

## Health Seeking Behaviour of Tuberculosis Patients in Ekiti State, Nigeria

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**ABSTRACT** This study was conducted in the capital city of Ekiti State of Nigeria. It was aimed at exploring the health seeking behavior of TB patients also as proxy for understanding the treatment choice of HIV positive persons. 117 TB patients were selected from the chest clinic register of the State Specialist Hospital and at family level using snowball method. 55% of the respondents are male while 46% are female. 10 in-depth interviews were also conducted among the patients and health workers. The mean age of male respondents is 36 years and 22 years for female; about 155 are not married while 60% and 51% of female and male respectively are either divorced or widowed. This high marital separation is related to the stigma and death due to AIDS or TB. 32% of the female and 20% of male have no formal education. And most earn less than equivalent of US\$2 per day. More than 20% of male and 10% of female access TB treatment centre until after two months of the onset of the symptoms, 1/3 after the third month. Male also use public medicine while female access more traditional care. The major factors are perceived cost of treatment and privacy due to fear of stigma. Gender and level of education of respondents are most significantly related to treatment choice of TB patients. Conclusively improved TB treatment serves as veritable entry point for HIV screening and treatment.

### INTRODUCTION

Nigeria has the highest Tuberculosis prevalence rate of 536 per 100,000 in Africa and the fourth in the world. The national annual incidence for all cases per year is 283,000 (2007 WHO statistics). Tuberculosis is one of the diseases once celebrated to have been eradicated but it re-emerged and associated with HIV increasing prevalence globally. TB as one of the opportunistic infection of AIDS equally accelerates the loss of vitality and immune system thus hasten other morbidity and mortality. Tuberculosis is responsible for the death of one-third of persons with AIDS. At the global level, TB is the second leading disease causing death; about 8.4 million people are estimated to develop TB each year while two million deaths are estimated annually due to TB. However 90 percent of all TB infections are in developing countries (Nigeria 2004).

The WHO describes TB and HIV as a deadly co-epidemic in many regions of the world. Previous efforts at control of TB had been focused mainly at communication for prevention and treatment therapy for TB patients. But the insurgence of HIV made collaboration of HIV and TB programme imperative. In Nigeria the National

TB programme was launched in 1991 while in 2001 the Directly Observed Treatment Shortcourse (DOTS) strategy was initiated and implementation started in some selected states including this study area. In the 2004 National Health Policy, the control of TB along with Leprosy was also highlighted with set goals and objectives against global targets (Federal Ministry of health, September 2004). In 2006, the National tuberculosis programme launched a 5 year strategic plan for tuberculosis control. Its goal is to reduce significantly the burden, socio-economic impact and transmission of TB in Nigeria. Five objectives were stated to achieve the goals (in PATHS 2008: 3)

Tuberculosis germs are spread through the air from patients with active pulmonary tuberculosis though the infection is influenced by the state of healthiness of the immune system. In situations where the immune system is strong, the TB infectivity is checked and the victim remains with dominant infectious unification (Frieden 2003). In the last few decades, most TB infected persons remain healthy carriers with only 5-10% ever developing active Tuberculosis. These few kept the epidemic alive by transmitting the germ to their close contacts. However as the TB carriers become increasingly infected with HIV

many more develop active tuberculosis because of reduced immunity for dual infected persons (TB and HIV). The risk of developing active TB is about 30-50% higher for persons with HIV than for non-HIV TB carriers. Consequently Tuberculosis can spread through the air and this suggests more infections to whole population especially for care givers of HIV/TB patients. This has further compounded the problem of health care in developing countries (UNAIDS 1997; WHO 2007).

### **Statement of the Problem**

Tuberculosis is traditionally known by the people and it is conceived as a very contagious disease with high mortality rate. This conception is really not unfounded in the face of lack of adequate therapy and control measure result in very sharp stigma and social fatality attached to the TB infection and the infected. This is documented in a study by Oluwadare and Oluwasanmi (2003). For instance; "Most of the participants actually assert that Tuberculosis is more dangerous than HIV/AIDS since it can be contacted through the air. But the fact that it has lasting cure, relatively cheap and subsidized by the government makes TB a more controllable disease than HIV" (Oluwadare and Oluwasanmi 2003: 25).

