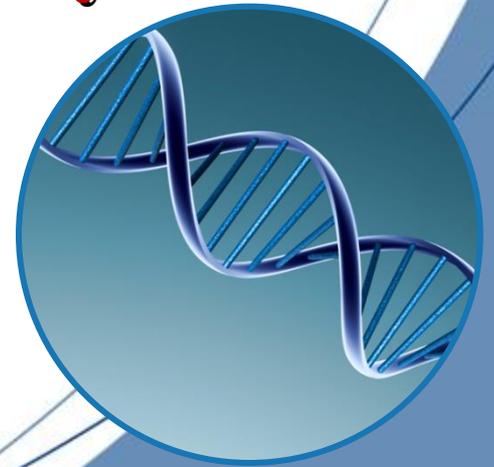


**Perceptions of and Knowledge about
tuberculosis (TB): findings from the
South African National Health &
Nutrition Examination Survey I
(SANHANES I)**



Professors Pamela Naidoo^a & Leickness Simbayi^b

*^aPopulation Health, Health Systems & Innovation (PHHSI) and
^bHIV, AIDS, STIs & TB (HAST): Human Sciences Research
Council (HSRC), South Africa. ^aExtraordinary Professor at
UWC, pnaidoo@hsrc.ac.za; ^bHonorary Professor at UCT*

4th TB Conference, 10-13 June 2014, ICC, Durban, SA

Acknowledgements

SANHANES I was funded by the NDOH &
DFID

INTRODUCTION

- It's important to locate TB within a 'holistic' framework such as a *Bio-Psycho-Social Model*
- During this conference the focus is primarily on the biomedical aspects of TB
- This presentation will hone in on the *psychosocial aspects* of TB
- The presentation will demonstrate how the *biological (disease characteristics), psychological and socio-economic factors associated with an infectious disease such as TB, are inter-related*

INTRODUCTION cont...

HISTORICAL CONTEXT

- Prior to mid-1800s TB was almost unknown in SA
- Since then there's been a steady increase in TB prevalence
- Historically poor living & working conditions of miners set the stage for rapid TB transmission in SA
- Route of transmission can be traced from the migratory patterns of mine workers to rural communities
- Additionally, poor socio-economic & environmental conditions during apartheid 'facilitated' the spread of TB

INTRODUCTION cont...

- **Socio-economic determinants of TB are well-known:** overcrowding, poverty (& associated poor nutritional status), & lack of health resources including lack of access to health care
Read: *Paul Farmer's* work which provides an excellent understanding of the socio-economic determinant's of TB
 - It's estimated that about 1% of the SA population develops TB every year
 - SA has a high TB/HIV rate making up 25% of all TB-HIV co-infections in the world
 - Given this: *Social & Human Sciences need to play a role in eradicating TB and improving cure rates*

PSYCHOSOCIAL FACTORS: MEDIATING DISEASE OUTCOME

- There has been prolific biomedical research on TB relating to disease pathways & effective medicines that can cure the disease
- The role of Socio-Economic factors in TB disease onset is also relatively well known
- **GAP:** What has been *understudied and underestimated is the role of psycho-social factors in mediating TB disease outcome* (including TB cure & HR-QoL of those infected and those with TB/HIV co-morbidity)

PSYCHOSOCIAL FACTORS: MEDIATING DISEASE OUTCOME

- There are many *psychological (individual level) & social factors (environmental, household, work and community levels)* that influence TB disease outcome
- This presentation will focus on the *Knowledge of and Awareness about TB disease*
- The findings from the *South African National Health and Nutrition Examination Survey I (SANHANES I)* conducted by the HSRC will be presented



SANHANES I (Shisana *et al.*, 2013)

Background: Knowledge and Awareness

- Appropriate knowledge & awareness of TB, as well the fact that *TB is curable* even in the face of HIV remain vital messages required for effective TB control in SA
- These messages are important when TB patients decide to use *health services, seek a diagnosis & adhere to treatment*
- *TB knowledge & awareness of TB as an infectious disease* forms the basis for people taking *protective measures (which are behavioural)* to avoid becoming infected

SANHANES I cont...

