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Research Article

Influence of socio-economic factors on treatment of tuberculosis patients in Owerri municipal

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Abstract

The main purpose of the study is to ascertain the influence of Socio-economic factor in treatment, compliance of tuberculosis treatment centres. To this effect, research hypothesis were formulated. Related literature reviewed. The Population of the study comprised 1, 585 new tuberculosis patients treatment from the year 2001-2005 in Owerri Municipal. The sample for the study consisted 100 patients from the population. Validity and reliability of the instrument were ensured by my supervisor. Data collection was analysed using percentage (%) and chi square (X^2) test of association. The results of the study revealed that social stigma is not associated with non compliance of tuberculosis patients to treatment in Owerri Municipal. Poverty and ignorance/illiteracy were implicated to have impact in the non-compliance to treatment of the TB patients in the above mentioned treatment area. This is attributed to non availability of transport money to place of treatment, lack of money required to pay hospital fee on admission. Ignorance of some important fact required to know about tuberculosis and its treatment. Based on the findings and conclusion the researcher therefore recommends hospital management to remove the burden of admission and feeding fee from tuberculosis patient during their intensive treatment. The health workers were also recommended to take their health educational role very serious.

Introduction

Tuberculosis is a communicable disease caused by the tubercle bacillus (mycobataterium tuberculosis). Almost every organ in the body can be affected, but involvement of the lunges i.e. known as (pulmonary tuberculosis) accounts for more than 80% of tuberculosis cases(Bailliere's Nurse Dictionary,2003).

Tuberculosis should be suspected if a patient presents with the following symptoms persistent cough for 3 weeks or more with or without expectoration or coughing of blood (haemoptysis), fever, chest pain, shortness of breath, loss of weight. Most infections of pulmonary tuberculosis are caused by droplet nuclei

containing virulent human strain of tubercle bacillus(Benneth and Brown,2009).
Diagnosis of tuberculosis (pulmonary) rests mainly on the identification of tubercle bacilli either by sputum smear microscopy or by culture(Wolf *et al.*,2000).
Tuberculosis disease constitute major public health problem in Nigeria- in addition, the social stigma associated with this disease further compounds the problem. It has been estimated that about 250,000 new cases occur yearly in Nigeria (workers manual, national tuberculosis and leprosy control programme 4th Edition.

The federal Government in collaboration with some development patterns notably (world Health organization (WHO), international federation of Anti-leprosy Association ILEP) and others have been assisting in the provision of the technical and financial inputs to control tuberculosis.

That State Government have also been mobilized in the formation of state control takes headed by a control officer, they are responsible for the guidance and supervision at local government areas where implementation of the programme takes place as an integral post of the primary health care (PHC). The missions and private medical practitioners are also collaborating in the fight against this disease. In Imo State, treatment of tuberculosis is jointly sponsored by the German Leprosy and Tuberculosis Relief Association and Imo State Government. The Anti-tuberculosis drugs are regularly supplied and there are tuberculosis control programmed staff in all the tuberculosis centers that take care of the patients.

It is then disheartening to note that in spite of this care, many tuberculosis patients are not complying with the treatment. This results to defaulting, treatment failure, multi drug resistance and even death.

In Owerri Municipal we have Orlu Road TBL clinic, federal medical centre and Nigerian prisons clinic Owerri. Orlu Road TBL clinic runs ambulatory treatment, federal medical centre chest unit are mostly for in-patients receiving 2months intensive care treatment and 6months continuation and patient treatment. Nigerian prisons clinic owerri attend to prison inmates who are suffering from tuberculosis.Federal medical centre laboratory is used for diagnosis.

PURPOSE OF THE STUDY

The purpose of this is to find out whether socio-economic factor has effect on the treatment and compliance of tuberculosis patients considering the fact that many tuberculosis patients are not complying to treatment inspite of the care given to them and this results to the treatment failure, multi drug reaction or resistance and even death.

SPECIFIC OBJECTIVE OF THE STUDY

In view of the problem of non-compliance to treatment noticed among some tuberculosis treatment in Owerri municipal are listed in the statement of the problem. The following objectives are put forward.

• To determine whether social stigma is the cause of no-compliance to
treatment noticed among some tuberculosis patients in Owerri Municipal.
• To find out if ignorance and illiteracy are the causes of non-compliance to
treatment noticed among some tuberculosis patients in Owerri Municipal.
• To determine if non-payment of drug is a cause of non-compliance to
treatment noticed among some tuberculosis patients in Owerri Municipal.