TB as a proxy for HIV is conceived by the people though with increasing public communication of treatment route of DOTS is spread, but traditional and spiritual therapies are closer to the family. Less than 40 percent of Nigerians patronize public health facilities, thus most TB infections are not detected for follow up care where the specialized treatment is available (Orubuloye and Ajakaiye 2002). For instance, Jigawa State, one of the poor Northern Nigerian states, before donor intervention had a low cure rate of 48 percent compared to 66 percent national average and a high defaulter rate of 12 percent (Partnership for Transforming Health System 2008).

The danger of non-compliance which fuels defaulter rate is rampant across Nigeria. Nigeria currently has 70% defaulter rate (Federal Ministry of Health 2004). This is more conditioned by poor treatment regimen. The rural communities are poorly served by quality health services and therefore discourage sustained patronage by clients. This is equally worsened with poor and

less educated sub-populations who cannot afford alternative routes of treatment in the good private clinics or in nearby urban centre. Poverty was identified as a factor in Zambia by Needham et al. (1998). Here patients lack the means to travel to the hospital and pay for consultation. In addition they lack the income to pay for clinic attendance and other related prescriptions (Demissie 2002). Nair and Chacko (1997) had earlier identified poor knowledge of the treatment process for non-compliance in a study in India, potential patients are not adequately aware of the adherence instructions for the period of treatment thus abandoning treatment at the onset of positive response from chemotherapy.

In Nigeria characterized by poor health system and poor population, the treatment of TB is equally not immune from the basic poor health care delivery system. Primary health care is poorly managed in the rural areas and there is inadequate quality service of the available health clinics at the urban centres. Nigeria from these is ranked by WHO in 2000 as the 187<sup>th</sup> out of the 191 members states. Nigeria has one of the highest mortality rates in the world and one of the least life expectancy rates (53 years) due largely to poor health care delivery and poverty. TB treatment is equally affected (World Bank 2006).

This study is therefore a description of the health seeking pattern of Tuberculosis patients in Ekiti State as a case of Nigeria, it tends to identify the prevailing procedure, therapy and challenges in the process of seeking for treatment of Tuberculosis in the State. This study is guided by the health care utilization theory originally propounded by Anderson and Newman (1973) and various other refinements especially by Weller, Ruebush and Klein (1997) and Raayajin (1991). It emphasized the three factors influencing health behaviour as predisposing, enabling and the need. These factors are also delineated as three different classifications that explained decisions to choose a particular treatment regimen. The pre-disposing factors include; age, gender, religion, previous health experiences, educational status, knowledge about the illness. These focus on the personal or familiar attributes of the person needing treatment. The enabling factors include the availability of services, financial resources available to the care seeker; this may include health insurance, familiar or social support network. The need factors are perception of severity, the social cost of treatment process

(number of days needed to be off work or school, pattern of help from outside) etc. The three factors lead to the choice of treatment options either home remedies, traditional healers, private medical facility or public health service and the consequences.

### **Brief Profile of Ekiti Health System**

Ekiti state is in the south-west geo-political zone of Nigeria with a population of about two and half million people and annual population growth rate of 3%. There are sixteen local government areas, mostly of less than two hours drive-distance to the state capital (Ado-Ekiti). The basic occupation of the people is agriculture mainly cocoa, coffee, rice, cassava, maize and vegetable cultivation. Roads linking the state capital to local government headquarters are relatively good but those to the remote communities are mostly in disrepair (Ekiti-State 2004). There are about 174 functioning primary health care centres across the state, four state specialist hospitals, seventeen state general hospitals and one federal medical centre. The latter is the highest referral point in the State. Virtually all the state health structures (buildings and also personnel) were from the old Ondo State with continuous rehabilitation and improvement in facilities (Dare 2005). There are other private health providers of varying qualities across the State.

The Tuberculosis epidemic in the State is relatively better compared to the national figure. The estimated prevalence of TB is 40/100,000 as compared to 536/100,000. The estimated number of cases is 7000 and the death rate is 5.7 percent compared to national 76 percent. Also, the TB cases with HIV positive are 13 percent compared to 19 percent for the national estimate. TB-DOTS service is also available in all the sixteen local government areas though in reality the quality of the service tends to reduce with increase in distance from the State Capital. This study took place in the State capital having the best Tuberculosis treatment Centre in the State. The Centre is located within the State Specialist Hospital Complex. The Centre has been enjoying the support of German Government, WHO and British Council for over a decade.

