

Attitude of Tuberculosis Patients Towards the Risk of HIV/AIDS

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ABSTRACT Tuberculosis patients are more likely to test positive to Human Immunodeficiency Virus and this is the reason more TB patients need to be tested for HIV. The goal of this paper was to find out the attitude of TB patient towards the risk of HIV/AIDS. Descriptive survey design was used with 150 participants who are receiving treatments at Directly Observed Therapy (DOT) centers in Ibadan metropolis. The survey used a pre-coded, self-administered questionnaire, which contained approximately 53 items, including demographic information. The results show that TB patients have negative attitude towards HIV as a result of fear of double stigmatization. Based on this finding, it was recommended that the healthcare system should be strengthened by embarking on periodical enlightenment programs that create awareness about danger of stigmatization of TB patients. This will help in removing the barrier of stigmatization towards tuberculosis patients for better combat HIV/AIDS.

INTRODUCTION

According to the World Health Organization, Tuberculosis (TB) and Human Immunodeficiency Virus (HIV) are pandemic diseases that affect numerous people all over the world yearly (WHO 2013). While cases of these diseases are declining in the Western world, the case in other regions especially in sub-Saharan Africa is increasing (WHO 2014). More so, tuberculosis is the number one cause of death among people living with HIV/AIDS and sub-Sahara African countries have the highest percentage of HIV, TB and death cases. Burden of TB in Nigeria is compounded by a high prevalence of HIV among TB patients that suggest that TB situation in Nigeria is HIV driven (WHO 2012).

However, tuberculosis is not incurable and can be prevented. Over 5,000 people die of tuberculosis on a daily basis (two to three million people per year) (WHO 2011). Tuberculosis often strikes the most susceptible individuals of society, and if left unattended, it leads its sufferers to become emaciated, weaken, and die prematurely (Du Cros et al. 2011). TB excessively affects the people of low socioeconomic sta-

tus and other vulnerable groups of society (Alencar et al. 2009; Diniz et al. 2009).

There are both biological and social factors that impact tuberculosis transmission, becoming a disease, and treatment. By identifying and examining the interrelation of these factors, anthropologists and other social scientists have made important assistance toward the control of TB. The highest numbers of active TB cases are found in less developed countries, especially in Africa, which are mostly affected by HIV. There are 1.6 million new TB cases each year, in contrast with nations having established market economies, which account for roughly 100,000 cases (<https://findtbresources.cdc.gov>). Tuberculosis (TB) is an infectious disease, which is transmitted through the air or by ingesting infected milk or meat and it is both preventable and curable (World Health Organization 2006a; Marais and Schaaf 2010). Infection can occur through droplets when infected persons cough, sneeze or talk (World Health Organization 2006a). An HIV positive person has a five to ten percent risk of developing TB (Gandhi et al. 2006; ITECH 2008).

In the World Health Organization (WHO) report, close to 9.6 million new patients develop TB yearly, and that death from TB alone is about 1.5 million people globally in 2014 (WHO 2015). TB has a great burden on their caregivers and their communities as a result of spending on diagnosis, treatment, transport to and from the health facilities and time lost from work (WHO

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2006b). The same way that sexually active individuals are exposed to HIV, TB patients are also exposed to HIV/AIDS. Since cure is still far-fetched, public enlightenment through education remains prevention strategies against HIV/AIDS (Okaro et al. 2010). As the pandemic is now in the tenth decade since it was first identified and now combining with HIV/AIDS is showing no sign of relenting, it is important for infected patients to be well equipped with current facts, information, treatment options and knowledge of resources available. With the complacent attitude towards HIV/AIDS, infected patients may not necessarily care whether they have Tuberculosis diseases or not, it is therefore important to assess the attitude of patients towards risk of HIV/AIDS (Okaro et al. 2010). Precise study in this area is less available, NGOs, public health officers and organizations have actually carried out studies on attitudes of TB patients towards the risk of HIV/AIDS, yet study on this particular topic has received less consideration from the researchers, which is indicated by its less available literature both in the library and on the Internet.

