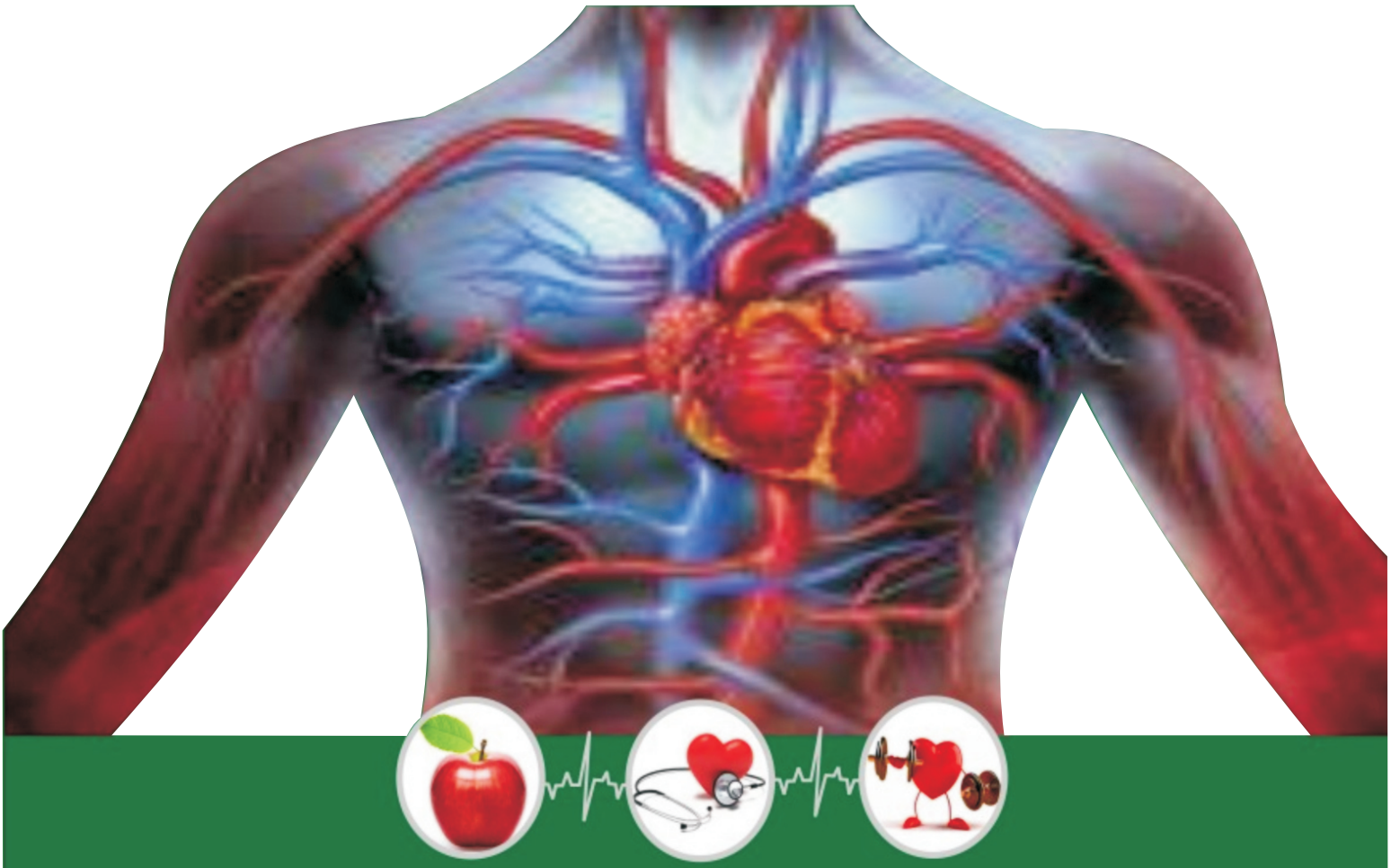
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KNOWLEDGE, ATTITUDE AND PRACTICE OF RESIDENTS OF EGBEDA LOCAL GOVERNMENT AREA, OYO STATE TOWARDS TUBERCULOSIS