### **Research Process**

The research procedure was adapted to

comply with the TB treatment protocol in order to access the respondents. This is also with a view to protect the privacy of the respondents. Therefore open survey and sampling of the identified respondents were not used. In Ekiti state, just like in most TB-DOTS implementing states in Nigeria starts consultation with the TB patients very early in the morning across the various health centres offering the service. After due consultation and engagements with the health personnel and medical team in charge of the hospital and Tuberculosis treatment centre, permission was granted to sample patients coming for treatment. Therefore either an exit interview or household interview procedure was used to get information from the patients.

Respondents are those who showed willingness to be part of the research either by providing his/her home address at home to be interviewed or ready to spend time with the interviewer in the hospital environment for the interview, preferably not within the TB clinic premises. One hundred and seventeen (117) responses were successfully concluded and used for this study out of 125 interviews conducted. The structured interview schedule is made up of twenty-two questions that measure personal characteristics of the respondents, pattern of their health seeking, perception and attitude to treatment and general evaluation of the process of care.

## **RESULTS**

### **Social Characteristics of the Respondents**

From table 1, most of the respondents are less than thirty-five years of age. The mean age for the male and female respondents is 33.5 and 22.2 years, respectively. This age classification shows that the TB patients sampled and also representative of the actual population are still in the active age group. But this unexpectedly is not explaining why more than 50 percent of both the male and female respondents are not currently married but either divorced or separated. This very unusually high level of marital break up cannot but be related to the scourge of HIV or the TB itself forcing couples to separate or the death of either spouse. From the table the female respondents suffer more of divorce while male respondents suffer from death of spouse. This is not far fetched since stigma of either HIV or TB is primarily always against the female gender.

**Table 1: Basic social characteristics of respondents**

| S.No. | Social Characteristics of the respondents | Male (N=64) | Female (N=53) |
|-------|-------------------------------------------|-------------|---------------|
| 1.    | Age (in years)                            |             |               |
|       | Below 18                                  | 18.7        | 16.9          |
|       | 19-29                                     | 37.5        | 37.2          |
|       | 30-39                                     | 26.5        | 18.7          |
|       | 40-49                                     | 4.6         | 3.7           |
|       | 50 years and above                        | 12.5        | 5.6           |
| 2.    | Religion:                                 |             |               |
|       | Christianity                              | 76.5        | 77.3          |
|       | Islam                                     | 14          | 16.9          |
|       | Others                                    | 9.3         | 5.6           |
| 3.    | Educational Status:                       |             |               |
|       | No formal education                       | 20.2        | 32.0          |
|       | Primary                                   | 39.0        | 32.0          |
|       | Secondary                                 | 15.6        | 11.3          |
|       | Post secondary                            | 25.0        | 24.5          |
| 4.    | Occupation:                               |             |               |
|       | Civil service                             | 17.1        | 11.3          |
|       | Trading                                   | 10.9        | 52.9          |
|       | Artisan                                   | 37.5        | 9.4           |
|       | No work (including students)              | 34.3        | 24.4          |
| 5.    | Income per Month (in Naira N):            |             |               |
|       | Below 5000                                | 46.8        | 50.9          |
|       | 5000-7500                                 | 23.4        | 22.4          |
|       | 7501- 10,000                              | 20.1        | 20.7          |
|       | Above 10,000                              | 9.4         | 5.6           |
| 6.    | Marital Status:                           |             |               |
|       | Never married                             | 15.6        | 15.0          |
|       | Currently married                         | 32.8        | 24.5          |
|       | Divorced                                  | 15.6        | 32.0          |
|       | Widowed                                   | 35.9        | 28.3          |

The high level of spousal break up among the respondents is also explainable by the high level of less education and those involved in informal occupations which is also related to the level of poverty. More than half of the respondents earn less than equivalent of two dollars per day while just one quarter earn slightly above equivalent of sixty dollars per month. In Nigeria especially Ekiti State, the stipulated minimum wage (per month) is six thousand, five hundred naira (about \$55). The above conditions shows that the respondents are socially, medically and economically depressed, with glaring low socio-economic status.