There is a connection between risk of HIV awareness and education as a means of reducing the transmission of the virus. Today, there is a rareness of empirical evidence in Nigeria especially in Ibadan city on the extent to which TB patients have right attitude towards risk of HIV/AIDS. It is essential for this study to investigate attitude of TB patients towards risk of HIV/AIDS. Presently, there is little or no study focussing on risk of HIV/AIDS of Tuberculosis patients in Ibadan. This unfilled space is the motivation for the present study. However, for the purpose of this paper the following research questions are postulated, which are:

- ♦ What is the attitude of TB patients towards risk of HIV/AIDS
- ♦ What is the influence of stigmatization on TB patients' risk of HIV/AIDS?
- ♦ What are the social cultural factors influencing health seeking behavior of TB patients?

Theoretical Framework

This study is anchored in the mind, self and society theory propounded by George Herbert Mead (1863-1931). This theory explains social attitudes and the physical world. It emphasized

that the arrangement of the social act has been transferred into the individuals and becomes the people's mind. Individuals exchange the attitudes of the other towards his own responses, and in exchanging it, he discovers it has been changed in that his response is now a different one entirely, and continues to change further.

Public attitude changes gradually, and it is practically difficult to change public opinion by a single individual, but changes in public opinion is on a continual bases by responding to group opinion in a positive way and thereby effecting changes through individual's own responses. One's own opinion is one's response to public opinion. Mead's idea of mind is that of a "social phenomenon's" that does not only arise through public opinion, but has a communication process that is internally established in the use of significant symbols. The perception of mind as means rather than product means that human internal process consciousness is not a product of external forces but rather an active and creative force constantly changing and growing. The mind is not a dumping site for different ideas, nor a caricature of other's people way of acting. Instead, mind is a process a selection is been made through sifting of different ideas. Mead also conceived as coming from social experience" that can be perceived as "an object to it" and possesses a "social structure". This suggests that individuals can conceive of their own being and convert that identity into a form of consciousness so conceived the self can be the recipient of both definition and emotion. Symbolic communication provides answers to the question: Who am I? Consistently Mead argued that the self is best conceived as a developmental process.

The emergence of the self is based on learning to play the role of the other, and in turn, role playing demands that one imagines how one's own way of acting is conceived from the view of other. According to Mead, role taking is a developmental process that produces self. However, this developmental process consists of three distinctive phases, which are infancy, child and adolescent and adult stages. Two dimensions of self are experience in a lifetime and they are formed and reformed. The first self enables one to grow and be known in response to the attitude of others. The response actually emerged from the conception of people situations. The other self, comes from the assumption of others

people attitude, which actually provides rules for the response. These two dimension of self is represented the concepts “I” and “me”, respectively. “Me” is the internalization of the generalized other. Society in Mead’s system is little more than an extension of his “organized self”. More precisely, the self through interaction takes on “generalized social attitudes” toward a wider environment. Such references are beyond the immediate spheres of personal relationships, intimate groups or communities.

Literature Review

A study conducted in Ethiopia, revealed that TB causes were attributed to inability to balance one’s behavior or bad diet and the best form of treatment is herbal remedies and eating nutritious food (Hesselin et al. 2009). In a related study among the Xhosa speaking people of South Africa, TB is associated with lack of hygiene and also with witchcraft, such as the lighting bird, *impundulu*, which requires divine intervention (Nichol et al. 2011). These may influence the patients’ attitude towards HIV/AIDS, as most patients may not want to attend clinics where they would be offered treatment, which includes diagnoses for HIV/AIDS. TB patients in Kenya believe that the direct causes of TB are hereditary predisposition, negative resulted affect their health seeking behavior (Lin et al. 2007). Among the sufferers of TB in Philippines, a study revealed that patients attributed TB symptoms to excessive drinking and thereby causing delay in their treatment seeking behavior (Boccia et al. 2011). Similarly, among Igbo of Nigeria, TB patients who are of the traditional opinion that TB is transmitted through eating beef and other high protein foods also reportedly delayed seeking treatment until when they become emaciated (Karim et al. 2012).

Onifade et al. (2010) in his study among Nigerian female street workers revealed that a larger percentage of the respondents do not have adequate knowledge of modes of HIV/AIDS transmission and had wrong perceptions about HIV/AIDS with its negative consequences showing on their risk behavior making them more susceptible to the virus. Research study also revealed that African and American social work students only had little knowledge about causes and prevention of HIV/AIDS while they are not knowledgeable in the prognosis and trans-

mission. This was revealed in their unpreparedness to handle HIV/AIDS cases and avoidance of people living with HIV/AIDS (Corbett et al. 2007).

