KNOWLEDGE, PERCEPTION AND PREVENTIVE BEHAVIOURTOWARDS TUBERCULOSIS AMONG IGBOKODA RESIDENTS IN ILAJE LOCAL GOVERNMENT, ONDO STATE

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Abstract

Tuberculosis is one of the infectious diseases that had affected many developing nations, Nigeria inclusive, with high morbidity and mortality. Stigma had also contributed in no little way to patients' adherence to treatment regimes. This research study was carried out to unveil the knowledge, perception and prevention behaviour to tuberculosis (TB) in Ilaje Local Government. A descriptive cross-sectional design was adopted in the study. Multistage sampling technique was used to select 198 respondents within people within the age of 18yrs to 65years. Self-structured questionnaire whose validity and reliability has been previously ascertained was used for data collections. Data collection was analyzed and the results were using descriptive statistics such as frequency and percentage. Result showed that respondents have 71.7% had good knowledge of tuberculosis and 96% of the respondents have good perception about TB. Good preventive behaviour to TB was high among the respondents. It is essential to improve the development of knowledge and health education programs for tuberculosis and also diagnosis of tuberculosis should be made closer to people for prompt diagnosis of the disease.

Keywords: Knowledge, Perception, Practice, Tuberculosis, and Behaviour

Introduction

Tuberculosis is a worldwide public health problem, and mortality and morbidity rates continue to rise. Globally 9.7 million people get sick with tuberculosis and 1.7 people die from tuberculosis each year, of these about 511, 000 are drug-resistant TB. (DR TB). WHO estimated that the largest number of new TB cases in 2008 occurred in South East Asian region, which accounted for 35% for incident cases globally? However, the estimated incidence rate in Sub-Sahara Africa is nearly twice that of the South East Asia region with over 100, 000 population (World Health Organization, 2010). Despite the fact that the global incidence of tuberculosis has decreased, an estimated 10.4 million people contracted the disease in 2015, with Africa accounting for one-quarter of the total (World Health Organization, 2016). Every ten seconds, a person is infected with tuberculosis (TB) somewhere on the planet, and every second, someone dies as a result of the disease. Ethiopia is one of the 30 countries with the highest rates of tuberculosis, according to the 2018 Global TB Survey. Raising community awareness helps to facilitate early TB detection, which is one of the foundations of the End TB Strategy (World Health Organization, 2016). Studies have found a connection between TB awareness, treatment-seeking, and treatment

adherence (Cramm, Finkenflügel, Moller, and Nieboer, 2010). To resolve such concerns, the level of expertise needed to design effective interventional programs must be determined (Adane, Spigt, Johanna, Noortje, Abera & Dinant, 2017).

Nigerian ranks 10th among the 22 High burden tuberculosis countries in the world. World Health Organization (WHO) estimated that 210, 000 new cases of tuberculosis occurred in the country in 2010. There were an estimated 320, 000 prevalence cases of tuberculosis in 2010, equivalent to 199/100, 000 cases (Nigeria Tuberculosis Fact sheet, US Embassy in Nigeria, 2010). There were 90, 447 tuberculosis cases notified in 2010 with 41.416 (58%) cases as new smear positives and a case detection rate of 40%, 83% of cases notified in 2009 were successfully treated. The main goal of Nigeria's tuberculosis treatment is to half the tuberculosis prevalence and death rate by 2015. Tuberculosis death rates have declined from 11% in 2006 to 5% in 2010 (United State Embassy in Nigeria, 2011). Several studies have shown that patient delay can be affected by a variety of factors, including a lack of understanding, a lack of comprehension of the importance of symptoms, negative social attitudes, or a combination of these. While there have been a few studies on awareness, knowledge attitude, and preventive practice (KAP) towards tuberculosis in other parts of the world, none have been conducted among the Igbokoda residents in Ilaje Local Government area in Ondo State Nigeria.

