SOCIAL VARIABLES AND THE PERCEPTION OF STIGMATIZATION AS HINDRANCE TO THE USE OF TUBERCULOSIS SERVICES IN AKWA IBOM STATE, NIGERIA

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ABSTRACT

The study investigated social variables and perception of stigmatization as hindrance to the use of tuberculosis services in Akwa Ibom State, Nigeria. Three research questions turned into hypotheses guided the study. Ex-post facto research design was used. From a population of 3846 registered TB patients, in the nine government owned general hospitals, 500 subjects were selected through stratified random sampling technique at equal gender basis for the study. A researcher-developed instrument, social variables and perception of tuberculosis stigmatization questionnaire (SUPTSQ) validated by three experts with reliability index of 0.87 was used to gather data for the study. Pearson Product Moment Correlation was used to analyze data obtained at .05 level of significance. Results showed significant relationship between educational level, gender, economic status and perception of stigmatization in the use of TB services. It was concluded that low level of knowledge about route cause and curability of TB, stigmatization, powerful male-privileging ideologies and wide spread abject poverty are major social variables hampering the use of TB services. It is recommended that awareness campaign be mounted by government and non-governmental agencies concerning specific aspects of TB disease, curability, drug regimen and the need to seek health services early by TB patients.

Keywords: Knowledge, attitude, perception, stigmatization, hindrance, tuberculosis services

INTRODUCTION

One of the most serious health problems in Nigeria, and world over is tuberculosis (TB), an airborne disease caused by mycobacterium tuberculosis. TB could be transmitted through the air or by ingesting infected milk or meat (Bovine TB). It most commonly affects the lungs causing pulmonary tuberculosis (PTB) and could also affect other parts of the body causing extra pulmonary tuberculosis (EPTB) (Griffin & Kerr, 2006; Federal Ministry of Health (FMOH), 2008). TB is a global health concern and is a major cause of illness and death worldwide especially in the developing countries, where it is fuelled by increase poverty, population and Human Immune Deficiency Virus/Acquired Immune Deficiency Syndrome (HIV/AIDS) (World Health Organization (WHO), 2008). It is a disease associated with social stigma and highly infectious.

Research studies by Abioye, Omotoyo & Alakija (2011); Lucas & Gilles (2003) and WHO (2010) revealed that, the disease affect 8 – 10 million people annually and about two (2) billion people have been exposed to TB at one time or the other. WHO (2010) report noted further that there is an estimated 8.8million incident cases (range 8.5 – 9.2 million cases)

globally, equivalent to 128 cases per 100,000 populations, and 1.2 – 1.5 million deaths (including deaths from TB among HIV positive people).

The impact of TB is such that in 1993, WHO declared TB a global health emergency. This led to the establishment of "Stop TB Partnership" in 1995. The Stop TB Partnership developed a global plan/intervention to stop TB and this included the Directly Observed Treatment Short – Course Strategy (DOTS) which WHO was recommended TB treatment pattern. This was established to achieve TB control. The main aim of this intervention programme was to provide detected infectious smear positive patients with effective treatment to prevent spread of the disease and ensure rapid and lasting cure. (WHO, 2006; WHO, 2010; Maamari, 2008). Despite the availability of highly efficacious treatment for decades, TB still remain a major global health problem and the social stigma associated with the disease further compounds the problem (FMOH, 2008).

TB is a major public health problem in Nigeria and was declared a national health emergency in June, 2006; after which an emergency plan for its control was developed (FMOH, 2008). According to WHO (2008), Nigeria is ranked 5th among the 22 high TB burden countries in the world. Statistics from National Tuberculosis and Leprosy Control Programme (NTLC) (2009) revealed that case notification rate of new smear positive cases has doubled in six years from 16/1000,000 population in 2002 to 32/100,000 population in 2007. In absolute number, a total of 86,241 of all forms of TB cases were notified in 2007 and 44,016 (55%) out of 80148 new TB cases were smear positive. The case detection rate of smear positive cases has also increased from 16% in 2002 to 31% in 2007. The young economically productive age groups (15 – 44) years old are mostly affected by TB (FMOH, 2008).