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Abstract

This study assessed knowledge, attitude and practice of residents of Egbeda Local Government Area, Oyo State towards tuberculosis. The purpose of this study was to assess whether (i) residents of Egbeda LGA have knowledge of causes of; (ii) mode of transmission of TB; determine their (iii) attitude towards preventive measures of and (iv) their practice towards control measures of TB. Descriptive research design of the survey type was adopted for this study. The population for the study comprised all residents of Egbeda LGA, Oyo State. Simple random and purposive sampling techniques were used to select 179 respondents (18 years and above). The questionnaire used was validated by 3 experts from the field of health education. A reliability co-efficient of r=0.72 was obtained through test re-test method. Data was collected by the researchers with seven trained research assistants. The four postulated hypotheses were tested using inferential statistics of Chi-square at 0.05 alpha level. The study concluded that, the residents of Egbeda LGA have knowledge of the causes and mode of transmission of TB; had positive attitude towards its prevention and were familiar with its control measures. The study therefore recommended that, members of public should abstain from smoking, overcrowding and malnutrition as it is commonly said that prevention is better than cure. Also, health workers are advised to intensify their effort in giving health education to the public on the prevention and control of TB.

Keyword: *tuberculosis; causes, mode of transmission, health education,*

Introduction

Tuberculosis (TB) is a contagious bacterial infection that involves the lungs (Medline Plus, 2020). It may spread to other organs of the body. It is caused by the bacterium Mycobacterium tuberculosis. It is an airborne infection that is easily spread from an infected person to another one (Healthline Media, 2020). Tuberculosis constitutes a significant public health emergency globally. The 2015 World Global TB report revealed that TB still maintains the status of the world's biggest

threat because, in 2014, the disease caused the death of 1.5 million people World-wide. Apart from the mortality toll from TB, the morbidity effect as indicated by the same report showed that 9.6 million people fell ill to TB in 2014 across the World (5.4 million men, 3.2 million women and 1.0 million children) with an estimated 12% of the 9.6 million new TB case in 2014 being HIV-positive (Global TB Report, 2015; Hassan, Olukolade, Ogbuji, Afolabi, Okwuonye, Kusimo, Osho, Osinowo&Ladipo, 2017).

Tuberculosis, as a major disease is responsible for the public health and economic crisis in low-income countries (Fatiregun&Ejeckam, 2010). The global incidence rate of TB per capita is growing by approximately 1.1% per year. Of the 1.7 billion people estimated to be infected with TB, 1.3 billion live in developing countries. Globally, the disease kills approximately 5000 people daily, with 98% of deaths occurring in the developing world, affecting mostly young adults to their most productive years. Among the 15 countries with the highest estimated TB incidence rates, 13 are in Africa which accounts for 31% of the global total, more so as countries in the sub-Saharan region are experiencing a great burden of the human immunodeficiency virus (HIV) infection increases the risk of TB infection in these African countries (Ekaete, Okojie&Isah, 2013).

Nigeria is ranked fourth globally and first in Africa among 22 high burden tuberculosis countries (World Health Organisation (WHO), 2009; Onyeonoro, Chukwu, Oshi, Nwafor&Meka, 2014). The country in recent times has intensified efforts to address the challenges posed by the disease through expansion and enhancement of TB services and directly observed treatment short-course (DOT) (Onyeonoro, Chukwu, Oshi, Nwafor&Meka, 2014). In 2018, an estimated 10 million people fell ill with tuberculosis (TB) World-wide. 5.7 million men, 3.2 million women, and 1.1 million children (WHO, 2019). The 30 high TB burden countries accounted for 8.7 % of new TB cases, eight countries account for two-thirds of the total, with India leading the count, followed by China, Indonesia, Philippines, Pakistan, Nigeria, Bangladesh and South Africa (WHO, 2019).

One major setback to the success of TB control in Nigeria is the poor knowledge and stigma attached to the disease (Promtussananon&Peltzer, 2005, Dodor& Kelly, 2009, Okuonghae&Omosigho, 2010). According to Lo, Yang, Chiang, Hsu and Lin (2008), patients' attitude on tuberculosis, their knowledge of the disease and factors associated with treatment compliance, their result showed that the level of knowledge and awareness about TB is correlated with health-seeking behaviour. The attitude of individual, family and community strongly influence the health-seeking behaviour, culture plays a major role in shaping people attitude towards illness and their compliance to treatment. For example, research shows that patients who rigidly held their traditional views that TB can be spread by eating beef and other protein foods reportedly delay seeking treatment often wait until they are highly malnourished (Nigeria Centre for Disease Control, 2019).

Adequate knowledge and positive perception of the community towards TB and its management are pre-requisites to early treatment-seeking (Okuonghae&Omosigho, 2010). Public knowledge and attitude toward TB patients could be influenced by socio-demographic variables of the patients; such knowledge may also influence the attitude as to how the patient sees himself and the reaction towards him from individuals and the community. According to Okuongbe and Omosigho (2010),

their study showed that fifty per cent of the respondents had attitude scores below the mean, implying poor attitude towards patients, while about seventy per cent has attitude scores above the mean (good attitude).

