

Knowledge and Practice of Pulmonary Tuberculosis Prevention among in-Mates and Staff of Taraba State Correctional Centres

Rhoda Pheela Saminaka Onyekwena¹, Tomen Egbe Agu², Josephus Boniface³, Tomen, Ezekiel Agu⁴, Obed Tiwah John^{5*}

^{1,3}Department of Nursing Sciences, Faculty of Health Sciences Taraba State University, Jalingo

²Department of Public Health Sciences, Faculty of Health Sciences Taraba State University, Nigeria.

⁴Dalhatu Araf Specialist Hospital, Department of Family Medicine, Lafia Nasarawa State

^{5*}Department of Research & Statistics, Centre For Initiative and Development, Taraba State – Nigeria

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ABSTRACT

Tuberculosis (TB) remains a significant public health concern worldwide, with vulnerable populations, such as inmates and staff within correctional centers, facing unique challenges. This study conducted in Taraba state, Nigeria, aimed to assess the knowledge and practices related to TB prevention among this specific population. Data were collected through structured interviews and analyzed with the help of SPSS version 25 to provide insights into TB awareness, attitudes, and behaviors within 3 correctional centers in Taraba State. Simple descriptive statistics such as percentages and frequency distribution tables were used.

This study revealed a diverse socio-demographic profile of participants, with variations in gender, age, education, income, occupation, religion, household size, and smoking habits. While some respondents demonstrated accurate knowledge about TB, a substantial proportion held misconceptions about its causes, transmission, and symptoms. Attitudes towards TB were generally positive, with most participants considering it a serious disease; however, fear of infection and stigmatizing attitudes persisted. Practices related to TB prevention and seeking medical care showed a range of behaviors, highlighting the need for targeted interventions.

The findings from this study emphasize the importance of tailored, culturally sensitive, and evidence-based TB education and awareness campaigns within correctional settings. These campaigns should address knowledge gaps, dispel myths, reduce stigma, and promote timely diagnosis and treatment. The study underscores the critical role of public health initiatives in ensuring that all individuals, regardless of their circumstances, have access to accurate information and the necessary resources to prevent and control TB effectively.

Keywords- knowledge, practice, Pulmonary Tuberculosis, Correctional Centres, Taraba

INTRODUCTION

Tuberculosis (TB) is one of the most common worldwide infectious diseases and one of the leading causes of death in the world, with an overall 1.7 million TB-related deaths reported in 2016, despite accessibility of

TB treatment. In 2016, the World Health Organization (WHO) estimated a total of 10.4 million incidents TB cases globally; Six million men, 3.4 million women and 1.2 million children. 10% of who were living with HIV infection. The burden of TB is the highest in the South-East Asian and African regions, which accounted for 70% of the global TB incidence in 2016 [1]. In fact, since 1993, TB has been declared as a “global emergency” by the World Health Organization until now [2].

Even though the incidence of tuberculosis (TB) has decreased worldwide, it remains a global health challenge. [3]. The disease is more prevalent in congregate settings such as prisons [4]. Especially, it is much worse in Sub-Saharan prisons due to the added problems of human immunodeficiency virus (HIV) and poverty [5]

A total of 1.6 million people died from TB in 2021 (including 187 000 people with HIV). Worldwide, TB is the 13th leading cause of death and the second leading infectious killer after COVID-19 (above HIV/AIDS). TB is present in all countries and age groups. But TB is curable and preventable. [6]

In 2021, 1.2 million children fell ill with TB globally. Child and adolescent TB is often overlooked by health providers and can be difficult to diagnose and treat. In 2021, the 30 high TB burden countries accounted for 87% of new TB cases [7].

Confined populations, especially those comprised of incarcerated individuals, represent a serious problem in the control of infectious and contagious diseases, such as tuberculosis (TB) and AIDS. Even when surrounded by prison walls, these individuals are never entirely isolated from society. Bonds with the outside world continue through contact with both visitors and prison workers. Inmates also inter-relate with the community in general through releases to work, granted leaves, escapes and return to society when sentences have been served. In addition, prison workers maintain contact with their own families and the community in general, and this represents a double risk of contamination. In other words, an uncontrolled epidemic of TB in a prison facility may represent a serious risk to individuals and to society at large. In the opposite direction, TB brought in from the outside community can trigger off an epidemic among inmates [8].