RESEARCH QUESTIONS

The following research questions are formulated for this study.
Research Question I: How does social stigma responsible for non-compliance to treatment of TB patients in Owerri Municipal?
Research Question II: To what extent is poverty responsible for non-compliance to treatment of TB patients in Owerri Municipal?
Research Question III: How does ignorance/illiteracy responsible for non-compliance to treatment of TB patients in Owerri Municipal?

RESEARCH METHODOLOGY

This chapter presents the method, procedure and steps employed by the researcher to arrive at a definite and concrete direction towards achieving the aims of the research work for the purpose of thorough investigation and successful production of research work, the following methods were adopted, Research Design. Area of Study, Population of the study, Sample and

Sampling Technique, Instrument for Data Collection, Method of Data Analysis.

Research Design

Survey research method was used to ascertain the influence of socio-economic factor on the treatment/compliance of tuberculosis patients in tuberculosis treatment centres in Owerri Municipal. According to Anyanwu (2000), survey research can be defined as the investigation of the behaviour, opinion or other manifestation of a group of people by questioning them. It may involve all or some of them hence the associated concepts of copulation and sampling.

Area of Study

There are tuberculosis treatment centres in almost every Local Government in I mo State, but the area of this study tuberculosis treatment centres in Owerri Municipal Council. The centres comprises; Chest Unit, Federal medical Centre Owerri, taking care of in-patient receiving 2months intensive treatment and outpatients receiving 6 months continuation treatment.

- Orlu Road tuberculosis intake clinic
- Owerri running ambulatory treatment for ambulatory patients
- Nigerian prisons clinic Owerri attend to prison in-mates who has tuberculosis.

Population of the Study

The population of the study is 1,585 now patients admitted or took treatment from 2000 - 2014 in the three TB treatment centres in Owerri Municipal. The make-up of this population is stated thus: Chest Unit, Federal Medical Centre Owerri = 1033 patients, Orlu Road TB Intake Clinic = 493, Nigerian Prisons Clinic = 59.

Table 1 Population of TB New Admissions from 2009 – 2013

Treatment Centre	No of Patients					
	2000	2001	2002	2003	2004	Total
Chest Unit F.M.C Owerri	223	220	210	200	180	1033
Orlu Road T.B Intake Clinic Owerri	105	103	100	95	90	493
Nigeria Prisons Clinic Owerri	15	13	12	10	9	59
	343	336	322	305	279	1,585

Sample and Sampling Technique

Sample - A total number of 100 patients were used in this study. This is the portion of the total population that is studied.

Sampling Technique - The sampling technique used in selecting this sample id proportional stratified random sampling. The population is first stratified according to the location of the TB treatment centre. Then patients are drawn randomly from each stratum in such a way that the relative proportions of the strata in the resultant sample are the same as exist in the parent population

Table 2 Sampling according to Population of Stratum that make up the Total Population

Treatment Centres	Populations	Sample
Chest Unit, F.M.C Owerri	1033	65
Orlu Road Intake Clinic Owerri	493	31
Nigerian Prisons Intake Clinic Owerri	59	4
Total	1,585	100

Instrument used for Data Collection

To obtain the relevant data for this study, some research instruments were used. These include questionnaire, interviews, observation and literature review.

(a) Questionnaires: The researcher made use of structured questions which require the respondents to say either 'Yes' or 'No'. This will make the respondent to answer the questions correctly irrespective of their academic background.

(b) **Interview:** In addition to the use of questionnaires some tuberculosis patients and health workers in tuberculosis unit and other related unit in the hospital such as laboratory section were interviewed. Both formal and informal interviews were employed. The formal interview guides were directed most to TBL supervisor in-charge of treatment centres in Owerri Municipal and the staff assisting her because they are in best position to provide the information needed due to their qualification and wealth of experience in TB unit. Information interviews and discussions were also held with patients in the treatment centre of study and other staff working there. A lot of data were collected through this medium.

(c) **Observation:** Non participants observation made during tuberculosis clinic days in the treatment centres under Owerri Municipal provided a lot of useful data for the study.

(d) **Literature Review:** In carrying out this research, extensive search was made in order to get valuable Books, Magazines, Journals and other published and unpublished works. These books and other documents helped a lot in the literature review and in the analysis of the research problem.