Nigeria commenced the implementation of WHO's recommended DOTS, and achieved 100% state-wide coverage in 2003 but accessibility to TB services (diagnostic and treatment) is still sub-optimal due to perception of the people about the disease. This is worse among rural dwellers, most of who are poor and live several kilometers away from service centres. As a result, the fact about TB is often misconstrued, resulting in poor knowledge of TB and stigmatization of TB patients (FMOH, 2007; Fatiregun & Ejeckam, 2010). Indeed, TB remains a serious health problem in Nigeria with over 50,000 infected persons. Between 2002 and 2008, TB transmission has been on the increase despite availability of effective chemotherapy (Daniel, Oladapo & Alausa, 2006). According to Ekanem (2008) in recent years, usage and compliance to TB services has been a major problem as many TB patients failed in using the available TB services. Those using the services failed in completing their course of treatment for the disease. Thus, effective control of TB has remained the greatest health challenge as there are several barriers to the successful control of tuberculosis.

WHO (2010) reported that the only effective approach to TB control is to rapidly diagnose and treat TB patients thereby breaking the chain of infection. Treatment renders infected people non-infectious within two weeks of commencement, but TB is not cured until completion of a full course of treatment lasting six to ten (6 – 10) months which requires regular visits to health or service centres. Both these visits to treatment or service centres and the symptoms of TB (chronic cough, weight loss and weakness) make it difficult for patients to disguise the fact that they have TB.

It is noted that once persons are identified as TB patients, they experienced stigmatization on the account of their disease, leading to delayance in seeking care and usage of TB services. Sometimes, patient relocates, thereby increasing the possibility of further transmitting the infection (Smith, 2004; Public Health Watch, 2006). Individuals diagnosed with TB report fears of isolation and rejection such as losing employment, being divorced or having diminished marriage prospects, not being allowed to share meals, utensils or sleeping quarters

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with family members and general avoidance or gossip among community members (Long, Johansson, Diwan, & Winkvist 2001; Baral, Karki & Newell, 2007; Eastwood & Hill, 2004). Fear of these often lead to delays in and usage of TB services.

Abioye, et al (2011) correctly noted that TB leads to significant disruption of patients' life and predisposes patients to stigma and discrimination. Eastwood & Hill (2004) opined that for fear of being infected with the disease, the family members of a TB patient would not interact with him or her, and would separate the patient's utensils, room and sleeping bed. Neighbours would often not like to talk with the patient, if they do, the patient would be asked to hold a handkerchief over his or her mouth. Married couples even separate bed and room from the wife or husband who is infected with TB and they do not even have sex with each other. In most cases, fear of this isolation causes the patients to hide their TB status from people.

In a study conducted by Karim, Johansson, Diwan and Kulane (2010), it was discovered that there are several barriers to the successful control of TB using treatment strategy (DOTS) and other TB programmes. Among these barriers are the perception, knowledge, attitude, and illness experiences of an individual. This can enhance or hinder one's health care seeking habit and use of TB services.

Perception is viewed as the process of attaining awareness or understanding of the environment by organizing and interpreting sensory information (Bonjour, 2007). This implies that a person's or community's understanding or knowledge can influence one's perception which in-turn affects one's behaviour and attitude. It also means that perception or risk can reflect a person's or community's level of knowledge about risk factors and means of transmission and may lead to delay or early seeking of health care.

People's perception can be influenced by cultural or traditional values and beliefs. These in most cases determine where such people go to seek health care. In most communities in Nigeria, TB is culturally perceived as a disease caused by witches or come as a divine punishment to an offender. This perception determines where such individuals so afflicted go for help and treatment. Weiss, Auer, Somma and Abouhia (2006) noted that people with strong cultural or traditional values and beliefs about TB first undertake traditional, family or spiritual healing. They noted further that it is only when that fails, that they seek treatment from health care providers.

In another study, Sudah, Nirupa, Rajasathivel, Sundaram, Bhatt and Renu (2003) observed that, community perception of TB can influence the health seeking behaviour of people in accessing health care facilities for their symptoms. Liefooghe, Aliddawa, Kipruto, Vermeire and DeMunynck (1997) opined that, a community's perception of TB strongly influences their attitudes towards TB patients and this can influence the patient's health seeking behaviour positively or negatively. Sudha et al (2003) in their conclusion said, people's beliefs about health and the perceived severity of their disease condition can act as a vital determinants to their seeking help early through diagnosis and treatment.