Tuberculosis is one of the major diseases of public health importance especially in prisons where case-finding rate has been low and is posing specific challenges in numerous geographical areas, particularly in low and middle-income countries (LMICs) where more than 80% of the global TB burden reside [6]. The WHO established five facts of prisons PTB spread, these include: Prisons receive TB, Prisons concentrate TB, Prisons disseminate TB, Prisons make TB worse, and Prisons export TB. Poor TB case finding results in annual TB transmission risks of 90%. [8]

Tuberculosis still remains a major infectious disease in prison systems for several reasons. These include but not limited to the high prevalence of multi- and extensively drug resistant TB (M/XDR-TB) [1-8], and intravenous drug use among HIV-infected individuals, which makes prison populations more susceptible to the development of TB [8]. Transmission occurs through prison staff, visitors, and released inmates. The estimated prevalence of latent TB infection (LTBI) and active TB disease in LMICs such as Ethiopia, Thailand, and Brazil has been reported to be almost 4-, 8-, and 64-times respectively higher among prisoners compared to the general population [8, 9]. Factors known to contribute to the transmission of MTB strains and hamper TB control are overcrowding, delayed case detection, poor contact tracing, inadequate treatment of infectious cases, high turnover of prisoners, and poor implementation of TB infection control (IC) measures [8]. In addition, limited access to timely and quality health care services further exacerbate the situation. The prison health service is typically underprivileged and under-funded [11] and the prisons suffer from severe overcrowding, poor hygiene and inadequate ventilation, representing an epicentre for transmission of PTB to close contacts and surrounding communities. Often there is no medical screening

upon admission, and TB-infected prisoners are housed in crowded cells.

According to Shaban (2023), Tuberculosis (TB) is caused by bacteria (*Mycobacterium tuberculosis*) that most often affect the lungs (it can also affect the spine and abdomen). Tuberculosis is curable and preventable. This study is concerned with PTB (lungs) which is airborne transmitted.

PTB is spread from person to person through the air. When people with lung TB cough, sneeze or spit, they propel the TB germs into the air. A person needs to inhale only a few of these germs to become infected [10, 11]

About a quarter of the global population is estimated to have been infected with TB bacteria, but most people will not go on to develop TB disease and some will clear the infection. Those who are infected but not (yet) ill with the disease cannot transmit it. [12]

The World Health Organization reported that People infected with TB bacteria have a 5–10% lifetime risk of falling ill with TB. Those with compromised immune systems, such as people living with HIV, malnutrition or diabetes, or people who use tobacco, have a higher risk of falling ill.

When a person develops active TB disease (multiplying in the body), the symptoms (such as cough, fever, night sweats, or weight loss) may be mild for many months. This can lead to delays in seeking care, and results in transmission of the bacteria to others. People with active TB can infect 5–15 other people through close contact over the course of a year. Without proper treatment, 45% of HIV-negative people with TB on average and nearly all HIV-positive people with TB will die [11, 12]

Tuberculosis mostly affects adults in their most productive years. However, all age groups are at risk. Over 80% of cases and deaths are in low- and middle-income countries.

People who are infected with HIV are 16 times more likely to develop active TB. The risk of active TB is also greater in persons suffering from other conditions that impair the immune system. People with under nutrition are 3 times more at risk. Globally in 2021, there were 2.2 million new TB cases that were attributable to under nutrition (WHO, 2021).