According to Ochonma, Nwodoh, Maduakolam, Ogbonna, Ani &Dyages (2017), their study which was based on people's attitude towards TB patients revealed that forty per cent of respondents behaved in sympathetic form toward TB patients and about three per cent feel hated for TB patients, eleven per cent behaved in a friendly way but also try to avoid them, predominantly about forty-four per cent of the respondents inclined to support and help TB patients.

The causes of TB include age (infants and older adults), history in the family, smoking, place of residence, place of origin, malnutrition and alcoholism (American Lung Association, 2020; Mayo Clinic, 2020). In some industrialized countries, TB has been linked to overcrowding, poverty, homelessness, poor TB management and negligence in implementing its control programme (Atun & Coker, 2008). According to Medline Plus (2020), poor environment and weakened immune systems (for example due to HIV/AIDs, chemotherapy, diabetes, poor nutrition) could lead to tuberculosis.

TB is caused by mycobacterium bacterium which is transmitted from an infected host to a new host through the respiratory mist. When people with active TB cough, sneeze, laugh, speak, sing or spit, they expel infectious aerosol droplets of 0.5 to 5.0μm in diameter. A single sneeze can release up to 40, 000 droplets (Centres for Disease Control and Prevention (CDC, 2012). A person with active but untreated tuberculosis patient may infect 10-15 (or more) other people year (WHO, 2019). TB can also be spread through sharing food or drink; sleeping in the same bed and kissing an infected person (Healthline Media, 2020).

According to Wood, Lawan, Johnstone-Robertson and Bekkar (2011), TB could be prevented through adequate nutrition and avoidance of smoking; through cough etiquette, avoidance of close contact with an infected person and adequate ventilation (Healthline Media, 2020). Similarly, immunization of Bacillus Calmette Guerin (BCG) vaccine provides variable protection against the progression of TB infection to disease (WHO, 2018).

TB could be controlled through the following: careful screening of patients for signs and symptoms of TB; rapid diagnosis and implementation of effective anti- TB therapy (Haymarket Media, 2020); drug therapy of 4-drug regime (Izoniazid, Rifampicin, Pyrazinamide and either Ethambutol or Streptomycin) for the entire 6 months; directly observed therapy (DOT), with DOT, patient on the above regime can be switched to 2 to 3 times dosage per week after an initial 2 weeks of daily dosage (Thomas, 2020). Also, TB could be controlled through monitoring, where a patient diagnosed with active TB would undergo sputum analysis for Mycobacterium tuberculosis weekly until sputum conversion is documented. Treatment during pregnancy, here pregnant women with active TB would be treated in the first stage of pregnancy with Izoniazid, Rifampicin and Ethambutol (Swaminathan, Narendran &Venkatasan, 2010).

Statement of the Problem

Tuberculosis still represents an important global public health threat and it is one of the world's leading causes of death. It was declared a national emergency in 2006 after which an emergency plan for the control of TB in Nigeria was developed. Despite the support of donor organizations such as Damien Foundation Belgium Nigeria, the German Leprosy Relief Association and the introduction of directly observed treatment short-course (DOT), tuberculosis cases seem to be on the increase in most communities in Nigeria.

The cumulative human suffering and economic losses caused by TB in Nigeria is immense. The report also showed that some 80 per cent of TB cases were undetected, while some 1.5 million people died from TB annually (Global TB Report, 2015). The double impact of TB and HIV co-infection is keeping large number of people trapped in poverty with these diseases that reinforce each other. Based on the above evidence-based scenario, the researchers investigated the assessment of knowledge, attitude and practice of residents of Egbeda Local Government Area, Oyo State towards tuberculosis.

Research Hypotheses

The following research hypotheses were tested to guide the study:

1. Residents of Egbeda LGA, Oyo State do not have significant knowledge of causes of TB.
2. Residents of Egbeda LGA, Oyo State do not have significant knowledge of mode of transmission of TB.
3. Attitude of people living in Egbeda LGA, Oyo state is not significant towards TB preventive measures.
4. Practice of residents of Egbeda LGA, Oyo state is not significant towards control measures of TB.