Method of Data Analysis

The statistical methods used in analyzing the result of the information are the percentage and chi-square methods. In using these methods, a number of tables are used in analyzing the responses in questions asked in the questionnaire. The frequency of every option in percentage calculated based on the total number of response. The chi-square is used in testing the validity generalization is then made on whether the assumption is true or not.

Also the hypothesis is tested by applying the responses to the questions that one related to the formulated hypothesis. The critical value and computed value are compared and where the critical value is greater than the computed value, the null hypothesis is accepted and the alternative rejected but where the computed value is greater than the critical value is greater than the critical value, the null hypothesis is rejected and the alternative hypothesis is accepted. This method helped to prove the validity of the hypothesis.

The chi-square formula
$$X^2 = \frac{f(0-E)^2}{E}$$

DATA PRESENTATION AND ANALYSIS

The objective of this chapter is to present and analyze the data collected in the course of the research. This will take the form of tabulation and explanation of the data got from the completed questionnaire.

The researcher, therefore, for purpose of clarity divided this chapter into two sections. The first section is concerned with research data analysis using simple percentages to test the statistics and frequencies. This is followed up with the testing of the hypothesis formulated earlier in this work to prove the validity by using Chi (x^2) test statistic at 0.05 level of significance and appropriate degree of freedom (d/f).

DATA PRESENTATION AND ANALYSIS

Table 3   Questionnaire Distribution

Treatment Centre	Number Distribution	Number Returned	% of Total No Returned
Chest Unit F.M.C Owerri	65	59	59 .
Orlu Road intake Clinic	31	28	28
Nigerian Prisons Intake Clinic Owerri	4	3	3
Total	100	90	90%

The above table shows that out of 100 questionnaires that were distributed 90 of them representing 90 percent were collected.

The break-down of this shows that 59 (59%) were collected out of the 65 given to Chest Unit F.M.C Owerri; while 28 (28%) and 3 (3%) were collected from 31 and 4 given to Okigwe Road Intake clinic and Prisons Intake Clinic respectively.

Table 4
Question: What is your sex?

Options	Frequency	% Response
Male	50	55.6%
Female	40	44.4%
Total	90	100%

The above table shows that 50 (55.6%) of those who returned their questionnaire are male, while 40 (44.4%) are female.

Question: How old are you? Table 5

Options	Frequency	% Response
10-19 years	5	5.6%
20-29 years	15	16.7%
30-39 years	20	22.2%
40-49 years	40	44.4%
50 and above	10	11.1%
Total	90	100%

The above table shows that among the respondents that returned their questionnaire, 5(5.6%) fall within the ages of 10-19 years, 15(16.7%) are within 20-29years, 20(22.2%) are within 30-39 years, 40(44.4%) are within 40-49years and 10(11.1%) are above 50 years.

Question: Are you literate:

Table 6

Options	Frequency	% Response
Yes	60	66.7%
No	30	33.3%
Total	90	100%

The above table shows that 60 (66.7%) of the respondents are literate while 30 (33.3%) are illiterate.

Question: What phase of treatment are you receiving? Table 7

Options	Frequency	% Response
Intensive phase	40	44.4%
Continuation phase	50	56.6%
Total	90	100%

The treatment regimen for new cases of tuberculosis has two months intensive treatment preferably in the hospital ward and six months continuation treatment as out-patient. Out of the 90 respondents, 40 (44.4%) are on intensive treatment while 50 (56.6%) are on continuation treatment.

Question: What type of patient are you? Table 8

Options	Frequency	% Response
In-Patient	10	11.1%
Out-Patient	80	88.9%
Total	90	100%

Table 8 shows that 10 (11.1%) among the 90 respondents are in-patients while 80 (88.9%) are out-patients.

Question: Have you defaulted from treatment? Table 9

Options	Frequency	% Response
Yes	30	33.3%
No	60	66.7%
Total	90	100%

Defaulting from treatment is a sign of non-compliance, among the 90 respondents 30 (33.3%) out of them has defaulted in one way or the other to treatment while 60 (66.7%) has not defaulted in any way.

Question: Do people around you associate freely with you since your ill-health?
Table 10

Options	Frequency	% Response
Yes	60	66.7%
No	30	33.3%
Total	90	100%

Some people stigmatize tuberculosis that they don't associate freely with any person suffering from it, among the 90 respondent 60 (66.7%) admitted that people around them are associating freely with them while 30 (33.3%) are having problem with people's association

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Question: Do you and people around you take tuberculosis to be incurable?