Aim

The aim of this survey was to assess participant's perceptions of and knowledge about TB

Method

Design: cross-sectional population based household national survey

Sampling: multi-stage disproportionate stratified cluster sampling (N=14 739). 1 000 census EAs from 2001 population census selected from a database of 86 000 EAs. HSRC master sample (2007) used for sampling of households

SANHANES I cont...

Sample: Participants were males and females 15 years and older from all 9 provinces

Procedure

- Individual Interviews were conducted at house-hold level
- TB: self-reported infection over the life-time (5.9% of sample)
- No biomarkers/active case finding for TB was conducted

Data Collection Tools

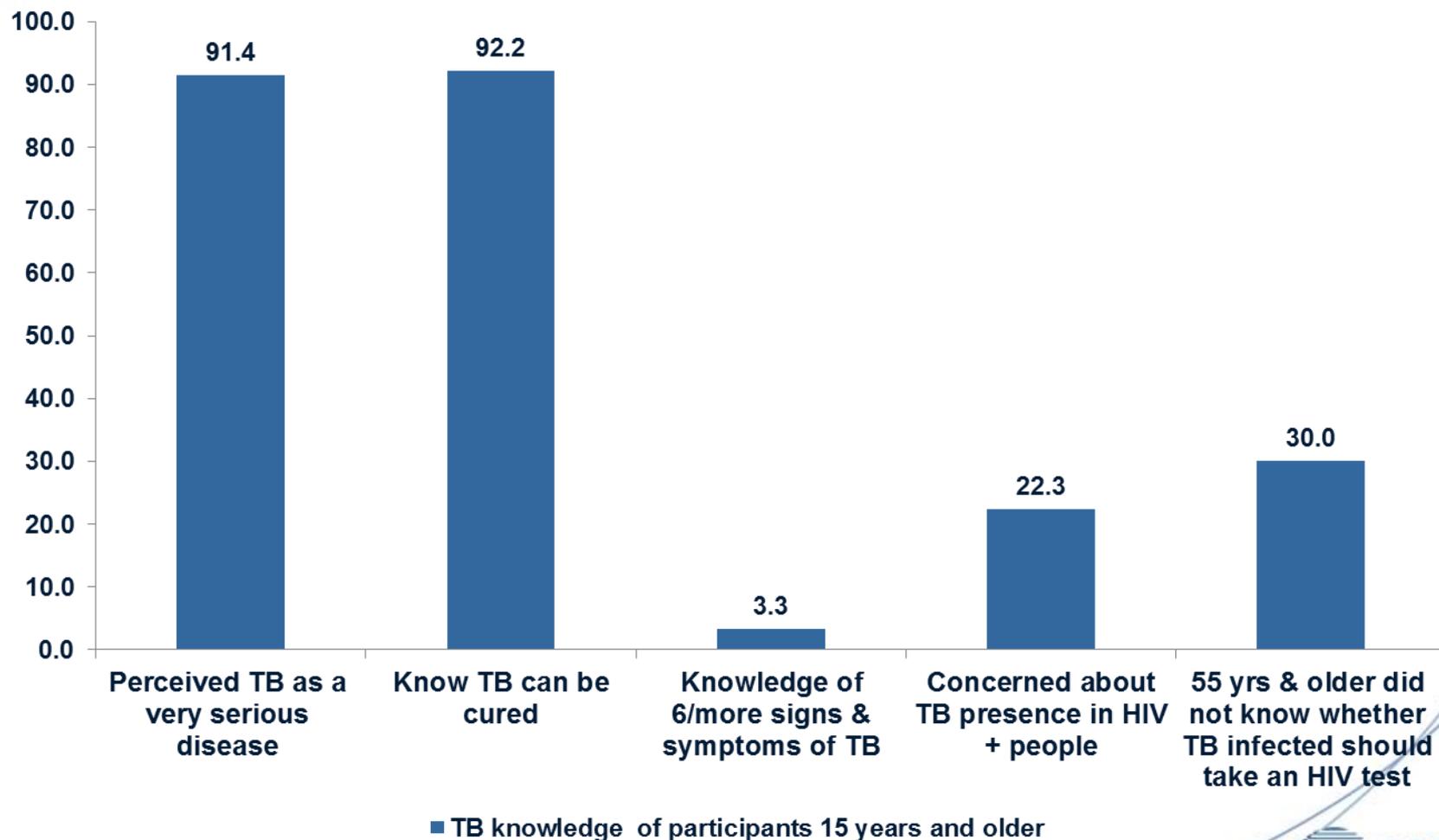
- Visiting point questionnaire
- Adult Questionnaire with various modules including one on the Knowledge and Awareness of TB & Attitudes towards the disease (92.6% response rate)

SANHANES I cont...