Methodology

The study was carried out with the use of descriptive research design of survey type. The study population comprised all residents in Egbeda LGA, Oyo State. Simple random and purposive sampling techniques were used to select 179 respondents who are above eighteen years of age to form the sample size for the study. Researchers' designed a closed-ended questionnaire already validated by the three experts from the field of health education was used as an instrument for data collection. The reliability of the instrument was carried out using the test re-test method and the reliability coefficient of r=0.72 was obtained. The researchers with the help of seven instructed research assistants administered 179copies of the questionnaire to the selected 179 respondents in Egbeda LGA, Oyo State. Descriptive statistics of frequencies and percentages were used to answer research questions and inferential statistics of Chi-square analysis was used to test the four postulated research hypotheses at 0.05 alpha level of significance.

Results

Hypothesis One: Residents ofEgbeda LGA, Oyo State do not have significant knowledge of the causes of tuberculosis.

Table 1: Chi-square Analysis showing Residents' knowledge of the Causes of Tuberculosis in Egbeda LGA, Oyo State.

S/N	ITEM	SA	A	D	SD	Row Total	Cal x^2	Df	Crit. Value	Rem.
1	Poor nutrition could lead to TB	72 (39.9%)	75 (42.1%)	16 (9.0%)	16 (9.0%)	179				
2	Excessive alcohol consumption is linked to TB	47 (26.4%)	91 (50.6%)	25 (14.0%)	16 (9.0%)	179				
3	Overcrowding is associated with TB	39 (21.9%)	89 (50.0%)	31 (16.8%)	20 (11.3%)	179	93.21 Rej	12	21.03	Ho
4	TB may result from smoking	58 (32.6%)	88 (49.4%)	18 (10.1%)	15 (7.8%)	179				
5	TB runs in the family	51 (28.7%)	78 (43.3%)	22 (12.4%)	28 (15.7%)	179				
	Column Total	**267**	**421**	**112**	**95**	**895**				

Significance Level: 0.05

The findings from the table 1 revealed that calculated Chi-square value of 93.21 is greater than critical value of 21.03 with degree of freedom 12 at 0.05 alpha level of significance. Therefore, the null hypothesis is rejected. This implies that, residents of Egbeda LGA are aware of the causes of TB.

Hypothesis Two: Residents of Egbeda LGA, Oyo State do not have significant knowledge of Tuberculosis mode of transmission.

Table 2: Chi-square Analysis showing Residents' knowledge of Tuberculosis Mode of Transmission in Egbeda LGA, Oyo State

S/N	ITEM	SA	A	D	SD	Row Total	Cal x^2	Df	Crit. Value	Rem.
6	Living in an overcrowded environment with infected TB patient could increase the spread of TB	64 (36.0%)	67 (37.1%)	24 (13.5%)	24 (13.5%)	179				
7	Kissing an infected TB patient could increase the chance of contracting it.	23 (12.9%)	43 (24.2%)	62 (34.8%)	51 (28.1%)	179				
8	Sharing the same handkerchief with TB patient could put one at risk of it.	63 (35.4%)	64 (36.0%)	31 (17.4%)	21 (11.2%)	179				
9	Sharing cigarette with infected TB patient could aid its spread.	52 (29.2%)	89 (50.0%)	25 (14.0%)	13 (6.8%)	179				
10	Sharing the same spoon with TB patient could facilitate the spread of TB.	44 (24.7%)	65 (36.0%)	47 (26.4%)	23 (12.9%)	179				
							94.61	12	21.03	Ho Rej
	Column Total	**246**	**328**	**189**	**132**	**895**				

Significance Level: 0.05

The findings from the table 2 revealed that calculated Chi-square value of 94.61 is greater than critical value of 21.03 with degree of freedom 12 at 0.05 alpha level of significance. Therefore, the null hypothesis is rejected. This signifies that, residents of Egbeda LGA could identify the ways through which TB spreads from one person to another.

Hypothesis Three: Attitude of residents of Egbeda LGA, Oyo State is not significant towards preventive measures of tuberculosis

Table 3: Chi-square analysis showing Residents' Attitude towards Preventive measures of Tuberculosis in Egbeda LGA, Oyo State

S/N	ITEM	SA	A	D	SD	Row Total	Cal x^2	Df	Crit. Value	Rem.
11	Avoidance of smoking could prevent TB	41 (23.0%)	65 (36.5%)	31 (17.4%)	42 (13.1%)	179				
12	Balanced diet could reduce the incidence of TB	39 (21.9%)	54 (30.2%)	44 (24.7%)	42 (23.0%)	179				
13	Covering mouth while coughing and sneezing is a way of preventing TB	50 (28.1%)	83 (46.6%)	30 (16.9%)	16 (8.4%)	179				
14	BCG vaccine could protect infants against TB.	45 (25.3%)	58 (32.6%)	41 (22.5%)	35 (19.6%)	179				
15	Avoidance of overcrowded environment could prevent one from contracting TB.	27 (15.2%)	56 (31.5%)	55 (30.8%)	41 (22.5%)	179	98.21	12	21.03	Ho Rej
	Column Total	**202**	**316**	**201**	**176**	**895**				