Ekanem (2008) observed that in the last few years, TB transmission has been on the increase due to some social determinants which influence the perception of the people thereby hindering infected individuals from accessing TB services. Courtwright and Turner (2010) submitted that, some patients who commenced treatment latter disappeared and could not complete treatment due to social and cultural issues such as perceived stigmatization. Studies have shown that stigma is shaped and promulgated by institutional, communal norms and interpersonal attitudes and is a social determinants of health (Heyuders & Vander Meij, 2006; WHO, 2008).

Most authors identify the perceived contagiousness of TB as a leading cause of stigmatization. They noted that lack of knowledge regarding cause of TB, routes of transmission and transmissibility, the perceived risk of transmission can lead to stigmatization and isolation of individuals with TB (Bennsta, StranMark, & Diwan, 2004; Baral, Karki & Newell, 2007; West, Gadkowski, Ostbye, Predrahita & Lee, 2006). According to Courtwright et al (2010), the major cause of stigmatization is the perceived fear of infection by an infected person, and the issue has brought a serious socio-economic consequence particularly for women. Stigmatization usually results in discrimination and low self esteem arising from fear of being isolated by community members. The patients are conscious all the time of gossips and potential discrimination by friends, peers, and family members.

Stigmatization is a complex process involving institutions, communities, intra and interpersonal attitudes, which has been recognized as an important social determinant of health and health disparities. Stigma begins when a particular trait or characteristic of an individual or group is identified as being undesirable or disvalued (Link & Phelan, 2001). This is one of the social determinants that affect health outside of the ease with which an individual can access services (WHO, 2008).

Stigma has enormous impact on the victims. The impact is felt at home, in the workplace, institutions and community. The obvious cause is the fear of being infected. The stigmatized individual often internalizes this sense of devaluation and adopts a set of self-regarding attitudes about the marked characteristic including shame, disgust, and guilt. It is noted that, these attitudes produce a set of behaviours that include hiding the stigmatized issue, withdrawing from interpersonal relationships, or increasing risky behaviour (Collins, Von Unger, & Armbrister, 2008). TB related stigma is a public health concern as it is part of the hidden burden of the disease. Stigma leads to discrimination which is the unfair treatment of person or group usually because of prejudice about specific character they posses. The stigma may affect the extent to which the patient is able to obtain, maintain and complete treatment (Lienhardt & Ogde, 2004).

Tuberculosis is described as disease of the poor and is associated with poor living conditions, malnutrition, shanty housing and overcrowding (Park, 2009). Smith (2004) stated further that TB is closely associated with poverty; and that although all classes of society get the disease, the poor are at greatest risk, both because they are in greater contact with other sufferers due to overcrowding at home, at work, travelling and socializing because their immune system is weakened due to malnutrition. People in some communities in Akwa Ibom State, Nigeria even believe that TB is an act of divine punishment. This belief influences people in such a way that they do not even want to work with, look at or walk close by people with the disease.

Studies by Eastwood and Hill (2004), Loag et al (2001) have it that social variables such as level of education, gender, economic status background and religion are factors associated with stigma. Weiss et al (2008) have reported gender disparity between male and female on seeking, accepting, using of TB services and adherence to the treatment. They noted further that women's social roles place them at a higher risk of contracting TB. Majority of women often have reduced access to economic resources, lower educational opportunities as compared to men. As a result, many women are unable to locate and reach qualified health personal and services.

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STATEMENT OF THE PROBLEM

TB is known to be a curable disease which can be eradicated or control. The discovery of vaccination and anti-biotics that kill TB bacteria was a turning point in the task of TB control and eradication. Since 1995, more than 49 million people have received the DOTS treatment for TB and this has helped 22 countries including Nigeria to reduce the 80% TB estimated cases to 32% (WHO, 2008). However, there has been report of resurgence and escalating TB infection rate particularly in sub-Sahara Africa with Nigeria being one of the leading TB epidemic nations (WHO, 2010). The main cause of the TB resurgence and escalating incidence is the perception of stigmatization which influences the usage of TB services (WHO, 2010). Individuals infected or believed to be infected with TB have been stigmatized, and isolated by love ones, families, relatives and peers.