Alcohol use disorder and tobacco smoking increase the risk of TB. In 2021, 0.74 million new TB cases worldwide were attributable to alcohol use disorder and 0.69 million were attributable to smoking. [12]

Correctional center settings, where segregation criteria are based on crime characteristics rather than on public health concerns, may facilitate transmission. Overcrowding, late detection and treatment of infectious cases, frequent transfers between prisons and poor airborne infection control measures are all factors contributing to transmission of TB [13]. Prisoners may be at higher risk of TB disease following a recent infection or reactivation of latent infection through co-immune-depressing pathologies, particularly HIV infection, intravenous drug use and poor nutritional status [14]. Moreover, prisons represent a reservoir for transmission of the disease to the community at large through prison staff, visitors and close contacts of released prisoners with still active TB disease [15]. The transmission dynamics between prisoners and the general population have been hypothesized as playing a key role in driving overall population-level incidence, prevalence and mortality rates of TB. Neglecting TB prevention and control in prisons settings can, therefore, carry serious consequences for both prisoners and the general population, especially in countries with poorly performing NTPs and high incarceration rates.

Baseline data regarding prisoners' knowledge of TB and related factors are limited. Studies conducted in prisons of Brazil [16] and Texas [17] reported gaps on some specific TB KAP variables. In a Brazilian prison, only 5.0% and 3.6% of the prisoners could mention the TB symptoms and prevention methods,

respectively, and in a USA prison 43.0% of the prisoners had a perceived stigma towards TB [17]. To our knowledge, in sub-Saharan prisons, only one study assessing prisoners knowledge was conducted six years ago in Eastern Ethiopian prisons [17]. This study reported a moderate level of knowledge about TB and revealed some misconceptions about its causes, control and prevention [5]. This study was therefore conducted to assess knowledge and practice of PTB prevention among inmates and staff of correctional centres in Taraba State.

MATERIALS AND METHODS

Study Area and Design

A cross-sectional study was conducted in 3 correctional centers in Taraba State, Nigeria between from January, 20123 to March, 2023. Participants were drawn using stratified random sampling techniques.

Sampling Technique and sample size determination

For the purpose of this study, stratified random sampling technique was utilized and sample size determination was obtained using Cohchran formular for sample size determination. The formular is given

$$\text{given } n = \frac{Z^2 Pq}{e^2}$$

Where n = sample size

$Z^2 = 95\%$ confidence level

P = Prevalence of TB based on recent studies by (18) was 10.1% which is equivalent to 0.101q

= 1-P

e = Tolerance error (0.01)

Therefore,

$$n = \frac{1.96^2(0.101 \times 0.899)}{(0.01)^2} = 348$$

For adequate power for the study, the sample size was increased to 375 therefore, a sample size of 375 was considered for the study

Data Collection Procedure, Processing and Analysis

A pretested structured questionnaire was used to collect data. Knowledge and practice of TB prevention was measured using two sections of a questionnaire. Section A of the questionnaire elicited information about the respondent's socio-demographic variables. Section B elicited information about the respondent's knowledge and prevention of PTB.

Data were analyzed using SPSS version 23. Descriptive statistics (frequencies and percentages) were used to analyze demographic variables, while chi-square statistic was used to test association between variables.

The main outcome variables knowledge and practice were measured dichotomously. Respondents were asked to indicate ‘Yes’ if they know and practice TB prevention or otherwise ‘No’

Ethical Considerations

The ethical approval was obtained from the research and ethics committee of Taraba State Ministry of Health. Informed consent was given by the study participants. Participants were assured of confidentiality. They were also assured of their right to withdraw from the study anytime

RESULTS

Table 1.1 Distribution of socio-demographic characteristics of respondents.

Variable	Labels	N (%)
Gender	Male	225 (60%)
	Female	150 (40%)
Age	15–29	100 (26.7%)
	30–39	150 (40%)
	40–49	70 (18.7%)
	50+	55 (14.7%)
Marital status	Married	255 (68%)
	Unmarried	100 (26.7%)
	Divorced/Widowed/Separated	20 (5.3%)
Level of Education	No Formal	55(14.7%)
	FSLC	100(26.7%)
	SSCE	150 (40%)
	Diploma	55 (14.7%)
	Degree and above	15 (4%)
Income	10,000-20,000	280 (74.7%)
	30,000–40,000	60 (16%)
	50,000–100,000	25 (6.7%)
	100,000 and above	10(2.7%)
Occupation	Housewife	130 (34.7%)
	Civil Servant	50 (13.3%)
	Self-employed	100 (26.7%)
	Farming	95 (25.3%)
Religion	Christianity	140 (37.3%)
	Islam	160 (42.7%)
	Traditional Religion	75(20%)
How many of you are in your household?	Two	100(26.7%)
	Three	70(18.7%)
	Four	60(16%)
	Five and above	145(38.7%)
Do you smoke?	Yes	188(50.1%)
	No	187(49.9%)

