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Community Based Intervention, A Right Step in Controlling Tuberculosis Scourge:
Experience in Rural Communities of Ekiti State, Nigeria

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Abstract
Pulmonary tuberculosis (PTB) affects all ages, gender and race, but affect children more than adult. The proportion of PTB cases in countries varies from 3% to as high as 40% (World Health Organization, 2011). Nearly 10% of Tuberculosis patients on treatment die each year from complications due to delayed presentation and/or Human Immunodeficiency Virus (HIV/AIDS) co-infection. Community based interventions have long been linked to tuberculosis control efforts. Effectively treated and cured patients living within the communities are often the best advocates for TB services and may become the drivers of social mobilization to support tuberculosis control (World Health Organization; 2011).

The study is a descriptive cross sectional study design. Data were collected from the 150 participants in selected communities using structured questionnaires. Data were collated, cleaned and analyzed with Statistical package for social science (SPSS) version 22.

Majority of the respondents are between 21- 30 years of age, female gender and Christian religion. The participants have good knowledge of PTB, 79.3% and 90.0% knows that PTB can be contacted as droplet nuclei and via air transmission respectively; 81.3% are aware that it is curable. Although, above half of the respondents thought that it can be contacted by sharing cutleries (59.3%) and swimming pool (51.3%). There a lot of negative attitudes towards PTB clients. Some of the respondents (38.6%) affirmed that they can break relationship with PTB affected friends, 48.7% cannot employ PTB patients, 64.7% of the respondents consider PTB as deadly as HIV/AIDS.

Negative attitudes and stigma hindered Tuberculosis prevention, testing, and treatment. There is an urgent need for further intervention to reduce stigma against PTB. The community members should be empowered with adequate knowledge of the growing burden of the disease and accessible potentials for cure.

Keywords
Attitude, Community, Practice, Pulmonary, Tuberculosis

INTRODUCTION
Tuberculosis (TB) is an infectious disease and it is endemic in Nigeria, a very populous nation that is divided into several administrative States with varying ethnic, socio-economic and health indices. Unfortunately, the public rarely knows the TB burdens from the States of Nigeria, and this may be contributing to the prevailing inappropriate care seeking behavior and poor awareness of the disease in Nigeria (Ukwaja K Alobu,, 2009) The prevalence of PTB in Nigeria was 420 (31.7%) out of the 1,324 patients examined during a TB outbreak (Nigeria FMOH 2009). A case fatality rate of 9 (2.14%) of the 420 -positive cases was observed during the study period of 10 months. The most affected age group was between 16 and 35 years .In 2012, World health organization (WHO) estimated that 530,000 children (less than 15years) had PTB. Over 75% of these cases were in the 22 high burden countries, including Nigeria (WHO, 2012).

The control of the disease in Nigeria is coordinated by the National tuberculosis and leprosy control program (NTBLCP) in line with the 'Stop Tuberculosis Partnership' initiatives whose ultimate target is to eliminate Tuberculosis as a public health problem in less than 1 case per million populations (Aghaji MN, Nwakoby, 2010). Therefore, for the above target to be achievable in Nigeria using the current passive detection strategy, the people at the community level should be empowered with adequate knowledge of the growing burden of the disease and accessible potentials for cure.

Community attitudes and beliefs can worsen diagnosis and treatment outcome of TB especially stigma. Stigmatization of patients will bring denial and late presentations of cases with complication thereby worsen the health outcomes. Rural areas are greatly and painfully neglected in tuberculosis prevention and care. Most rural communities, due to lack of awareness strongly regard TB patients as people on the sure pedestal of death; hence, they strongly stigmatize them (Niemann S et al, 2002). In some cases, patients are denied family care and starved while some are given poisonous concoction for a faster "relief" of death.

Furthermore, Community studies are also useful for revealing people's perception of health services. Findings from social and behavioral research in the community can be used as template for further research. The objectives of the study are to assess the community knowledge on tuberculosis and their attitude towards TB patients even after cure.

RESEARCH METHODOLOGY

The study is a descriptive, cross sectional study among people in Ido/Osi local government area in Ekiti-State. Multistage sampling method was used to select the study participants. All consented adults were included into the study, while critically ill adults were exempted from the study. Primary data was collected for the study using a structured questionnaire which the respondent filled and returned. One hundred and fifty people (calculated sample size) participated in the study. Permission for community entry was gotten through the community leaders of the selected villages and town after obtaining ethical clearance certificate; the study was beneficence, not harmful and confidentiality was maintained. The consent of the respondents was obtained, as they were not under obligation to participate in the study. The data were analyzed using statistical package for the social science (SPSS) version 22. Results were presented appropriately with tables, frequencies and percentages.