A similar study by Davis et al. (2007) found out that sexually active respondents in the study displayed low level of knowledge about HIV/AIDS transmission and exhibit biased attitudes towards people living with HIV/AIDS. On the contrary, the abstaining respondents had a high level of knowledge of HIV/AIDS transmission. The study therefore, recommended for increased safer sex and condom self-efficacy practices.

METHODOLOGY

A descriptive research design was used due to the fact that the research’s aim is to investigate attitude towards risk of HIV/AIDS among TB patients. Respondents were drawn from three local government areas of Ibadan metropolis, which are Ibadan North, Ibadan Northeast, and Ibadan Northeest. Five DOTS centers were purposively chosen from the three LGA and 50 patients receiving DOTS were selected from each local government making a total number of 250 patients. Over one hundred and fifty patients are registered in each of this centers receiving treatment. Samples of 250 participants were selected for this study and questionnaires were administered to respondents who are patients receiving treatment at DOTS centers in Ibadan as at the time of data collection.

The adopted sampling technique was multi-stage and this was as a result of the fact that all the respondents could not be reached at almost the same time. First, the researcher identified the centers where the data was collected using cluster sampling technique. DOTS centers were also identified in three local government council areas of Ibadan North, Ibadan Northeast and Ibadan Northwest. From these 5 DOTS centers, patients were sampled using the accidental sampling technique. Ibadan is the capital of Oyo state in Nigeria. It is an old city predominantly occupied by the Yoruba speaking group of Nigeria. It is located in the southern part of Nigeria and noted for accommodating people from all works of life. Ibadan is a nodal town because of many gates that leads to the town. The city is divided into 11 local government areas for administrative purpose and boasts of many tertiary institutions of which University of Ibadan is

one. The survey used a pre-coded and self-administered questionnaire. The questionnaire contained approximately 53 items, including demographic information. This took approximately 30 minutes to complete specific topics covered including:

- ♦ Current exposure to HIV/AIDS education and resources
- ♦ HIV/AIDS attitudes, behaviors, subjective norms, perceived behavioral control, and locus of control
- ♦ Perceived vulnerability
- ♦ Attitude towards doubles stigmatization

Attitude and behavior questions were scored on a 5-point Likert-type response set. The questionnaires were tested for reliability, with the aid of the test-retest method. The Cronbach Alpha (coefficient alpha showed 0.80) showed that the questionnaire was effectively reliable for collecting data.

RESULTS

This section looked into the presentation, analysis and interpretation of the data collected. It focused on the analysis of the data collected from the respondents. The demographic backgrounds of the participants were first treated, after which the main focus of the questionnaire was treated. Thereafter the hypotheses were tested.

From Table 1, it is obvious that more males (72.2%) were involved in the study than females (27.8%). This may suggest a higher prevalence of TB among males than females or a higher rate of enrolment for treatment for males than females. Table 1 also showed that respondents aged 50 years and above had the highest proportion in the sample with 31.1 percent of respondents. At the same time, respondents who were between 20-29 years (the lowest age group in the study) had the lowest percent of the entire sample with 15.5 percent. Other age groups were 30-39 years with 23.7 percent and 40-49 years with 29.7 percent. Information of participants' marital status indicates that nearly half the respondents (49.5%) were married while only 1.4 percent was divorced, 9.9 percent were separated and 13.2 percent were widowed. The second highest majority was single (25.9%). More also, it can be seen from Table 1 that majority of the participants (54.9%) were Muslims while 45.1 percent were Christians. It is evident that 12.8 percent of

respondents were civil servants, 25.6 percent were traders, about four in ten respondents (42.6%) were self employed individuals with as much as nineteen percent unemployed.