Table 1.2 Knowledge of respondents on TB cause, transmission, signs & symptoms, treatment, and attitudes toward TB among participants.

Question	Label	N(%)
Knowledge about TB causes		
What is the primary cause of TB?	TB germ /Bacteria	150(40%)
	Virus	70(18.7%)
	Cold wind	59(15.7%)
	Smoking	40(10.7%)
	Spoiled soil (soil with a bad odor)	10(2.7%)
	Poor hygiene Alcohol	6(1.6%)
	Inherited	25(6.7%)
	Don't know	15(4%)
Knowledge about the transmission of TB		
TB is spread from person to person through the air when coughing or sneezing?	Yes	135(36%)
	No	200(53.3%)
	Don't know	40(10.7%)
Can TB be transmitted by sharing utensils?	Yes	150(40%)
	No	195(52%)
	Don't know	30(8%)
Can TB be transmitted through food?	Yes	140(37.3%)
	No	215(57.3%)
	Don't know	20(5.3%)
Can TB be transmitted through sexual contact?	Yes	215(57.3%)
	No	140(37.3%)
	Don't know	20(5.3%)
What is the most common site for TB infection in the body?	Lungs	185(49.3%)
	(Only one answer)	
	Glands	70(18.7%)
	Brain	60(16%)
	Bones	50(13.3%)
	Others (specify)	8(2.1%)
	Don't know	2(0.53%)
Knowledge about symptoms of TB		
A person who is infected with TB coughs for several (more than 3) weeks?	Yes	140(37.3%)
	No	215(57.3%)
	Don't know	20(5.3%)
A person who is infected with TB has a persistent fever	Yes	140(37.3%)
	No	215(57.3%)
	Don't know	20(5.3%)

A person who is infected with TB sweats during the night	Yes	140(37.3%)
	No	215(57.3%)
	Don't know	20(5.3%)
A person who is infected with TB has pain in the chest or back	Yes	140(37.3%)
	No	215(57.3%)
	Don't know	20(5.3%)
Weight loss is one of the symptoms of TB	Yes	140(37.3%)
	No	215(57.3%)
	Don't know	20(5.3%)
Knowledge about the availability of TB treatment		
Is TB management available free of cost in Bangladesh?	Yes	255(68%)
	No	45(12%)
	Don't know	75(20%)
Is TB curable?	Yes	255(68%)
	No	75(20%)
	Don't know	45(12%)
Attitude towards TB		
In your opinion, how serious disease is TB?	Very serious	255(68%)
	Somewhat serious	45(12%)
	Not very serious	75(20%)
Do you afraid to get infected with TB? (chose only one)	Yes	150(40%)
	No	175(46.7%)
	Don't know	50(13.3%)
Will you keep it secret when any family member gets TB?	Yes	195(52%)
	No	166(44.3%)
	Don't know	14(3.7%)
Would you be willing to work with someone previously treated for TB?	Yes	150(40%)
	No	175(46.7%)
	Don't know	50(13.3%)
What would be your reaction if you found out that you have	Go to pharmacy	185(49.3%)
	Go to a health facility	70(18.7%)
TB? (chose only one)	Got to a traditional healer	60(16%)
	Pursue other self-treatment options (herbs, etc.)	50(13.3%)
	Others (specify)	10(2.7%)

Practice of Participants towards TB

Practice towards TB	Label	N(%)
Have you screened for TB?	Yes	75(20%)
	No	300(80%)