Table 11

Options	Frequency	% Response
Yes	50	55.6%
No	40	44.4%
Total	90	100%

Only 50 (55.6%) out of 90 respondents believe that tuberculosis is incurable while 40 (44.4%) said that tuberculosis is curable.

Question: Do you take tuberculosis to be disease of the poor? Table 14

Options	Frequency	% Response
Yes	50	55.6%
No	40	44.4%
Total	90	100%

It has been noted that tuberculosis is tagged disease of the poor by some researchers, but among 90 respondents that are sampled for this research, 50 (55.6%) accepted that tuberculosis is disease of the poor while 40 (44.4%) did not accept it.

Question: Did admission fee made you refuse admission especially during the 1st 2months of your treatment? Table 13

Options	FREQUENCY	% Response
Yes	80	88.9%
No	10	11.1%
Total	90	100%

During the 1st 2months of intensive phase treatment, tuberculosis patients are supposed to be admitted in the hospital for proper observation and management.

During this period, hospital management require them to pay some fee for their feeding and hospital bed which they make use of. Most of the patients don't come for the admission because they don't have the money. Out of 90 respondents, 80 (88.9%) refused admission because of the fee while it was not a hindrance to 10 (11.1 %) respondents.

Question: Do transportation fee prevents you from receiving treatment at your centre? Table 14

Options	Frequency	% Response
Yes	70	77.8%
No	20	22.2%
Total	90	100%

Transportation fee to treatment centre was a hindrance to 70 (77.8%)"out of 90 respondents while it was not a problem to 20 (22.2%) respondents.

Question: Do you miss your drug because you don't have food to eat? Table 15

Options	Frequency	% Response
Yes	20	22.2%
No	70	77.8%
Total	90	100%

The table above shows that 20 (22.2%) respondents out of 90 missed their drugs because of no food while feeding was not a problem to 70 (77.8%).

Question: Do you neglect clinic days because of your business/work?
Table 16

Options	Frequency	% Response
Yes	60	66.7
No	30	33.3%
Total	90	100%

The table shows that 60 (66.7%) respondents out of 90 neglect their clinic days because of their business or work while 30 (33.3%) keep to clinic appointments irrespective of their business/work.

Question: Do you know the duration of your treatment? Table 17

Options	Frequency	% Response
Yes	70	77.8%
No	20	22.2%
Total	90	100%

Table 17 shows that 70 (77.8%) respondents out of 90 know the duration of their treating while 20 (22.2%) did not know how long their treatment will last.

Question: Do you know when to go for laboratory test during the course of your treatment?
Table 4:16

Options	Frequency	% Response
No	60	66.7%
Yes	30	33.3%
Total	90	100%

During the course of tuberculosis treatment, patients suppose to go for sputum laboratory test (AFB) at the end of intensive phase treatment, end of 5th month and end of 7th month to ascertain sputum conversion. Among the 90 respondents, 60 (66.7%) out of them don't know when to go for laboratory test during the course of their treatment while 30 (33.3%) did know of this.

Question: Can you detect when you are reacting to any of your drugs? Table 19

Options	Frequency	% Response
Yes	20	22.2%
No	70	77.8%
Total	90	100%

All tuberculosis drugs have side effect and patient react differently to these drugs. Patients are to be educated on what to be expected of a particular drug.
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Among the 90 respondents, only 20 (22.2%) have knowledge of tuberculosis drug reactions while 70 (77.8%) have no idea of it.

Question: Are you aware that tuberculosis is infectious and deadly, it can be transmitted to others and kill if not treated?
Table 20

Options	Frequency	% Response
Yes	50	55.6%
No	40	44.4%
Total	90	100%

Tuberculosis is highly infectious and deadly disease and this should be brought to the knowledge of tuberculosis patients to promote treatment compliance, out of 90 respondents 50 (55.6%) have knowledge of this while 40 (44.4%) have no knowledge of this.

TEST OF HYPOTHESIS

In this section, the hypotheses that were earlier formulated would be tested.