Akwa Ibom State of Nigeria has DOTS population coverage of 1.4/100,000 and health facility for DOTS coverage of 2,790 (Ekanem, 2008). Despite the availability, accessibility and affordability of TB services in the state, most infected persons are still dying. Against this background, this study is conducted to investigate whether social variables (educational level, gender and economic level) and perception of stigmatization could hinder effective use of TB services in Akwa Ibom State, Nigeria.

PURPOSE OF THE STUDY

The general purpose of the study was to investigate social variables and perception of stigmatization as they relate to the use of TB services. Specifically, the study had the following objectives:

a. To determine how educational level and perception of stigmatization relate to the use of TB services in Akwa Ibom State, Nigeria.

b. To access how gender and perception of stigmatization relate to the use of TB services in Akwa Ibom State, Nigeria.

c. To examine how economic status and perception of stigmatization relate to the use of TB services in Akwa Ibom State, Nigeria.

RESEARCH QUESTIONS

The following research questions guided the study:

1. How does educational level and perception of stigmatization relate to the use of TB services in Akwa Ibom State, Nigeria?

2. To what extent does gender and perception of stigmatization relate to the use of TB services in Akwa Ibom State, Nigeria?

3. How does economic status and the perception of stigmatization relate to the use of TB services in Akwa Ibom State, Nigeria?

RESEARCH HYPOTHESES

The following null hypothesis guided the study:

I. There is no significant relationship between educational level and perception of stigmatization in the use of TB services in Akwa Ibom State, Nigeria.

II. There is no significant relationship between gender and perception of stigmatization in the use of TB services in Akwa Ibom State, Nigeria.

III. There is no significant relationship between economic status and perception of stigmatization in the use of TB services in Akwa Ibom State, Nigeria.

RESEARCH METHOD

The study adopted ex-post facto research design because the researcher had no direct control of the independent variables since their manifestation had already occurred or because they were inherently not manipulable. The study area was Akwa Ibom State, Nigeria made up of three Senatorial Districts with 31 Local Government Areas. The target population for the study comprised of all the 3846 TB patients (both admitted and out patients) in all the nine government owned general hospitals in Akwa Ibom State, Nigeria. The sample size was made up of 500 registered TB patients selected through stratified random sampling technique from three general hospitals; one in each of the three Senatorial Districts at equal gender basis.

A researcher-developed instrument, Social Variables and Perception of Tuberculosis Stigmatization Questionnaire (SVPTSQ) was used to gather data for the study. The face validation of the SVPTSQ instrument was provided by three experts; one each in the Department of Measurement and Evaluation, Physical/Health Education and Community Health, University of Uyo, Akwa Ibom State, Nigeria. The split-half method was used to establish the reliability of the instrument at 0.87 which experts considered high enough for use in the study.

RESULTS

Hypothesis I: There is no significant relationship between educational level and perception of stigmatization in the use of TB services in Akwa Ibom State, Nigeria.

Table 1. Pearson Product Moment Correlation Coefficient of Educational Level and Stigmatization in the Use of TB Services

Variables	Σx Σy	Σx^2 Σy^2	Σxy	r-cal
Educational level and stigmatisation	9650	192151	119378	.642*
Use of TB services	9542	183742		

*significant p<.05; df = 498, critical r-value = .088.

The analysis of data in Table 1 showed that the calculated r-value of .642 at .05 level of significance and 498 degree of freedom was far higher than the table value of .088. The null hypothesis was rejected. This means that educational level and perception of stigmatization significantly hinder the use of TB services in Akwa Ibom State, Nigeria.

Hypothesis II: There is no significant relationship between gender and perception of stigmatization in the use of TB services in Akwa Ibom State, Nigeria.

Table 2. Pearson Product Correlation Coefficient of Gender and Stigmatization in the Use of TB Services

Variables	Σx Σy	Σx^2 Σy^2	Σxy	r-cal
Gender and stigmatization	6191	80612	119949	.706*
Use of TB services	9542	183742		

*significant p<.05; df = 498, critical r-value = .088.

The result of data analysis in Table 2 revealed that the calculated r-value of .706 at .05 level of significance and 498 degree of freedom was far higher than the table value of .088. The

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null hypothesis was rejected. This implies that gender and perception of stigmatization significantly hinder the use of TB services in Akwa Ibom State, Nigeria.