Have you had health education about TB?	Yes	225(60%)
	No	150(40%)
Do you cover your mouth and nose while coughing /sneezing?	Yes	188(50%)
	No	187(50%)
What do you use in covering your mouth and nose?	Hand	135(36%)
	Tissue	125(33%)
	Handkerchief	115(31%)
Do you open your windows regularly?	Yes	125(33%)
	No	250(67%)
Do you ensure all your children are vaccinated against TB?	Yes	200(53%)
	No	175(47%)
Do you isolate patients with TB ?	Yes	257(69%)
	No	118(31%)
Do you know TB treatment is free?	Yes	180(48%)
	No	195(52%)
Can balanced diet protect one from contracting PTB?	Yes	277(74%)
	No	98(26%)
Which of the following is a result of not taking TB drugs as prescribed?	Death	100(27%)
	Drugs Resistance	150(40%)
	Incurable TB	75(20%)
	I don't know	50(13%)

Table 1.4: Associated factors with knowledge of TB among participants

Variable	Labels	Adequate knowledge n	Poor knowledge n	P-value
Gender	Male	100	125	0.023
	Female	50	100	
Age	15–29	30	70	0.852
	30–39	50	100	
	40–49	20	50	
	50+	50	5	
Marital status	Married	90	135	0.341
	Unmarried	50	50	
	Divorced/Widowed/Separated	10	10	
Level of Education	No Formal	10	45	0.073
	FSLC	50	50	
	SSCE	65	85	
	Diploma	10	45	
	Degree and above	10	5	
Income	10,000-20,000	120	160	0.32
	30,000–40,000	20	40	
	50,000–100,000	5	20	

	100,000 and above	5	5	
Occupation	Housewife			0.921
	Civil Servant	45	5	
	Self-employed	60	40	
	Farming	50	40	
Religion	Christianity	100	40	0.0023
	Islam	89	71	
	Traditional Religion	20	55	
How many of you are in your household?	Two	40	60	0.698
	Three	30	40	
	Four	30	30	
	Five and above	50	95	
Do you smoke?	Yes	80	108	0.0032

Table 1.5 Associated factors with practice toward TB among the participants.

Variable	Labels	Good Practice n (%)	Bad practice n (%)	P-value
Gender	Male	99	126	0.017
	Female	100	50	
Age	15–29	50	50	0.94
	30–39	65	85	
	40–49	35	35	
	50+	30	25	
Marital status	Married	157	98	0.341
	Unmarried	30	70	
	Divorced/Widowed/Separated		11	
Level of Education	No Formal	20	35	0.043
	FSLC	30	70	
	SSCE	50	100	
	Diploma	40	15	
	Degree and above	12	3	
Income	10,000–20,000	150	130	0.0442
	30,000–40,000	30	30	
	50,000–100,000	15	10	
	100,000 and above	5	5	
Occupation	Housewife	65	65	0.862
	Civil Servant	30	20	
	Self-employed	40	60	
	Farming	50	45	
Religion	Christianity	130	10	0.0135
	Islam	99	61	

	Traditional Religion	35	40	
How many of you are in your household?	Two	50	50	0.698
	Three	35	35	
	Four	35	25	
	Five and above	55	90	
Do you smoke?	Yes	50	138	0.00043

Description of Results

The distribution of the results as presented in Table 1.1 and 1.2 shows a comprehensive study conducted to evaluate the knowledge and practices related to tuberculosis (TB) prevention among inmates and staff within correctional centers in Taraba state, Nigeria. The study encompasses several key aspects, and this is discussed based on sections as highlighted below:

Socio-Demographic Characteristics of Respondents:

Based on Table 1.1 Gender distribution indicated that 60% of the respondents were male, while 40% were female. In terms of age distribution, 26.7% of the respondents fell within the age group of 15–29, 40% were aged 30–39, 18.7% were aged 40–49, and 14.7% were aged 50 and above. In terms of marital status, the majority (68%) were married, 26.7% were unmarried, and 5.3% were divorced, widowed, or separated. Regarding educational attainment, 14.7% had no formal education, 26.7% held a First School Leaving Certificate (FSLC), 40% had a Senior Secondary Certificate Examination (SSCE), 14.7% possessed a diploma, and 4% held a degree or higher. The income distribution revealed that 74.7% of respondents earned between 10,000 and 20,000, 16% earned between 30,000 and 40,000, 6.7% earned between 50,000 and 100,000, and 2.7% earned 100,000 and above. Occupations varied, with 34.7% being housewives, 13.3% working as civil servants, 26.7% self-employed, and 25.3% engaged in farming. In terms of religion, 37.3% identified as Christians, 42.7% as Muslims, and 20% as adherents of traditional religions. Household size was diverse, with 26.7% having two members, 18.7% having three members, 16% having four members, and 38.7% having five or more members. Smoking habits were evenly split, with 50.1% of respondents being smokers and 49.9% being non-smokers.

Knowledge about TB:

Based on Table 1.2. A significant proportion (40%) correctly identified TB germs or bacteria as the primary cause of TB, while other misconceptions were present, such as attributing TB to viruses (18.7%) or cold wind (15.7%). TB transmission: There was uncertainty among respondents about TB transmission. Only 36% believed that TB is spread through the air when coughing or sneezing, and 40% thought it could be transmitted by sharing utensils. A majority (57.3%) believed TB could not be transmitted through food. TB symptoms: Respondents displayed varied recognition of TB symptoms. 37.3% correctly identified persistent cough for more than three weeks, night sweats, chest or back pain, and weight loss as symptoms of TB. TB treatment: A positive perspective was observed, as 68% of respondents believed that TB management is available free of cost. Additionally, 68% believed TB is curable.

Attitudes towards TB:

A notable 68% considered TB a very serious disease. Around 40% expressed fear of getting infected with TB. More than half (52%) would keep it a secret if a family member had TB. 40% were willing to work with someone previously treated for TB. When asked about their reaction if they were diagnosed with TB,

49.3% indicated they would go to a pharmacy for assistance.

Practices towards TB:

Based on the results of TB screening, only 20% of the respondents have undergone TB screening, while a substantial 80% have not availed themselves of this service. This indicates a potential lack of awareness or access to TB screening services among the majority. It's noteworthy that a significant portion of the surveyed population (60%) has received health education about TB, which suggests that efforts have been made to raise awareness and knowledge about the disease. This is a positive sign for public health initiatives aimed at educating the community about TB. The data indicates a balanced split in the practice of hygiene during coughing and sneezing, with 50% of respondents adhering to this hygienic practice and the remaining 50% not following it. This underscores the need for continued education and awareness campaigns on the importance of proper respiratory hygiene.

Furthermore, among those who do practice proper hygiene, 36% use their hands, 33% opt for tissues, and 31% choose handkerchiefs as their preferred method of covering their mouth and nose during coughing or sneezing. In terms of ventilation, approximately one-third (33%) of respondents regularly open their windows to ensure proper airflow, while the majority (67%) do not adopt this measure. This highlights a potential gap in understanding the importance of ventilation in preventing TB transmission.

On child vaccination against TB, it is practiced by 53% of respondents, while 47% do not ensure that all their children are vaccinated against TB. This suggests the need for increased awareness campaigns emphasizing the importance of childhood TB vaccination. The data reveals that a significant proportion of respondents (69%) do practice the isolation of TB patients, which is crucial in preventing the spread of the disease. However, 31% do not follow this practice, indicating a potential area for education and awareness efforts.

Knowledge about the availability of free TB treatment is mixed, with 48% of respondents aware of this fact, while 52% are not aware. This underscores the importance of better communication about the availability of free TB treatment services to ensure that those in need can access them. The belief that a balanced diet can protect against contracting Pulmonary TB (PTB) is held by a majority of respondents (74%), indicating a strong belief in the role of nutrition in preventing TB. This reflects a positive attitude towards holistic health and disease prevention. Lastly, the understanding of the consequences of not taking TB drugs as prescribed varies among respondents. While 27% believe it can lead to death, 40% think it can result in drug resistance, and 20% believe it can cause incurable TB. Notably, 13% admit they do not know the consequences, highlighting the need for improved patient education and awareness campaigns regarding the importance of adhering to TB treatment regimens.