HYPOTHESIS 1 STEP 1: Formulate hypothesis

Ho: Social stigma is not related to non-compliance of tuberculosis patients to treatment.
H1: There is a relationship between social stigma and non-compliance of tuberculosis patients to treatment.
i.e. HOITT^ 7T$_2$ versus Ha: TT-I $2\ n_2$

STEP 2: Let a = 0.05
Degree of freedom (df)
Formular = df = (r-1)(c-1)
Where r = number of rows
c = number of columns
r = 3, c = 2
⟨n
df=(3-1)(2-1)
= 2x1 =2 df = 2

STEP 3: let test statistics be X2 = T (0-E)2

E STEP 4: Decision rule

Reject Ho, if $X^2 > X^2$ 0.05 = 5.991 Accept Ho, if $X^2 < X^2$ 0.05 = 5.991
i.e. Reject Null hypothesis if X^2 calculated is greater than X^2 table Accept null hypothesis if chi-square (X^2) Calculated is less than X^2 table.

STEP 5: Compute test statistic.

Table 4:21

Tables 10,11,and 12	Accepted	Not Accepted	Total
10, do people around you associate freely with you since your ill-health?	60	30	90
11, do you and people around you take tuberculosis to be incurable?	50	40	90
12, do you take tuberculosis to be disease of the poor?	50	40	90
Total	160	110	270

Compute expected frequency using Z-Rule.

Roll total X column total = RTXCT
Grand total   GT

$E! = \frac{90 \times 160}{270} = \frac{14400}{270} = 53.3$

$E_? = 90 \times 160 =$
$270 £^ = 90 \times 160 =$
270
$E_4 = \frac{90 \times 110}{270} = 270$
270
$14400 = 53.3$
$270 \quad 14400 = 53.3$
270
$9900 = 36.7$
$270 \quad 9900 = 36.7$
270

$E_R = 90 \times 110 = \quad 9900 = 36.7$
$270 \qquad\qquad\qquad 270$

Table 22: Calculation of cell and total chi-square X^2

0	E	O-E	$(O-E)^2$	$\frac{(O-E)^2}{E}$
60	53.3	6.7	44.89	0.84
50	53.3	-3.3	10.89	0.20
50	53.3	-3.3	10.89	0.20
30	36.7	-6.7	44.89	1.22
40	36.7	3.3	10.89	0.30

40	36.7	33	10.89	0.30
			$3.06 = 7 \frac{(O-E)^2}{E}$	

$X^z = 3.06$

$X^2\ 0.05 = 5.991$

STEP 6: Decision rule

Since $X2 = 3.06 < X^2\ 0.05 = 5.991$,

We therefore accept null (Ho) and conclude that social stigma is not related to non compliance of tuberculosis patients to treatment in owerri municipal T.B. Treatment centres.

STEP 7: critical value of X^2 distribution.

HYPOTHESIS 2

Step 1:

HO: Poverty is not related to non-compliance of tuberculosis patients to treatment.

H1: poverty is related to non-compliance of tuberculosis patient to treatment.

Step2:   Let X = 0.05

Df=(3-1)(2-1)

= 2x1 =2

Df=2

Step 3:   Let test statistic be

Step 4:   Decision Rule

Reject Null Hypothesis (Ho) if X^2

Calculated is greater than X^2 table

Accept Null hypothesis (Ho) if X^2

Calculated is less than X^2 table. **Step 5: Compute test statistic**

Table: 23

Tables 13, 14 and 16	Accepted	Not accepted	Total
13 , did admission fee made you refuse admission?	80	10	90
14, do transportation fee prevent you from receiving treatment at your centre?	70	20	90
16, do you neglect clinic days because of your business / work?	60	30	90
Total	210	60	270

Step 5: Compute test statistic

Table 23

Tables 17, 18 and 20	Not Accepted	Accepted	Total
17: Do you know the duration of your treatment?	70	20	90
18: Do you know when to go for laboratory test during the course of your treatment?	60	30	90
20: Are you aware that tuberculosis is infectious and deadly, it can be transmitted to others and kill if not treated?	40	50	90
Total	170	100	270

Compute Expected Frequency

$Ei = \dfrac{90 \times 170}{270} = \dfrac{15300}{270} = 56.7$

$E2 = \dfrac{90 \times 170}{270} = \dfrac{15300}{270} = 56.7$

$£3 = \dfrac{90 \times 170}{270} = \dfrac{15300}{270} = 56.7$

$£4 = \dfrac{90 \times 100}{270} = \dfrac{9000}{270} = 33.3$

$£5 = \dfrac{90 \times 100}{270} = \dfrac{9000}{270} = 33.3$

$£6 = \dfrac{90 \times 100}{270} = \dfrac{9000}{270} = 27$

Table 25 : Calculation of cell and total chi-square x^2

0	E	0-E	$(0-E)^2$	$\dfrac{(0-E)^2}{E}$
70	56.7	13.3	176.9	3.12
60	56.7	3.3	10.9	0.19
40	56.7	-16.7	278.9	4.92
20	33.3	-13.3	176.9	5.31
30	33.3	-3.3	10.9	0.33
50	33.3	16.7	278.9	8.38
				$22.25 = T/0 \dfrac{(0-E)^2}{E}$