As a result, the aim of this study was to look into the knowledge, perception and preventive behaviour towards tuberculosis among Igbokoda residents in Ilaje Local Government area in Ondo State Nigeria. The specific objectives are:

- 1. To assess the level of Knowledge of Igbokoda residents about tuberculosis in Ilaje Local Government.
- 2. To evaluate the level of perception of Igbokoda residents about tuberculosis in Ilaje Local Government.
- 3. To examine the preventive behaviour to tuberculosis among Igbokoda residents in Ilaje Local Government.

Research Questions

- 1. What is the level of knowledge of Igbokoda residents about tuberculosis in Ilaje Local Government?
- 2. What is the level of perception of Igbokoda residents about tuberculosis in Ilaje Local Government?
- 3. What are the preventive behaviour to tuberculosis among Igbokoda residents in Ilaje Local Government?

Methodology

A descriptive cross-sectional design was adopted in this study to assess knowledge, perception and preventive practices towards tuberculosis among Igbokoda residents in Ilaje local government, Ondo State. The residents within ages 18-65 years of Igbotako in Ilaje local government area in Ondo State formed the population for this study. A sample size of 198 respondents was determined using the Cochrane formula of the non-finite population. Multistage sampling method was used to select 198 respondents into the study. Stage one involves clustering Igbotako community into ten clusters using street names. In stage two six clusters were randomly

selected for the study. Stages three involved recruiting all the respondents within the age group of 18-65 years in all the six clusters to form the study sample size. The instrument used for the collection of data for this research work is a self-structured questionnaire with thirty-one items and0 four sections, section A contained socio-demographic characteristics of the respondents, section B contained questions on the knowledge of respondents about tuberculosis with yes or no response pattern, section c consisted of statements of perception of the respondents about tuberculosis, this was measured on the 4 points Likert scale (strongly agree-disagree) and section D was made up of statements on preventive practices behaviour to tuberculosis with yes or no response pattern. The instrument was validated by the experts, the report of the content and face validity was considered and all the necessary corrections was made before data collection. The instrument stability consistent was done through the test re-test method. The reliability coefficient of section B was 0.8, section C was 0.78 and section D was 0.83.

All the principles of the declaration of Helsinki were observed during the conduct of this study. Data were collected with the use of a self-designed instrument after a detailed explanation of the purpose of the study and duly signed informed consent form, the instrument was given to all the respondents found in each of the clusters until we achieved study sample size, the researchers waited to retrieve all the instrument given out to the respondents in each cluster same day. The contents of the instrument were read to the respondents who cannot read and their responses were marked on the instrument. The collected data were coded and screened for missing data; the screened data were analyzed using Statistical Package for Social Sciences (SPSS) version 25. Descriptive statistical approach such as frequency and percentage was used to present demographic variables of the respondents and answered research questions.

Results Socio-demographic characteristics of respondents

Table 1: Socio-demographic characteristics of respondents

Items	Group	F	%	
Age (in years)	15-24	24	12.1	
	25-34	64	32.3	
	35-44	104	52.5	
	45 and above	4	2.0	
Religion	Christianity	116	58.6	
	Islam	48	24.2	
	Traditional	34	17.2	
Ethnicity	Yoruba	128	64.6	
	Hausa	34	17.2	
	Igbo	28	14.1	
	Others	8	4.0	
Level of education	Primary	30	15.2	
	Secondary	86	43.4	
	HND/BSc	78	39.4	
	Illiterate	4	2.0	

Marital atatas	C'1-	00	40.5	
Marital status	Single	98	49.5	
	Married	88	44.4	
	Divorced	12	6.1	
Gender	Male	162	82.8	
	Female	34	17.2	
House ownership	Owned	98	49.5	
•	Rented	82	41.4	
	Cohabiting	18	9.1	
House type	Brick	150	75.8	
	Mud	14	7.1	
	Plank	20	10.1	
	Others	14	7.1	
Family structure	Nuclear	118	59.6	
·	Extended	80	40.4	
Occupation	Student	26	13.1	
•	Civil servant	88	44.4	
	Others	84	42.4	

The findings show that the highest respondents 52 (52.5%) of the respondents are within the range of 35 to 44 years. The Religious Affiliation of the respondent reveals that 116 (58.6%) were Christians, 48 (24.2%) Muslims while only 34 (17.2%) were traditional worshippers. Also, 86 (43.4%) of the respondents had secondary education. On the marital status, 98 (49.5%) were single, and 88 (44.4%) were married, majority of the respondents 162 (82.8%) were male (Table 1).

