**Supplementary File Dr. Felix**

**Note please see missing words from the File sent** (, which could improve the outdoor air quality and...) page #7

**Recommendations**

The researchers recommend that there is a need to develop specific programmes for screening and detecting alcohol use disorders (AUD) in patients being treated for PTB at the Wellness Clinic in Themba Hospital. This could also be applied to other TB health institutions across the country. There is a need to prevent or reduce dust emissions mainly from the unpaved roads of rural areas, which could improve the outdoor air quality and subsequently, the population's health. Across the country, health policy makers need to further develop strategies and interventions to limit the impact of the risk factors for developing pulmonary tuberculosis. To that end, further research on these risk factors for TB may be beneficial to extend the scope of this study and enable more positive health interventions and a local and national level.

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**EXTRA INFORMATION ABOUT THE STUDY**

**Rationale**

The extensive literature review revealed the consensus in the scientific community regarding the major risk factor for the onset of tuberculosis is HIV infection, along with an acknowledgement that a number of other important risk factors make people susceptible to developing TB infections.

The purpose of this study is to assess the risk factors that are contributing to the increased development of PTB among adult HIV-positive patients attending the Themba Hospital Wellness Clinic. Because no previous research of this kind has been conducted in this hospital, it is hoped that this study would allow identification and greater understanding of the risk factors that are unique to the hospital’s specific context.

This study could offer a basis for the generation of hypotheses for further studies, and from an epidemiological point of view, this data will make a modest contribution to the scope of medical knowledge.

This research assesses some of the most relevant risk factors for the development of TB in line with previous research studies and includes: demographics; socioeconomics; behavioural and lifestyle aspects; medical history; and environmental conditions. Finally, a comparison of the presence (or prevalence) of these risk factors among HIV positive patients with tuberculosis and without tuberculosis is presented.

An awareness of the risk factors for tuberculosis is important for targeted interventions for both TB screening and prophylaxis. This is particularly important when resources available to public health agencies are limited and disease control activities must be prioritized.

**Aim**

The overall aim of the research was to assess contributory risk factors for Pulmonary Tuberculosis among adult patients suffering from Human Immunodeficiency Virus attending the Wellness Clinic at Themba Hospital.

**Objectives**

1. To describe the socio-demographic characteristics of the study participants.
2. To determine the prevalence of PTB among HIV positive patients.
3. To compare HIV positive patients with and without pulmonary tuberculosis in order to identify the potential additional individual risk factors for the development of PTB.
4. To model PTB outcomes against potential risk factors in a multivariable analysis.

**Table #:** Medical history of HIV patients PTB- and PTB+ (**not included in the article because p-value not statistically significant**)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Variables** | **PTB****n=202(%)** | **PTB+****n=98(%)** | **Total****n=300**  |  **χ2** | **P- value** |
| **Previous medical history/treatment of PTB**NoYes  | 112(70.9%) 90(63.4%) | 46(29.1%)52(36.6%) |  158 142 | 1.91 |  0.166 |
| **Family history of PTB**NoYes | 131(67.2%) 71(67.6%) | 64(32.8%)34(32.4%) |  195 105 | 0.006 |  0.938 |
|  |  |  |  |  |  |

 \*p<0.05

 **VARIABLES OF INTEREST AND THEIR DEFINITIONS**

|  |  |  |
| --- | --- | --- |
| Variables | Categories | Definition |
| General socio-demographic |
| Age group in years  | 0=18-301=31-402=41-503=>50 | Age group |
| Sex | 0= Female1= Male | Sex |
| Level of education  | 0=High School/ University Degree 1=Primary/ Secondary2=Illiterate/No Formal Education | Level of education  |
| Marital Status  | 0=Married/ Cohabitation 1=Widowed/ Divorced2=Single | Marital Status  |
| Employment Status  | 0=Presently Employed1=Pensioner2=Unemployed | Employment Status  |
| Household class  | 0=Normal1=Overcrowded | Household class  |
| Outdoor Environment  | 0=Clear 1=Dusty | Outdoor Environment  |
| Behavioural factors |
| Smoking | 0=No 1=Yes | Smoking |
| Drinking habit | 0=Non-Drinker/ Light Drinker 1=Moderate Drinker/ Heavy Drinker | Drinking habit |
| Medical history |
| Previous medical history/treatment of PTB | 0=No 1=yes  | Previous medical history/treatment of PTB |
| Family history of PTB | 0=No1=yes  | Family history of PTB |