$X^2 = 22.25$

$X^2 \, 0.05 = 5.991$

Step |B: Decision Rule

Since X^2 Calculated = 22.25 is greater than $X^2 \, 0.05 = 5.991$ We therefore reject null (Ho) and conclude that ignorance / illiteracy is related to non-compliance of tuberculosis patient to treatment in Owerri Municipal TB treatment centres.

Discussion of results

Introduction: Discussion of findings was stipulated from the objectives of the study and research hypothesis and backed up with the review of pertinent literature.

Objectives I / Hypothesis I

This aimed at identifying the relationship of social stigma with non-compliance to treatment of tuberculosis patients in Owerri Municipal Tuberculosis Patients in Owerri Municipal tuberculosis treatment centers. From the findings using X^2 test of association which yielded X^2 cal. 3.067 which is less than X^2 table of 5.991, the null (Ho) hypothesis was accepted and concluded that social stigma is not related to non-compliance of tuberculosis patient to treatment in Owerrri Municipal tuberculosis treatment centers.

Table 10 revealed that 66.7% of respondents are enjoying free association with people around them irrespective of their ill health while 33.3% are having problem with people's association. This implies that many people have realized the implications of stigmatizing some disease.

Since tuberculosis is now less stigmatized in owerri municipal treatment centers, problem of non compliance existing in the area is not connected with social stigma.

Objectives 2 / Hypothesis 2

This was set out to find out the relationship poverty has with non compliance of tuberculosis patients to treatment in Owerri municipal tuberculosis treatment centers. The result of data analysis using X^2 test of association, X^2 calculated is 12.858 more than X^2 table at 0.05 level of significance and 2 degree of freedom (df) which is 5.991, null hypothesis is therefore rejected. It was then concluded that poverty is associated with non compliance of tuberculosis patients to treatment in owerri municipal tuberculosis treatment centres.

Considering the datas in tables 13, 14, and 16, 88.9% of respondent accepted that hospital admission fee made them to refuse admission during their intensive treatment while only 11.1% had no problem of admission fee.

Also 77.8% of respondents admitted that transportation fee to treatment centre made them to default in their treatment while 22.2% have no problem with transportation fee.

Again 66.7% of respondent accepted that they neglected clinic days to seek for their daily bread because they don't have enough in their house, 33.3% have no such problem.

The above data shows that the patients considered cost of treatment which includes hospital admission fee, transportation fee to treatment center and neglect of business that provides them with daily bread and these variables contributed to their non compliance because they don't have enough to meet to the cost. This problem is associated with poor people who find it difficult to meet to the cost of treatment.

Objective 3 /Hypothesis 3

This sought to ascertain the extent illiteracy and ignorance are associated with non-compliance to treatment of tuberculosis patients in Owerri-Municipal treatment centers. The result of data analysis using X^2 test of association. X^2 calculated is 22.24 more than X^2 table at 0.05 level of significance and 2 degree of freedom (df) which is 5.991, null hypothesis is rejected. It was therefore concluded that ignorance / illiteracy is associated with non-compliance of tuberculosis patients to treatment in Owerri municipal tuberculosis treatment centers.

TABLE 19: shows that 77.8% respondents revealed that they don't know when they are reacting to their drugs while 22.2% knows.

TABLE 20: Revealed 44.4% respondents are aware that tuberculosis is infectious and deadly, and can be transmitted to others and kill if not treated while 55% of the respondents are not aware of these important facts. This is in line with what Kaufmann *et al*. (1993) Stated; uncertainty and fear can lead a patient to abandon treatment. Ignorance of the approximate duration of the illness is one of the reasons leading patients to abandon their treatment.

Conclusion

It was concluded that poverty has significant impact in the non-compliance of tuberculosis patients in Owerri Municipal treatment centers. Again conclusion was drawn that ignorance / illiteracy were implicated in the non-compliance of tuberculosis patient to treatment in Owerri Municipal treatment centers.

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