Research Question 1: What is the level of knowledge of Igbokoda residents about tuberculosis in Ilaje Local Government?

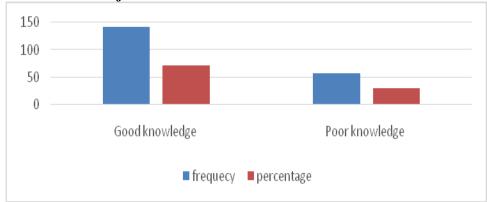


Fig 1: Respondents' level of knowledge about Tuberculosis

The finding shows that respondents 71.7% have good knowledge of causes, signs and symptoms, mode of transmission, methods of prevention of tuberculosis (fig1).

Research Question 2: What is the level of perception of Igbokoda residents about tuberculosis in Ilaje Local Government?

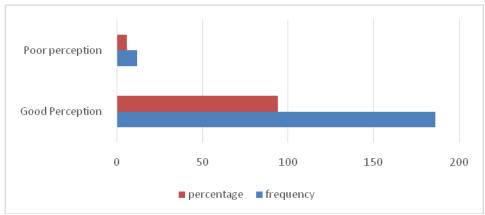


Fig 2: Respondents' perception of Tuberculosis

The result shows that majority 94% of these study respondents have a good perception of Tuberculosis and its course (fig 2)

Research Question 3: What are the preventive behaviour to tuberculosis among Igbokoda residents in Ilaje Local Government?

Table 2: Preventive behaviour to tuberculosis among Igbokoda residents in Ilaje Local Government

Items		Yes		No	
	f	%	f	%	
Take your medicines as directed			126.1		
Always cover your mouth with a tissue when you cough, sneeze or laugh.			2412.1		
Do not go to work or school, separate yourself from others and avoid close contact with anyone			3015.2		
Sleep in a bedroom away from other family members			2010.1		
Put the tissue in a closed bag and throw it away			2814.1		
Contacts are often family members, close friends, or work mates			2613.1		

Results as presented in table 2 shows 186 (93.9%) identified that taken medication as directed could prevent tuberculosis; 174 (87.9%) said spreading of tuberculosis can be prevented by always covering mouth with tissue when coughing, sneezing or laughing. Results also show that 168 (84.8%) stressed that people with tuberculosis should not go to school or work and separate themselves from others as well as avoid close contact to reduce the spreading of the bacteria

while 178 (89.9%) stated that sleeping in a bedroom away from others could reduce spreading of the bacteria. This shows that the majority has good preventive behaviour of tuberculosis.

Discussion

This study was conducted to provide information on knowledge, perception and preventive behaviour to tuberculosis. The finding implies that respondents 71.7% knew about tuberculosis. This current finding is partially consistent with a study conducted in Iran by Amiri, Doosti-Irani, Sedaghat, Fahimfar and Mostafavi, (2018) which found that 62 percent of participants had a good knowledge of the disease, and the study conducted in North Mecha by Kasa, Minibel, and Bantie (2019) found that 54 percent of participants had a good understanding of tuberculosis, This is closely related to the submissions of Tsankova, Yustiniyanova, and Kapreljin (2011) in a study conducted among secondary School Students in Varna. Generally, the knowledge of the respondents about tuberculosis is very good. This supports various submissions of previous scholars that knowledge of tuberculosis is good. Nwankwo (2015), in a study conducted among TB Diagnosed Patients in Kigali Urban and Rural Health Facilities in Rwanda concluded that more than half of her respondents had good knowledge of tuberculosis. Conversely, Solliman, Hassali, Al-Haddad, Hadida, Saleem, Atif, and Aljadhey (2012), in a study conducted among general population in North East Libya found out that the knowledge of tuberculosis was poor. This disparity may be due to a time difference; awareness levels may differ over time as a result of regular health education programs and increased public media access.