#### Pattern of Knowledge and Perception of Tuberculosis by the Respondents

All the respondents are aware of the infection and symptoms of Tuberculosis but very few, three men and one woman is aware of other TB infected person at the extended family level. Perception of danger of the infection shows that 52 and 43 percents of male and female respectively believe

that TB is "slightly dangerous" while 14 and 22 percent of male and female respondents believe it is dangerous and about 17 percent of all respondents believe TB is not dangerous. Explaining what they know about TB shows appreciable level of knowledge of the infection and this makes the respondents not to absolutely fear the epidemics in terms of not being curable or manageable. The respondents know the basic symptoms of TB to include: a cough that persists for more than a month (100%); feeling tired all the time (83%), weight loss (73%), cough blood (98%), loss of appetite (32%), night sweat (45%), and fever (20%). Knowledge of the severity of an illness will determine the course of action for treatment of the illness. But men tend to have at least ten point higher percentage knowledge of TB except on the issue of fever. The men have 23 and women 18 percents respectively. Table 2 explains further the beliefs of the respondents about the TB infection. The table again shows that the respondents are somewhat positive in their assessment of TB; however overwhelming majority does not accept that TB is an air borne disease. Significantly over 90 percent accept modern health care as the best route for managing TB. Summarily most of the respondents do not hold fatalistic beliefs about TB.

It will be noted that TB is one of the century old diseases in the world and so both the causation and courses are relatively known though these issues are coloured by respective cultural myths. In this study, smoking habit and poverty are the most acknowledged causes of TB while poverty and drinking of alcohol are also mentioned. However 12 and 17 percent of male and female respectively hold other superstitious beliefs for the cause of TB. This includes spiritual attack from enemies, ancestral curse and result of breaking of cultural taboos. The least acknow-

**Table 2: Percentage of respondents' belief about Tuberculosis infection.**

| Beliefs                                        | Responses (%) |      |         |
|------------------------------------------------|---------------|------|---------|
|                                                | Yes           | No   | No idea |
| TB is a deadly disease                         | 5.1           | 87.1 | 7.6     |
| TB is the same as HIV or AIDS                  | 7.7           | 87.1 | 5.1     |
| TB does not have cure                          | 13.7          | 81.2 | 5.1     |
| Traditional medicine offers the best treatment | 32.5          | 49.5 | 17.9    |
| Modern medicine offers the best treatment      | 90.5          | 3.4  | 5.9     |
| TB is air borne disease                        | 17.1          | 29.9 | 52.9    |

ledged cause is poor ventilation at the house, the latter confirmed the previous denial that TB is air borne by the respondents. Dhese (2000) earlier identified misconception about TB as a factor in aiding the transmission. In this study, respondents erroneously neglects the fact that TB is contacted through the air, while food; smoking and drinking pattern conditioned by poverty are identified. The major route of transmission is denied.

### Seeking for Medical Help

At the initial stage of the infection, when there was the push to look outside of the household for assistance, about half of the respondents, both male and female contacted traditional healer mostly for both divination or native herbal therapy depending on the perceived severity of the symptoms. There seems to be little difference in the tendency across the gender to patronize native medicine. Less than 40 percent of the respondents used western medicine of either public or private. This shows that about two-third of the respondents are still very close and accessible to non-acceptable route of managing TB. The reason for these is presented in table 3. It is mostly about cost of treatment, need for privacy in the face of social stigma and perception of the quality of care in terms of access, personnel and treatment procedure. The need for protection and the financial cost of treatment far outweigh the respondents' knowledge that public clinic is better than native therapy. Further analysis shows that belief about the nature of TB infection is a significant predictor of when and where treatment for the infection take place.

Decisions about treatment choice are dominated by the spouse. For men their respective wives have significant voice in decision-making. For women, their respective parents and in-laws have significant input in decision making. The table shows that those who are likely to be burdened by care are also involved in decision making about where to get medical help. For both sexes, more than one-third of the respondents sought medical help outside of the family around the second month of the onset of the symptoms. The acceptable protocol is within the first four weeks (PATHS 2006). In this study, about 12 percent of the patients sought help within the first four months. Spinal (2002), earlier identified the overriding impact of social stigma and fear to delayed treatment, also the uncertainty of the