Test of Hypothesis

The tables (Table 1.4 and Table 1.5) provided show the results of statistical analysis comparing various demographic and socioeconomic factors with the knowledge of tuberculosis (TB) and the practice towards TB among participants. The p-values indicate the level of statistical significance of these associations. Based on Table 1.4 which presents associations between various demographic and socioeconomic factors and knowledge of tuberculosis (TB) among participants. It reveals significant associations between gender, with males having better knowledge, religion, with Christians having better knowledge, and smoking habits, with non-smokers having better knowledge. Borderline associations were found for education level, where those with "No Formal" education and "Diploma" had slightly lower knowledge. Other factors, including age, marital status, income, occupation, and household size, showed no significant associations with TB knowledge.

Table 1.5 examines factors associated with participants' practices towards TB. It indicates significant associations between gender, with males having better practices, education level, with those having "No Formal" education having poorer practices, income, with the "10,000-20,000" income group having poorer practices, religion, and smoking habits, with non-smokers having better practices. Other factors such as age, marital status, occupation, and household size did not show significant associations with TB practices.

DISCUSSIONS

This study aimed to assess knowledge and practice of PTB prevention among inmates and staff of correctional centres in Taraba State Nigeria.

Result from the study showed moderate knowledge of TB among participants. However, most of the respondents exhibited mixed practice level in terms of TB prevention with a reasonable number of participants having good practice while others having poor practice. The findings of this study agreed with a study conducted by [19] it however differ slightly from some local study carried out in South east Nigeria, Tapah prison in Malaysia which showed good knowledge and good practice among prison workers [20, 21]. The demonstrated higher TB awareness in South-East Nigeria and that of Malaysia could possibly be attributed to series of TB workshops, seminars and public lectures given within those communities coupled with health talks on TB routinely given at primary health care centers [22, 23]. In this study, gender, education level, income, religion, and smoking habits were associated with both knowledge of and practice toward TB among the participants. This agrees with studies carried out by [24-26] where Gender, education, and religion were significantly associated with good practices toward TB with females, married, younger and older, less educated, and Muslim people showing poor practices toward TB. Although no association was found between age, marital status, occupation, and household size as opposed to [24-26] who in addition found age and marital status as significant factors. The factors for poor practices identified in this study are consistent with other studies among different types of populations [24-26]. The demographic disparities in association could also be attributed to inability to develop targeted strategies for improving TB prevention knowledge and practices in affected communities.

CONCLUSION

This study provides valuable understandings into the state of TB prevention knowledge and practices among inmates and staff across three correctional centers in Taraba state.

It was observed that while some respondents displayed accurate knowledge and positive attitudes towards TB, there were also misconceptions and uncertainties. TB prevention efforts in this population should focus on dispelling myths, reducing stigma, and promoting timely diagnosis and treatment. The findings underscore the need for tailored, culturally sensitive, and evidence-based TB education and awareness campaigns within correctional settings.

RECOMMENDATIONS

Based on the study's findings, the following recommendations are proposed:

Tailored Educational Campaigns: Develop and implement targeted TB education and awareness campaigns within correctional centers. These campaigns should address the specific knowledge gaps identified in the study, correct misconceptions, and provide accurate information about TB causes, transmission, symptoms, and treatment.

Cultural Sensitivity: Ensure that educational materials and campaigns are culturally sensitive and consider the diverse socio-demographic characteristics of the inmate and staff population. This can enhance the effectiveness of the interventions.

Stigma Reduction: Implement programs aimed at reducing the stigma associated with TB. Promote a supportive and non-discriminatory environment within correctional centers to encourage individuals to seek timely medical care and disclose their TB status without fear of judgment or isolation.

Socio-Demographic Tailoring: Consider the unique characteristics of different subgroups within correctional settings when designing and implementing TB interventions. Recognize that strategies may need to be adapted to meet the specific needs of inmates and staff with varying backgrounds and circumstances.

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