Table 1: Percent distribution of respondents according to socio-demographic characteristics

<i>Socio-demographic variables</i>	<i>Frequency</i>	<i>Percent</i>
<i>Sex</i>		
Male	161	72.2
Female	72	27.8
<i>Age Group</i>		
29-29	34	15.5
30-29	52	23.7
40-49	65	28.7
50 and Above	68	31.1
<i>Marital Status</i>		
Single	55	25.9
Married	105	49.5
Divorce	3	1.4
Widowed	28	13.2
Separated	21	9.9
<i>Number of Children</i>		
1-3	85	46.2
4-6	69	37.5
7 and above	30	16.3
<i>Religion</i>		
Christianity	97	45.1
Islam	118	54.9
<i>Education Status</i>		
No formal education	27	12
Primary	54	25.6
OND	90	42.6
HND	40	19.0
Master degree	29	13.3
<i>Occupation</i>		
Civil Service	27	12.8
Trading	54	25.6
Self-employed	90	42.6
Unemployed	40	19.0
<i>Monthly Income</i>		
<N10,000	18	10.4
10,001-20,000	50	28.9
30,001-50,000	45	26.0
50,001	60	34.7
Total	223	100.0

The participants' levels of education also in Table 1 showed that the highest proportion of the participants were ordinary national diploma holders. This represents 34.4 percent, followed by higher national diploma, which represents 18.8 percent. Above 13.3 percent of the participants had a master's degree while just 17.9 percent had primary education. However, 15.6 percent had no formal education. Data on respondents' education can suggest at the peripheral level that those with higher level of education

are more prone to TB. However, a more detailed and nuanced examination will show that education improves one's chances of being enrolled for treatment because the educated are more aware that TB is curable and that the treatment is free, and they also have better information about where to get the treatment, and as such, more of them will be enrolled for treatment than the less or uneducated.

Attitude Towards HIV/AIDS

The variable attitude towards risk of HIV/AIDS was generated by adding all the items that elicited information about what the respondents [TB patients] feel or think of their chances of having HIV because of their TB status. Computed scores were categorized into two—negative and positive attitudes, using the mean score as the cut-off point.

Table 2 reveals that some fifty-three percent of TB patients who are negative in their attitude towards HIV/AIDS had a lower risk of being infected with HIV/AIDS while forty-seven percent have high chances of being infected. For respondents with a positive attitude towards HIV/AIDS and risk of HIV/AIDS, fifty-seven percent were at a low risk of HIV/AIDS and forty-three percent at a high risk of HIV/AIDS. Thus, attitudes towards HIV/AIDS and risk of HIV/AIDS was found to be significantly related, positive attitudes puts the person (TB patients) at a lower risk of HIV while negative attitudes increases one's odds (risk) of becoming infected.

Table 2: Relationship between attitude towards HIV/AIDS and risk of HIV/AIDS

<i>HIV/AIDS attitude</i>	<i>Risk of HIV/AIDS</i>		<i>Total</i>
	<i>Low</i>	<i>High</i>	
Negative attitude	53.0	47.0	115
Adequate	57.0	43.0	100
Total	54.9	55.1	215*

No responses were excluded from the cross tabulation analysis

Table 3 revealed that single respondents were at low risk of HIV at 67.3 percent while 32.7 percent were at high risk. For the married, 56.3 percent were at low risk of HIV while 43.8 percent at high risk of HIV, and 44.2 percent of participants who were separated, widowed or di-

vorced were at a low risk while those at high risk are 55.8 percent. This result indicated that single parents are more at risk of HIV/AIDS and this is because many of them have sexual partners who have sexual intimacy with other people.

Table 3: Risk of HIV/AIDS by marital status of participants

<i>Marital status</i>	<i>Risk of HIV/AIDS</i>		<i>Total</i>
	<i>Low</i>	<i>High</i>	
Single	67.3	32.7	55
Married	56.2	43.8	105
Divorced	44.2	55.8	52
Total	56.1	43.9	212

No responses were excluded

From Table 4, a careful observation showed that Christians were slightly more at risk than their Muslims counterpart. Where 46.4 percent of Christians were at high risk of HIV, 44.1 percent of Muslims were at the same HIV risk level.