RESULTS

Table 1 Socio-demographic characteristics of the respondents

Socio demographic characteristics	Frequency N= 150	Percentage N= 100
Age		
< 20 years	25	16.7
21-30 years	**61**	**40.7**
31-40 years	32	21.3
41- 50 years	21	14.0
>51years	11	7.3
Sex		
Male	64	42.7
Female	**86**	**57.3**
Religion		
Christianity	**108**	**72.0**
Islam	35	23.3
Traditional	7	4.7
Ethinicy		
Hausa	10	6.7
Ibo	20	13.3
Yoruba	**113**	**75.3**
Others	7	4.7
Marital status		
Ever married	**88**	**58.5**
Single	62	41.5
Educational level		
None	1	0.7
Primary	10	7
Secondary	**80**	**55.3**
Tertiary	59	37.0

Table 1 shows that majority of the respondents are between 21- 30 years of age; mostly of female gender and Christian religion. Above half of the respondents were married and attended at least secondary school.

Table 2 Knowledge level of the respondents about PTB

Variable	Frequency N=150	Percentage N=100
Can Pulmonary Tuberculosis be contacted by droplet nuclei?		
Yes	**119**	**79.3**
No	31	20.7
Can Pulmonary Tuberculosis be transmitted by air?		
Yes	**135**	**90.0**
No	15	10.0
Can someone contact Pulmonary Tuberculosis by sharing cutleries with infected person?		
Yes	**89**	**59.3**
No	61	40.7
Can someone contact Pulmonary Tuberculosis by swimming in public pool?		
Yes	**77**	**51.3**
No	73	48.7
Can someone contact Pulmonary Tuberculosis by sleeping together in the same room with infected person?		
Yes	**89**	**59.2**
No	61	40.8
Is Pulmonary Tuberculosis curable?		
Yes	**122**	**81.3**
No	28	18.7

Table 2 shows that the participants have good knowledge of PTB, 79.3% and 90.0% knows that PTB can be contacted as droplet nuclei and via air transmission respectively; 81.3% are aware that it is curable. Although, above half of the respondents thought that it can be contacted by sharing cutleries (59.3%) and swimming pool (51.3%).

Table 3 respondent's attitude towards people living with PTB

Variable	Frequency N=150	Percentage N=100
Should People living with tuberculosis be isolated from the public, in other to avoid spread of the disease?		
Yes	**102**.	**68.0**
No	48.	32.0
Do People living with tuberculosis deserved to be loved and cared for?		
Yes	**135**	**90.0**
No	35	10.0
Do you feel sympathetic towards people living with Pulmonary tuberculosis?		
Yes	**118**.	**79.3**
No	31.	21.7
Can you break off your relationship with your best friend, if he has Pulmonary Tuberculosis?		
Yes	58.	38.6
No	**92.**	**61.4**
Can you employ someone who is living with Pulmonary Tuberculosis?		
Yes	77.	51.3
No	**73**.	48.7
Can you buy food from someone who is living with Pulmonary Tuberculosis?		
Yes	62.	31.4
No	**88.**	**58.6**
Can you work with someone who has Pulmonary Tuberculosis?		
Yes	52	34.7
No	**98**	**57.3**

Most of the respondents (68%) thought that isolation of PTB patient is necessary, 90% believed that PTB patients should be well care for. Some (38.6%) affirmed that they can break relationship with PTB affected friends, 48.7% cannot employ PTB patients.

Table 4 practice of community towards people living with PTB

Variable	Frequency N=150	Percentage N=100
Should discrimination of PTB persist after cured?		
Yes	**92**	**61.4**
No	58	58.6
Should community equate Tuberculosis with HIV/AIDS thus distance themselves from the client?		
Yes	**97**	**64.7**
No	53	35.3
Should community be afraid of patronizing Tuberculosis, Client business, because of fear of being infected with Tuberculosis disease?		
Yes	**120**	**80**
No	30	20
Should PTB client had support Various group such as Non-Governmental Organization, Government agency, and Philanthropist in the community.		
Yes	**108**	**72.0**
No	42	28.0
Should community encouraged formation of Pulmonary Tuberculosis client club?		
Yes	**82**	**54.7**
No	68	45.3
Should Tuberculosis client children be separated from Other children in the community school?		
Yes	**84**	**56.0**
No	62	44.0

Majority of the respondents (61.4%) thought that discrimination of PTB patient should persist even after cure, 64.7% of the respondents consider PTB as deadly as HIV/AIDS. And 80% are even afraid of patronizing PTB founded businesses. Most of the respondents supported formation of supports group and clients club (54.7% and 56.0%) respectively.

DISCUSSION

The respondents had a good knowledge of the mode of transmission of PTB. More than half of the 119 (79.3%) were aware that PTB can be contacted through droplet nuclei, While 135 (90%) knew the correct mode of transmission. Moreover, 122 (81.2%) respondents. believed that PTB is curable. In addition, more than half of the respondents 89(56%) were aware that sleeping in the same room with PTB client could be a likely source of contacting Tuberculosis.