**Table 3: Percentage distribution of respondents' Pattern of health seeking**

| Indicators                                            | Respondents' responses<br>(in % age) |        |
|-------------------------------------------------------|--------------------------------------|--------|
|                                                       | Male                                 | Female |
| <i>Initial Facility Chosen:</i>                       |                                      |        |
| Government facility                                   | 14.0                                 | 20.7   |
| Private clinic                                        | 23.4                                 | 11.3   |
| Traditional healing home                              | 46.8                                 | 45.2   |
| Spiritual healing                                     | 15.6                                 | 22.6   |
| <i>Reason for the Choice:</i>                         |                                      |        |
| Cost is low                                           | 29.6                                 | 32.0   |
| Accessibility                                         | 11.7                                 | 3.7    |
| Effective treatment                                   | 18.7                                 | 30.1   |
| Better personnel                                      | 15.5                                 | 13.1   |
| Privacy                                               | 23.4                                 | 20.7   |
| <i>Who Took Decision:</i>                             |                                      |        |
| Self                                                  | 21.3                                 | 18.3   |
| Spouse                                                | 53.7                                 | 28.8   |
| Parents                                               | 4.6                                  | 24.5   |
| In-law                                                | 10.9                                 | 16.9   |
| Others                                                | 9.3                                  | 11.1   |
| <i>Duration of Symptoms before Seeking Treatment:</i> |                                      |        |
| Less than a month                                     | 15.0                                 | 7.4    |
| 4-7 weeks                                             | 7.8                                  | 11.3   |
| 8- 11 weeks                                           | 37.5                                 | 43.3   |
| 12-15 weeks                                           | 20.3                                 | 16.9   |
| above 15 weeks                                        | 26.5                                 | 20.7   |
| <i>Reason for Delayed Treatment:</i>                  |                                      |        |
| Illness not serious/<br>self medication               | 65.6                                 | 49.0   |
| Lack of money                                         | 9.3                                  | 7.5    |
| Social stigma                                         | 25.0                                 | 43.3   |
| <i>Assessment of Present Quality of Treatment:</i>    |                                      |        |
| Satisfied                                             | 50.0                                 | 54.7   |
| Not satisfied                                         | 43.7                                 | 26.4   |
| Undecided                                             | 6.3                                  | 18.9   |

infection status make people to unacceptably shop for help.

Also financial consideration has a very weak impact in decision making about seeking for help. This study reflects the assertion of Ahsan and Atre (2004) that women bears the great burden of social stigma; 43 percent, more than double the percentage of men who identified stigma as the barrier for prompt commencement of treatment and just half of the men's percentage commenced health seeking before the fourth month. Overall more than half of the respondents is satisfied about the TB-DOTS service.

### DISCUSSION

In this study, the greatest predictor of health seeking behaviour among the various social conditions (sex, age, marital status, religion, educational status) of the respondents using the



regression analysis is level of education, followed by gender and age. Marital status and religion tends to have very weak predictive value on health seeking decisions of the respondents. The place of education in effectively predicting health behaviours has been established while gender is also a factor especially given the peculiar nature of TB and related socio-cultural conditions associated with it. In this study about two-third of the respondents have less than secondary education. Caldwell (1979) and others agreed that a ten years of education is enough to spur desirable health behaviour. But there must be other favourable conditions especially in the cultural and health system environment.

The respondents generally represent a low socio-economic status compared to the larger social environment known for high literacy level, public salaried citizens and relatively better health care system. Owumi and Jerome (2008) and Oluwadare and Dada (2008) affirm that poverty encourages the patronage of indigenous healing therapy which most of the time is cheaper, closer and culturally analogous to the patients. The low social status also relate to not so enviable knowledge of Tuberculosis which may likely fuel the epidemic since TB is not conceived as an air borne disease. There is also the high level of stigma associated with TB infection. This again also account for very high divorce and marital separation among the married couples. Death of either spouse also shows that TB infection among the respondents might have been associated with AIDS epidemics thus increasing mortality. The level of social stigma, poor perception of the severity of TB, and gender inequality accounts for the delay in seeking for treatment in the TB-DOTS centre. Delay in seeking for medical help may also account for the emerging fear of non compliance to therapy (Coping 2008). The implication of this problem is to HIV/AIDS care in the State and Nigeria as a nation.

### CONCLUSION

The fear of stigma and discrimination is hindering public interventions for care and support of AIDS persons and related syndromes. Ekiti State is relatively poor; though with relatively high literacy level. The state equally has one of the least national HIV prevalence rate of about 1.6 percent. While Tuberculosis treatment has been well-institutionalized through the

support from the German government. Public HIV treatment protocol is rather less feasible since the state still propagandised the low prevalence rate of HIV.

### RECOMMENDATIONS

The health system needs to be strengthened at both primary and secondary levels to take care of the increasing number of TB patients that will also have unscreened HIV. It should therefore be made possible to implement the latest protocol of integrating TB and HIV programmes across board for greater effectiveness. Most public health facilities currently have parallel TB and HIV sections. This promotes fall out of the patients that should have been followed up for either service. Against this outcome, staff training on the two services should be prioritised

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