Significance Level: 0.05

The findings from the table 3 revealed that calculated Chi-square value of 98.21 is greater than critical value of 21.03 with degree of freedom 12 at 0.05 alpha level of significance. Therefore, the null hypothesis is rejected. This implies that, residents of Egbeda LGA have positive attitude towards preventive measures of TB

Hypothesis Four: Practice of students of Egbeda LGA, Oyo State is not significant towards control measures of tuberculosis.

Table 4: Chi-square Analysis showing Practice of Residents towards Control Measures of TB in of Egbeda LGA, Oyo State

S/N	ITEM	SA	A	D	SD	Row Total	Cal x^2	Df	Crit. Value	Rem.
16	Strict adherence to TB treatment could foster its control	49 (27.8%)	96 (53.9%)	21 (11.8%)	13 (6.7%)	179				
17	Directly observed treatment by health workers helps in controlling TB.	33 (18.5%)	68 (38.2%)	51 (28.7%)	27 (14.6%)	179				
18	Early diagnosis and treatment of TB patient aids its control	58 (32.6%)	84 (47.2%)	24 (13.4%)	13 (6.8%)	179				
19	Readiness of a person diagnosed with TB could help in its control	24 (13.4%)	30 (16.9%)	67 (37.6%)	58 (32.1%)	179	90.61	12	21.03	Ho Rej
20	Drug therapy of 4-regime is a way of controlling TB	55 (30.9%)	91 (51.1%)	20 (11.2%)	13 (6.8%)	179				
	Column Total	**219**	**369**	**183**	**124**	**895**				

Significance Level: 0.05

The findings from the table 4 revealed that calculated Chi-square value of 90.61 is greater than critical value of 21.03 with degree of freedom 12 at 0.05 alpha level of significance. Therefore, the null hypothesis is rejected. This implies that, residents of Egbeda LGA are familiar with control measures of TB.

Discussion of Findings

The result obtained from the tested hypothesis one revealed that residents of Egbeda LGA, Oyo State had significant knowledge of the causes of pulmonary tuberculosis. The finding justified the assertion of Atun and Coker (2008); American Lung Association (2020) who affirmed that some people are aware that smoking, overcrowding and homelessness could result in TB.Chiang, Enarson, Mayo Clinic (2020) equally confirmed that poor diet and food low in calories could make a person be at greater risk of TB. The finding also harmonized the submission of Medline Plus (2020) that poor environment and weakened immune system due to HIV/AIDs, chemotherapy, diabetes and poor nutrition could cause TB.

The result from tested hypothesis two revealed that residents of Egbeda LGA, Oyo State had significant knowledge of the mode of transmission of TB. The finding confirmed Centers for Disease Control and Prevention (2012) that when people with active TB cough, sneeze, speak and sing, the disease (TB) can be contracted by another person. The finding corroborates the report of WHO (2019) that untreated tuberculosis patient may infect 10-15 (or more) other people a year through hand-shake; sharing of food or drink; sleeping in the same bed and kissing of an infected person (Healthline Media, 2020).

The result obtained from the tested hypothesis three revealed that residents of Egbeda LGA, Oyo State had a significant attitude towards preventive measures of TB. The finding justified the report of WHO (2018), that immunization of Bacillus Calmette Guerin (BCG) vaccine provides variable protection against the progression of TB infection to disease. The finding equally justified the assertion of Wood, Lawn, Johnstone-Robertson (2011) who claimed that adequate nutrition, avoidance of smoking and other healthy lifestyles are good attitude towards the prevention of TB. The finding is also in line with Healthline Media (2020), that TB could be prevented through cough etiquette, avoidance of close contact with an infected person and adequate ventilation.

The finding from the tested hypothesis four showed that residents of Egbeda LGA, Oyo State had significant practice towards control measures of TB. The finding justified the submission of Haymarket Media (2020), that TB could be controlled through careful screening of patients for signs and symptoms of TB; rapid diagnosis and implementation of effective anti- TB therapy. Thomas (2020) also affirmed the finding that drug therapy of 4-drug regime (Izoniazid, Rifampicin, Pyrazinamide, and either Ethambutol or Streptomycin) for the entire 6 months and directly observed therapy (DOT) by the health workers are ways of controlling TB.