Results

- *Majority of participants (**91.4%**, $n=14\ 739$) *perceived TB to be a very serious disease*
- *Know that *TB can be cured* (**92.2%**, $n=14\ 903$)
- *Only **3.3%** ($n=15\ 140$) *had knowledge of 6 or more signs & symptoms of TB*
- *Only **22.3%** ($n=14\ 664$) *were concerned about TB presence in HIV + individuals*
- ***30%** of ≥ 55 years *did not know whether people with TB should take an HIV test*

TB KNOWLEDGE OF PARTICIPANTS 15 YEARS AND OLDER



SANHANES I cont...

Discussion

- *Opinions about the seriousness of TB:*

*According to several theories of behaviour change, such as the Health Belief Model (Janz & Becker, 1984) & Transtheoretical- Stages of Change Model (Proshaska & DiClemente, 1983), *whether or not people adopt preventive behaviour depends on how serious they perceive the problem to be*

*Hence: Knowledge & awareness (K&A) that TB is an infectious disease should lead to individuals taking protective measures (*adopting protective behaviours*) to avoid becoming infected

SANHANES I cont...

Discussion cont...

*K & A also allows those that are infected make **good health decisions** (such as *treatment adherence & adopting behaviours for transmission prevention*)

*K & A is important to ensure that there are no misconceptions bout TB

- ***Knowledge of the signs & symptoms of TB:***

*despite the majority of participants knowing about the seriousness of TB only 3.3% identified 6 or more signs & symptoms

*Majority identified only 2/3 signs & symptoms

SANHANES I cont...

Discussion cont...

- ***Knowledge that TB is a curable disease***

- *Positive finding that the majority knew that TB can be cured

- ***Perceptions of comorbidity between TB & HIV***

- *Indicates participants ability to separate TB and HIV as “2 distinct diseases”

- *Given the high TB/HIV co-infection rates in SA, it's important that people know that being HIV positive increases ones chances of becoming infected with TB

SANHANES I cont...

- *Discussion cont...*

- * HIV testing for individuals with TB: majority agreed with this. It is a concern, however, that a relatively larger proportion of the 55 years & older did not know whether a HIV positive person should test for TB

- * Ultimately K&A is crucial to health-seeking behaviour, diagnosis & treatment & cure

CONCLUSION & RECOMMENDATIONS

- In order to address the *psycho-social mediators* of TB disease *given the findings from SANHANES I, current evidence base & review of the literature* the following is needed:

***Health literacy campaigns** targeting groups of individuals/groups/institutions such as:

 Population level effect (targeting high burden areas) focussing on those using public transportation, living & working in high density areas

 “Older individuals” who may not understand the relationship between HIV and TB disease

CONCLUSION & RECOMMENDATIONS CONT...

- ➔ Parents & care-givers (need to remember that children are also vulnerable and need to be protected – this is often neglected in TB prevention research focussing on psycho-social aspects of TB)
- ➔ Schools, mines & mining communities
- ➔ Health Service Providers (e.g. Doctors, nurses, CHWs & so on)

CONCLUSION & RECOMMENDATIONS CONT...

- * Recognize the importance of psychosocial factors as mediators of TB disease outcome

- * Monitor the emerging ***quadruple burden of 'disease'***, namely

TB, HIV, Depression (Common Mental Disorders-CMDs), Alcohol & Substance Use Disorders

- * Use a sound **M & E system** to assess the impact of screening and treating for CMDs/Alcohol & Substance use Disorders whilst simultaneously using the ant-TB DOTS strategy recommended by WHO

THANK YOU

pnaidoo@hsrc.ac.za

www.hsrc.ac.za