Table 4: Distribution of risk of HIV/AIDS by participants' religion

<i>Religion</i>	<i>Risk of HIV/AIDS</i>		<i>Total</i>
	<i>Low</i>	<i>High</i>	
Christianity	53.6	46.4	97
Islam	55.9	44.1	118
Total	54.9	45.1	215

No responses were excluded

On educational status of respondents, Table 5 revealed that respondents with no formal education were more at risk of HIV than those who have completed primary school and tertiary education. 58.8 percent of those with no formal education were at a high risk when compared to

Table 5: Percent distribution of risk of HIV/AIDS according to participant education

<i>Educational status</i>	<i>Risk of HIV/AIDS</i>		<i>Total</i>
	<i>Low</i>	<i>High</i>	
No formal education	41.2	58.8	34
Primary	61.5	38.5	39
Tertiary	55.2	44.8	145
Total	54.1	45.9	218

No responses were excluded

the 38.5 percent of those who had primary education, and 44.8 percent with a higher education. This table also reveals that much is needed to be done in the area of sensitizing community people toward the HIV/AIDS epidemic especially people with a low socio-economic status.

Sociocultural Determinant of Patients' Health Seeking Behavior

This study also sought to determine the sociocultural factors influencing TB patients' health seeking behavior. This is necessary because with such knowledge, ways of improving health behavior among TB patients can be gotten to make for better quality of life. Table 6 presents information on the patients' health seeking behavior.

Table 6: Frequency distribution of experience of stigmatization according to selected characteristics of participants

Selected characteristics	Social stigmatization		Total
	Not stigmatized	Stigmatized	
Sex			
Male	49.7	50.3	151
Female	34.5	65.5	55
Total	45.6	54.4	206*
Age			
20 – 29	29.6	70.4	27
30 – 39	32.7	67.3	52
40 – 49	43.9	56.1	57
50 and above	61.8	38.2	68
Total	45.1	54.9	204*
Marital Status			
Single	41.7	58.3	48
Married	47.5	52.5	99
Divorced	44.0	56.0	50
Total	45.2	54.8	107*
Religion			
Christianity	55.6	44.4	90
Islam	40.0	60.0	110
Total	47.0	53.0	200*
Educational Qualification			
No formal education	68.8	31.3	32
Primary education	50.0	50.0	34
Tertiary education	40.7	59.3	135
Total	46.8	53.2	201*

No responses were excluded

From Table 6, it is obvious that more females at 65.5 percent experience stigmatization than their male counterparts at 50.3 percent. Also the table indicated that participants between ages 20 and 29 (the lowest age group in the study) experience stigmatization 70.4 percent more than

other age groups, while the age group of 50 years and above has the highest percentage of people with no stigmatization at 61.8 percent. Information on participants' marital status indicated that the singles experience more stigmatization at 58.3 percent than the married at 52.55 percent and divorced at fifty-six percent. It is also evident from the table that more Muslims at sixty percent experience stigmatization than their Christian counterparts 44.4 percent. Moreover, participants with tertiary education reported being more stigmatized more 59.3 percent than those with primary education at fifty percent and participants with no formal education had the lowest stigmatization of 31.3 percent. This result showed that stigmatization is still an issue in the fighting against HIV/AIDS, as more people experience stigmatization.

Table 7 showed that 88.4 percent of the participants who have been tested for HIV experience double stigmatization while a little slightly lower proportion of eighty-four percent who had been tested reported no experience of double stigmatization. This result with the difference of 4.4 percent showed that fear of double stigmatization hinders TB patients from seeking treatment and this could make them more vulnerable to HIV/AIDS. Being vulnerable means more people are at the risk of contracting the HIV virus and thereby rendering efforts at reducing infection rate ineffective. Increase in infection rates has a negative impact on the individuals, families, communities and the entire society at large. The society must create a conducive atmosphere where its people can express themselves without fear and prejudice. A conducive environment for Tuberculosis patients is where they experience no stigmatization and can develop the right attitude towards the risk of HIV/AIDS. A society free of stigmatization is a strong factor in reducing infection rate of HIV virus among Tuberculosis patients. This study showed that the more positive the attitude of TB patients

Table 7: Double stigmatization of TB Patient

Variable	Ever had HIV test		Total
	Yes	No	
No stigmatization	84.0	16.0	94
Stigmatized	88.4	11.6	112
Total	86.4	13.6	206*

No response were excluded

towards the risk of HIV/AIDS the more they are careful about risk of contracting HIV/AIDS and this will enable them to modify their behaviors so as to reduce their risk level. Many of the Tuberculosis patients could not go for HIV tests as a result of fear of double stigmatization.

