Hepatitis B virus (HBV) infection as a priority for the inclusion health agenda. *Elife*. 2023 Feb 9;12:e81070. doi: 10.7554/eLife.81070. PMID: 36757862; PMCID: PMC9910830.
2. Ross JE, Perumal R, Wolf A, Zulu M, Guzman K, Seepamore B, et al. Adaptive evaluation of mHealth and conventional adherence support interventions to optimize outcomes with new treatment regimens for drug-resistant tuberculosis and HIV in South Africa (ADAP-TIV): Study protocol for an adaptive randomized controlled trial [Internet]. In Review; 2023 Jun [cited 2023 SEP11]. Available from: <https://www.researchsquare.com/article/rs-2841179/v1>
3. Daftary A, Mondal S, Zelnick J, Friedland G, Seepamore B, Boodhram R, et al. Dynamic needs and challenges of people with drug-resistant tuberculosis and HIV in South Africa: a qualitative study. *Lancet Glob Health*. 2021 Apr;9(4):e479–88.
4. Martin NK, Vickerman P, Hickman M, Patterson TL, Rand E, Abramovitz D, et al. Overlapping substance using high-risk groups and infectious diseases: how dynamic modelling can evaluate risk and target HIV prevention: Editorial. *Addiction*. 2016 Sep;111(9):1512–5.
5. Systemic stigmatisation and, for patients with longstanding HIV, renewed destabilisation; treatment initiation, marked by side-effects, isolation, and social disconnectedness; discharge, marked by brief respite and resurgent therapeutic and social disruption; and continuity, marked by deepening socioeconomic challenges despite clinical recovery

References

6. Emeka E. Obioha. (2022) [State response to homelessness in South Africa: A multi-agency housing focused intervention approach considered](#). *Development Southern Africa* 39:6, pages 990-1006.
7. Wu S, Litvinjenko S, Magwood O, Wei X. Defining tuberculosis vulnerability based on an adapted social determinants of health framework: a narrative review. *Glob Public Health*. 2023 Jan 2;18(1):2221729.
8. Craig GM, Zumla A. The social context of tuberculosis treatment in urban risk groups in the United Kingdom: a qualitative interview study. *Int J Infect Dis*. 2015 Mar;32:105–10.
9. Phelan, J., Link, B. G., Moore, R. E., & Stueve, A. (1997). The Stigma of Homelessness: The Impact of the Label “Homeless” on Attitudes Toward Poor Persons. *Social Psychology Quarterly*, 60(4), 323–337. <https://doi.org/10.2307/2787093>
10. Stafford A, Wood L. Tackling Health Disparities for People Who Are Homeless? Start with Social Determinants. *Int J Environ Res Public Health*. 2017 Dec 8;14(12):1535. doi: 10.3390/ijerph14121535. PMID: 29292758; PMCID: PMC5750953.
11. Davies A, Wood LJ. Homeless health care: meeting the challenges of providing primary care. *Med J Aust*. 2018 Aug 3;209(5):230-234. doi: 10.5694/mja17.01264. PMID: 30157413.
12. Rajendran M, Zaki RA, Aghamohammadi N. Contributing risk factors towards the prevalence of multidrug-resistant tuberculosis in Malaysia: A systematic review. *Tuberculosis (Edinb)*. 2020 May;122:101925. doi: 10.1016/j.tube.2020.101925. Epub 2020 Mar 26. PMID: 32275233.

THE END

Ms Hlengiwe Nyilana

Hlengiwe.Nyilana@caprisa.com

Any questions??