Conclusions

Based on the findings of the study, it was concluded that:

1. Residents of Egbeda LGA Oyo State have significant knowledge of the causes of TB. This implies that they are aware of the causes of TB.
2. Residents of Egbeda LGA, Oyo State have significant knowledge of the mode of transmission of PTB. This signifies that they could identify the ways through which TB

spreads from one person to another.

3. Residents of Egbeda LGA, Oyo State have a positive attitude towards preventive measures of TB. It implies that they had a positive attitude towards preventive measures of TB.
4. Residents of Egbeda LGA, Oyo State had significant practices towards control measures of TB. This implies that they are familiar with the control measures of TB.

Recommendations

Based on the conclusion of this study, the following recommendations were made:

1. Members of the public are encouraged to continue abstaining from smoking, overcrowding and malnutrition as it is commonly said that prevention is better than cure.
2. Members of the public are advised to be friendly towards TB patients to make them have a sense of belonging which in turn may avert suicide as a result of being stigmatized.
3. Health workers should intensify their effort in giving health education to the public on the prevention and control of TB.

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SOLID WASTE DISPOSAL METHODS AMONG HOUSEHOLD MEMBERS IN KWARA STATE, NIGERIA

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Abstract

The study assessed solid waste disposal methods among household members in Kwara State of Nigeria. The purpose of the study was to examine the different solid waste disposal methods employed by household members in both rural and urban areas of Kwara State. An ex-post facto research design was used for the study. The population for the study comprised all heads of households in Kwara State, Nigeria. A sample of seven hundred and seventy one (771) respondents was selected using multi-stage sampling technique. A researcher developed questionnaire was validated by three experts and tested for reliability using a split half method. Data was analysed using an Independent Sample t-test. Findings revealed that respondents in both rural and urban areas of Kwara State, Nigeria used similar methods of solid waste disposal which include the use of bags (X= 2.65, 2.91), containers with cover (X= 2.83, 2.73), containers without cover (X= 2.64, 2.57) and backyard dumping for burning (X= 2.83, 2.68). They however differ in the use of polythene bags (X= 2.46, 2.70) and use of pit for dumping wastes (X= 2.54, 2.40). Findings also revealed no significant difference in the solid waste disposal methods used by household members in the study area (*p-value =0.99 > 0.05****). It was concluded that household members in Kwara State employ both legal and illegal methods of waste disposal. The researcher recommended that;*** *household members should try as much as possible to avoid disposing waste at their backyards, in drainages and water channels in order to prevent disease outbreaks.*

Keywords: Solid Waste, Disposal Methods, Rural Area, Urban Area, Household Members

Introduction

There is no doubt that a dirty environment affects the standard of living, aesthetics, health, and the quality of life of the general population living in it; hence, wastes must be properly treated. Waste refers to organic and inorganic materials generated from households, commercial and industrial establishments that have no monetary value to the owner (United Nation Children's Fund, UNICEF, 2012). Sridhar (2011) expressed that wastes may either be liquid or solid materials, which comes from human activities (domestic), agricultural or industrial activities, while, solid wastes are non-liquid and non-gaseous products of human activities, which are regarded as being useless by the owner. It could be in the form of refuse, garbage, or sludge.

The Environmental Pollution Group (2016), asserted that solid waste management encompasses disposal of refuse to land/sea or recovering and recreating usable substances from the waste by the process of recycling. The whole process of solid waste management involves the collection of waste, scientific dumping, and resource recovery. In a proper waste management system, refuse is usually collected using covered trucks. After waste collection, the wastes are disposed of by any of the following disposal methods; dumping, sanitary landfill, incineration, pyrolysis, composting or biogas technology. After the disposal of solid wastes, several useful products can be obtained through recycling. However, in Kwara State, this is not the usual practice. The waste management system lacks proper coordination and supervision, especially in urban centres. Wastes are collected using uncovered trucks thereby spreading some of the waste across the streets as the truck moves around the town. Disposal of waste is not monitored by the government or any concerned bodies, this makes the waste operators dump the collected refuse illegally. The rural area is also not exempted from this hazardous waste management practices.