Hypothesis III: There is no significant relationship between economic status and perception of stigmatization in the use of TB services in Akwa Ibom State, Nigeria.

Table 3. Pearson Product Correlation Coefficient of Economic Status and Stigmatization in the Use of TB Services

Variables	Σx Σy	Σx^2 Σy^2	Σxy	*r-cal*
Economic status and stigmatization	8052	129712	153844	.679*
Use of TB services	9542	183742		

*significant p<.05; df = 498, critical r-value = .088.

The data in Table 3 revealed that the calculated r-value of .679 at .05 level of significance and 498 degree of freedom was far higher than the table value of .088. The null hypothesis was rejected. This means that a significant relationship exists between economic status and perception of stigmatization in the use of TB services in Akwa Ibom State, Nigeria

DISCUSSION OF FINDINGS

The result of data analysis in Table 1 revealed a strong relationship between educational level and perception of stigmatization in the use of TB services in Akwa Ibom State, Nigeria. This finding is supported by earlier research findings by Vander-Watt & Swartz (2002), Basavanthappa (2008), Sebastian & Bathanley (2000) who noted that educational background of an individual directly influences his or her exposure and acceptance of health care services. Basavanthappa (2008) noted further that low level of education leads to ignorance about health, health services and the use of health services. It should be noted here that low level of education directly influence compliance behaviour of patient as well as specific aspect of TB disease and feature of drug regimen. Therefore, it is possible that lack of understanding concerning curability of TB by some community members in Akwa Ibom State, Nigeria has resulted in delay in seeking and using TB services.

The result of data analysis in Table 2 revealed a significant relationship between gender and perception of stigmatization in the use of TB services in Akwa Ibom State, Nigeria. Mak et al (2006), Weiss et al (2008) and Karim et al (2010) studies that support the findings of this study noted correctly that gender disparity exists in seeking, accepting, using and adhering to TB treatment. Mak et al (2006) study for example noted that women's social roles place them at a higher risk of contracting TB and that their low socio-economic status makes them unable to locate and reach qualified health personnel and services. The study concluded that the stigma attached to TB diagnosis leads many women to forgo seeking necessary medical attention. Karim et al (2010) study equally concluded that married women suffer more than unmarried women because of the fear that they would be abandoned or neglected by their husbands. Unmarried women however experience more difficulties in getting married than men unless they are fully cured of TB. Such worries may pressure unmarried women not to disclose their TB disease, fail to access TB services resulting in further spread of the disease. However, men are more likely to default treatment than women; the reason being that, men perceives greater stigma associated with seeking and using TB services than women.

The analysis of data in Table 3 revealed a strong positive relationship between economic status and perception of stigmatization in the use of TB services in Akwa Ibom State,

Nigeria. Park (2009) and Smith (2004) earlier studies which supports the finding of this study noted aptly that TB is seen as a disease of the poor and is associated with poor living conditions, malnutrition, shanty housing and overcrowded environments. These scholars noted further that although all ranks of the society suffer TB, the poor are at greater risk because they are in greater contact with other sufferers and that their immune system is weakened due to malnutrition. Courtright et al (2010) earlier study finding which also supports the finding of the present study noted that poverty is the main reason why most persons, particularly in rural communities do not use medical services even when they are seriously sick. This may be the situation in Akwa Ibom State, because in spite of enormous money coming into the state as a major oil producing state in Nigeria, resource-use decisions are being driven by lack of development, leading to wide-spread abject poverty, massive unemployment of even educated and skill youths and be wilding non-existence of socio-economic infrastructural amenities to met the basic needs of the people. Poor people have food as the most pressing needs. This may well explain the failure on the part of most people in Akwa Ibom State, Nigeria to avail themselves of TB services when infected.

CONCLUSION

Based on the findings of the study, it is concluded that low level of education which leads to ignorance about route cause and curability of TB and attendant stigmatization of infected persons, powerful male-privileging ideologies and wide-spread abject poverty are major social variables hampering the use of TB services in Akwa Ibom State, Nigeria. It is strongly recommended that awareness campaign be mounted by government agencies and non-governmental organizations concerning specific aspects of TB disease, curability, drug regimen, need for early seeking, accepting and compliance to TB treatment.

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