The finding also indicates that the study respondents have good perception about tuberculosis. It is a well-known fact that knowledge has the ability to affect people's perceptions. This finding is in line with other evidence report on perception of people about tuberculosis (Uchenna, & Ngozi, 2014). The finding of this study reveals that respondents have good TB preventive behaviour, many of the respondents would take medication as directed, prevent as well as spreading of tuberculosis by always covering mouth with a tissue when coughing, sneezing or laughing as well as putting tissue in a closed bag and throw it away into a safe place. This result is consistent with finding by Kasa, Minibel, and Bantie, (2019) who reported that 66.5% of participants had practice of covering their mouth during coughing but contrasting. Davaalkham et.al (2012) low percentage 42.9% of people with preventive behaviour to tuberculosis. This finding is not surprising as it is a well-known fact that intelligence can affect people's perceptions and preventive behaviours. The respondents' knowledge of tuberculosis has tremendously influenced their positive preventive behaviour, though few of the respondents still have poor preventive behaviour to tuberculosis.

Conclusion

The findings revealed that respondents had good knowledge of tuberculosis about causes, transmission, and prevention. When compared with other studies their knowledge of tuberculosis is higher. Respondents have good perception and preventive behaviour to tuberculosis though few of the respondents have poor perception and preventive behaviour to tuberculosis. Although knowledge of respondents was high there is still room for health education to further improve the knowledge of the level of people about tuberculosis especially in the area of prevention, prompt diagnosis, and adherence to the treatment regimen to guarantee the reduction of the scourge of this bacteria and utmost eradication in the community. Conscious effort should be made to enlighten the public about tuberculosis the more to improve their knowledge about it, and

diagnosis of tuberculosis should be made closer to people to facilitate prompt diagnosis of the disease.

References

- Adane, K., Spigt, M., Johanna, L., Noortje, D., Abera, S. F., & Dinant, G. J. (2017). Tuberculosis knowledge, attitudes, and practices among northern Ethiopian prisoners: Implications for TB control efforts. *PloS one*, *12*(3), 0174-692.
- Amiri, F. B., Doosti-Irani, A., Sedaghat, A., Fahimfar, N., & Mostafavi, E. (2018). Knowledge, attitude, and practices regarding HIV and TB among homeless people in Tehran, Iran. *International journal of health policy and management*, 7(6), 54-69.
- Cramm, J. M., Finkenflügel, H. J., Møller, V., & Nieboer, A. P. (2010). TB treatment initiation and adherence in a South African community influenced more by perceptions than by knowledge of tuberculosis. *BMC public health*, 10(1), 1-8.
- Davaalkham, D., Naranzul, D., Chimedsuren, O., Batbayar, O., Davaa, G., Angarmurun, D., & Nasanjargal, P. (2012). Knowledge, attitudes and practices on tuberculosis among general population: *the nationwide study report*
- Kasa, A. S., Minibel, A., & Bantie, G. M. (2019). Knowledge, attitude and preventive practice towards tuberculosis among clients visiting public health facilities. *BMC research notes*, 12(1), 1-6.
- Soliman , M.A., Hassali, M.A., AL-Haddad, M. Hadida, M. M., Saleem , F., Atif, IVL, &Aljadhey , H. (2012). Assessement of knowledge towards tuberculosis among general population in North East Libya . Journal of applied pharmaceutical sciences, 2(4) 24-30. DOI:10.7324/JAPS.2012.2420
- Tsankova, G., Yustiniyanova, B., and Kapreljan, L. (2011). Prevention of tuberculosis at school Age -Awareness of Secondary School Students. *Journal of IMAB-Annual Proceeding Scientific Paper*, (17), 1-5
- Uchenna, O. U., & Ngozi, C. J. (2014). Assessment of tuberculosis-related knowledge, attitudes and practices in Enugu, South East Nigeria. *Journal of infectious Diseases and Immunity*, 6(1), 1-9.
- World Health Organization. (2016). *Global tuberculosis report*. Geneva: World Health Organization.