Over the years, solid waste generation has steadily increased because of global changes associated with population, consumption, and industrial development. According to Breeze (2012), the world cities generate about 1.3 billion tonnes of solid waste per year and this volume is expected to increase to 2.2 billion tonnes by the year 2025. United Nations Development Programme, UNDP (2012) asserted that solid waste disposal is one of the major environmental health problems that the government and even citizens of Nigeria are concerned about. UNDP (2012) further reported that as of the year 2012, Lagos metropolis alone was generating about 998,081 tonnes of solid waste per year. Recent estimates also indicated that the total amount of domestic waste per annum in Nigeria is about 63million tonnes (0.45kg/capita/annum). Often, inadequacies in waste management are linked to population growth and urbanization. For instance, in Nigeria, statistics showed that the population growth rate of Nigeria as at 1991 was 3.0 per cent and an urban growth rate of about 5.5 per cent per annum, while the average waste generation rate is put at 0.49kg per day (Solomon, 2013). Urban centres in Nigeria has also witnessed a steady rise in waste generation due to urbanization and increase in population; Abuja, the nation's capital city generates between 0.55-0.58 kg of waste per person per day (Solomon,2013), Lagos state, one of the most populous cities in the world generates 11,000 metric tonnes of waste daily (Oresanya, 2015), while Minna the Niger state capital which has similar geographical characteristics with Kwara State generates about 90 tons of solid waste per day (UNDP, 2012). While Kwara 24/7, (2014) reported that the tons of waste in Kwara State has increased from 120 to 350 tons between 2000 and 2010. Ayo, Hassan, Ibrahim and Mohammad, (2012) also reported that the total quantity of waste generated per day is estimated to be about 1000 metric tons (approximate generation per capita per day is 500 grams).

Vikas and Prajes, (2016) noted that in rural areas, waste is a severe threat to the public health concern and cleanliness. Although, the form of waste generated in rural areas is predominantly organic and biodegradable, yet, it constitutes a major problem to the overall sustainability of the ecological balance of the area. For instance, it is estimated that rural people are generating solid waste (organic/recyclable) of 0.3 to 0.4 million metric tons per day respectively (Vikas &Prajes, 2016). As a result, in the absence of proper disposal of solid waste, the rural areas may be prone to outbreak of vectorborne diseases such as diarrhoea, malaria, polio, dengue fever, cholera, typhoid and other

water-borne infections such as schistosomiasis. As a result of haphazard disposal of refuse, the rural areas may be prone to outbreak of vector-borne diseases such as diarrhoea, malaria, polio, dengue fever, cholera, typhoid, and other water-borne infections such as schistosomiasis. Prevention of all these diseases is crucial to ensure optimal health among the rural people, and an important way of preventing the outbreak of diseases in these areas is through proper waste management. Proper disposal of waste is very important at the household level to avoid rat infestation. If waste generators properly dispose of wastes, many environmental health diseases would be avoided, especially in rural areas.

Although, Pravash (2012) noted that recently, the wastes that are not biodegradable, such as bottles, cans, plastics and polythene are rapidly increasing in rural areas too. This has created a big problem managing them. The consequence of this is the infestation of insect or mosquitoes reproducing in stagnant water pools on waste sites, blockage of water channels and drainages with waste bringing about several diseases. This poses certain health risks due to the presence of vermin, bugs, flies and scavenging animals particularly to workers, farmers and neighbouring residents. Most people in Kwara State seem to dispose of their waste illegally. Many at times, solid wastes such as plastic bottles, nylons, used sanitary pads, batteries, baby diapers and other waste materials are seen littered across the streets. The researchers observed that a large part of the total disease load may be due to poor sanitation and the improper solid waste management, which intensify their occurrence. More so, there is the paucity of data on how the people of Kwara State dispose of their waste. Hence, the researchers assessed solid waste disposal methods among household members in Kwara State, Nigeria.

Purpose of the Study

- The purpose of the study was to assess the solid waste collection methods employed by household members in rural and urban areas of Kwara State, Nigeria.

Research Questions

This study answered the following research question:

- What are the solid wastes collection methods employed by household members in Kwara State, Nigeria?

Research Hypothesis

- There is no significant difference in the solid waste methods employed by household members in rural and urban areas of Kwara State, Nigeria?

Methodology

This study employed a triangulation design. A triangulation design is appropriate when a researcher employs both qualitative and quantitative methods of data collection in a particular study. Therefore,

an Ex- post facto research design was used to gather quantitative data, while, a key informant interview was used to gather qualitative data for the study. The population for this study included all household heads in both rural and urban areas of Kwara State as at the time of this study. The target population comprised heads of households in the selected Local Government Areas in Kwara State which according to the 2016 projection of the National Population Commission (NPC, 2016) has a population of about two hundred and twenty-three thousand, three hundred and sixty (223,360) people. Only heads of households who were 18 years and above were part of the study. Officials of the Kwara State Environmental Protection Agency also formed part of the population for this study with a total population of 150. However, only the officials who deal directly with solid and liquid wastes formed the target population.