Most of the respondents knew that isolation of active case of TB is necessary. Some of the respondents (38.6%) agreed that they cannot relate with PTB patient even after cure. The discrimination and stigma towards PTB clients in this study is alarming despite the high knowledge level about the disease. More than half, (61.4%) revealed that discrimination of PTB client should persist after cured. In addition 64.7% consider PTB as deadly as HIV/AIDS. While 80% were against patronizing someone who has Pulmonary Tuberculosis business, This in support of findings with Enwuru CA,Idigbe (2010) and Markve O (2004).

In conclusion, the high level of knowledge does not reflect in the attitude of the respondents, just as reported by Rae and Colleague (2008). Based on the findings from the study, the following recommendations are made:

- Adequate mass health education aiming at behavioural change communication should be provided for the people in the community on PTB causes, mode of transmission, prevention and management.
- Attempt should be made at changing the negative attitude about PTB client.
- PTB clients should not be denied of their fundamental human right in the community after been confirmed sputum negative and certified medically fit.

REFERENCES

1. Aghaji MN, Nwakoby, BAN (2010). Drug resistance in chronic tuberculosis cases in Southern Nigeria, Nigeria journal of Clinical practice 13(1): p58-63.
2. Anthony, J. & Harries, N. (2005). TB/HIV a Clinical Manual. (2nd ed) .p.75. Geneva.
3. Centre for Disease Control (2000). Statement Committee on Latent Tuberculosis Infection "Targeted tuberculin testing and treatment of latent tuberculosis infection. American Thoracic Society". America.
4. Chaisson, R. E. & Martinson, N. A. (2008). "Tuberculosis in Africa—combating an HIV-driven crisis". The New England Journal of Medicine 358 (11): 1089–1092.
5. Christopher, R. & Bosede I. (2010). "Health seeking behavior of tuberculosis patients in Ekiti state, Nigeria. studies on Ethino Medicine,4(3): 191-197.
6. Enwuru C A, Idigbe EO, Ezeobi NV, Otegbeye AF (2002). Care –seeking behavioural pattern, awareness and diagnostic processes in patients with smear and culture positive pulmonary Tuberculosis in Lagos, Nigeria. Royal society of tropical medicine and hygiene96:614-616

7. Federal Ministry of Health, (1988). The National Pulmonary Tuberculosis Control Program frame work was established. Nigeria.
8. Golden M . P. & Vikram H. R. (2005). "Extra pulmonary tuberculosis: an overview. American Family Physician 72 (9): 1761–68.America.
9. Griffith D., Kerr, C. (1996). "Tuberculosis: disease of the past, disease of the present". Journal of Per anesthesia Nursing 11 (4): 240–245.
10. Halezeroğlu, S. & Okur, E. (2014). "Thoracic surgery for haemoptysis in the context of tuberculosis: what is the best management approach?. Journal of thoracic disease 6(3): 182–185.
11. Wandwalo ER, Markve O. Int. J Tuberc Lung Dis 2000(4):133-138.
12. Niemann S et al,. 2002.Mycobacterium africanum subtype 11 is associated with two major cause of human tuberculosis in kampala, Uganda. J Clin Microbiol 40(9):3398-3405
13. Perre, P. & Godreuil, S. (2010). "Pulmonary tuberculosis due to Mycobacterium a study of six recent cases ,. *Journal of Medical Microbiology* 59 (8): 984–989.
14. Southwick, F. (2007). Pulmonary Infections". Infectious Diseases: A Clinical Short Course, 2nd ed. McGraw-Hill Medical Publishing Division. pp. 104, 313–4.
15. TB Partnership and World Health Organization (2010) The Stop TB Strategy: building on and enhancing DOTS to meet the TB-related Millennium Development Goals, Geneva, Switzerland.
16. VanSmit, R. N. (2010). "Global lung health: the colliding epidemics of tuberculosis, tobacco smoking, HIV and COPD". European Respiratory Journal 35 (1): 27–33.
17. Van Solingen, D. (1997). "A novel pathogenic tax of the Mycobacterium tuberculosis complex, International Journal of Systematic Bacteriology .47 (4): 1236–45.
18. World Health Organization, (2006) . Diseases, Special Program me for Research & Training in Tropical ,. Diagnostics for tuberculosis : global demand and market potential. : on behalf of the Special Programme for Research and Training in Tropical Diseases. p. 36.
19. World Health Organization. (2006). "Global tuberculosis control–surveillance planning, financing WHO Report, China.
20. World Health Organization (2011). "The sixteenth global report on tuberculosis".
21. WHO global tuberculosis report 2018. Pharmaocology report 2018.
22. Zester, G., Sotgiu, G., Lange, (2011). "Interferon-γ release assays for the diagnosis of active tuberculosis: a systematic review and meta-analysis". The European respiratory journal : official journal of the European Society for Clinical Respiratory Physiology 37 (1): 100–11.