This finding is corroborated by the study of Basile et al. (2014) who stated that causes of stigmatization by people included perceived risk of infection, perceived relationship between TB and other causes of discrimination such as poverty and low caste, negative behavior, and TB as a divine punishment. More so, some TB sufferers opined that they were stigmatized by formal caregivers. In a similar manner in supporting this finding, the study carried out by Abioye et al. (2011) on determinants of stigmatization among TB sufferer in Lagos found that eighteen percent of TB patients experienced stigma and the stigma experience was significantly determined by their socioeconomic status. Stigmatization was a common experience among patients with tuberculosis and may bring about negative effects on treatment adherence. It was recommended that healthcare workers and policymakers should look into determining factors for effective tuberculosis control.

This finding is also upheld by the study by Mahendradhata et al. (2008) who found out that TB sufferers found it difficult to access VCT and experience fear of knowing their health status due to stigmatization in Jogjakarta, Indonesia. Bond et al. (2009) also supported the finding on stigmatization that TB patients suffered stigmatization such as gossip, name-calling, insults and social exclusion, especially when they became emaciated and were diagnosed and pronounced as TB sufferers. Social exclusion was another form of stigma faced by a TB sufferer as network of relationships with spouses or partners could no longer be sustained as a result of the illness. Additionally, Khan et al. (2000) in agreement with these finding states that both male and female TB patients face social and economic problems with women being more affected in Pakistan. Dhuria et al. (2008) also corroborate this finding, that TB has social implications as a result of attached stigma and that it affects psychological, health perception and social functioning in TB sufferers. Stigmatization is still a serious issue in the fight against many infectious diseases such as Tuberculosis and HIV/

AIDS. Being tested positive to Tuberculosis and HIV/AIDS could lead to fear of double stigmatization and unless the battle against stigmatization is won, all efforts so far made at reducing HIV infection and treatment may be in jeopardy.

Mead's theory of 'self' reveals attitudinal formation of humans as a result of their experience in the society. This can also explain the negative attitude of tuberculosis patient towards HIV/AIDS. Tuberculosis patients' negative attitude is directly emanating from the attitude of the society towards victim of tuberculosis and HIV/AIDS. Tuberculosis patients are stigmatized because of the nature of their illness that made them to be avoided, excluded and treated as HIV/AIDS victims. Stigmatization results in low self-esteem, which may develop into a negative attitude formation of victim of tuberculosis. Such negativity may include the inability to seek medical testing and treatment, and hiding their illness status so that people may not suspect them as HIV/AIDS victim. In the process, the victim experiences complications, which further worsens their situation. Negative attitude formation of tuberculosis patients is therefore socially engineered and determined, which is then internalized and formed basis of their attitude towards risk of HIV/AIDS.

CONCLUSION

This study identified and analyzed the attitude of TB patients towards perception of risk of HIV/AIDS. It established the inextricable but a relationship between TB patient's attitude towards risk of HIV/AIDS personal susceptibility and prevention strategies. Also, it revealed that sociocultural dynamics have endangered risk awareness and usage of HIV/AIDS prevention strategies, thus constitute a bane to favorable perception of these risks that focus typically on changing attitude towards HIV among the TB patients. Therefore, it can be concluded that negative attitudes and stigmatization of HIV/AIDS patients among others, which HIV/AIDS has bequeathed upon sub-Saharan Africa, will continue except the present HIV/AIDS prevention strategies that focus typically on changing attitude towards HIV/AIDS and awareness are complemented with interventions that can address the prevailing stigmatization.

RECOMMENDATIONS

It becomes imperative as a result of the findings of this paper that strengthening the health-care system through better HIV prevention preparation for TB patients is a key component in overall HIV prevention. This study has shown that TB patients' positive attitude towards HIV/AIDS can be effective in improving TB patients' perception of risk of HIV/AIDS, increase respectful interactions, and support HIV prevention. This intervention should be made available for TB patients, and may also provide a model for preparing health seeking behavior. HIV prevention throughout Nigeria and African countries at large. It is recommended that interventions be built based on the identified attitudes and stigmatization associated with HIV/AIDS while their outcomes are measured vis-à-vis changes in the recipients' perception of the risk.

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