A sample of seven hundred and seventy-one (771) respondents was used for the study. This comprised household heads who were selected across six Local Governments Areas of Kwara State. A multi-stage sampling technique was used to select the sample for the study. This included stratified, simple, proportionate, purposive and systematic random sampling techniques.

Two instruments were used for the study namely, a key informant interview guide which was constructed in line with the variable for the study and a researcher-developed questionnaire tagged 'Questionnaire on Solid Waste Management (QSWM)'. The researcher-developed close-ended questionnaire was validated by five experts. Cronbach alpha reliability coefficient was used to determine the reliability of the instrument. The result was 0.79. The researcher with the help of four (4) instructed research assistants administered the questionnaire. Seven hundred and seventy-one (771) copies of the questionnaire were administered to the respondents from house to house daily until the required number of participants were obtained. Copies of the questionnaire were retrieved immediately to avoid any loss and the influence of any extraneous variable. The officials of the waste management agencies were also contacted in their various offices to have a one-on-one interview with them. Data collected were coded and analysed using a descriptive statistics of frequencies and percentages for the demographic data, mean and standard deviations to answer the research questions raised for the study, while, an inferential statistics of independent sample t-test was used to analyse the hypothesis for the study at 0.05 alpha level of significance. A thematic analysis was also used to report the key informant interview.

Results

Research Question One: What are the solid wastes collection methods used by household members in Kwara State, Nigeria?

Table 1: Mean scores of responses and standard deviations on solid wastes collection methods used by household members in Kwara State.

S/N	ITEMS	Rural		Urban	
		Mean	**Std. Deviation**	**Mean**	**Std. Deviation**
1	Most of the time solid wastes we generate are kept in bags in our household.	2.65	1.052	2.91	0.982
2	Containers with covers are used to collect solid wastes in our household.	2.83	0.895	2.73	0.868
3	Containers without covers are used in our household most of the time.	2.64	0.987	2.57	0.921
4	Usually in our household, solid wastes are separated before disposal.	2.66	0.874	2.57	0.923
5	We do not do waste separation, we just dispose them off like that.	2.69	0.941	2.72	0.894
6	Wastes in our household are collected in polythene bags.	2.46	0.933	2.70	0.906
7	Usually, containers are not used to collect wastes in our household, solid wastes are dumped at the backyard for burning.	2.83	0.896	2.68	0.969
8	There is a pit for collecting waste at a particular place in our household	2.54	0.890	2.40	0.937
	Total	**21.30**	**7.468**	**21.28**	**7.400**

Table 1 shows the method of solid waste collection used in rural and urban areas of Kwara State, Nigeria. For instance, on whether the respondents keep their refuse in bags, mean scores of 2.64 and 2.91, with standard deviations of 1.052 and 0.982 were scored by rural and urban areas respectively. On whether containers with cover are used, respondents in a rural area had a mean score of 2.83, while those in the urban area scored 2.73 with standard deviations of 0.895 and 0.868 respectively. Likewise, on whether waste separation is done before disposal, respondents in the rural area had a mean score of 2.66 while those in urban area scored 2.57 with standard deviations of 0.874 and 0.923 respectively.

On whether the respondents do not use containers at all but they usually dump the refuse at their backyard for burning, the mean score of respondents in the rural area was 2.83 while that of the respondents in an urban area was 2.68 with standard deviations of 0.896 and 0.969. On whether there is a pit for burning refuse in their household, respondents in the rural area had a mean score of 2.54 while those in a rural area had a mean score of 2.40 with standard deviations of 0.890 and 0.937. On aggregate, respondents in a rural area had a mean score of 21.30 while those in the urban area had a mean score of 21.28 with a mean difference of 0.02. This implies that the solid waste collection methods employed by household members in rural and urban areas of Kwara State are very similar. Majority of the respondents in both rural and urban areas of Kwara State, Nigeria used similar methods of solid waste disposal which include the use of bags (X= 2.65, 2.91), containers with cover (X= 2.83, 2.73), containers without cover (X= 2.64, 2.57) and dumping at the backyard for burning (X= 2.83, 2.68). They, however, differ in the use of polythene bags (X= 2.46, 2.70) and use of pit for dumping wastes (X= 2.54, 2.40).

Hypothesis one: There is no significant difference in the solid waste collection methods employed by household members in rural and urban areas of Kwara State

Table 3: Independent Sample t-test on difference in the solid waste collection methods employed by household members in rural and urban Areas of Kwara State, Nigeria

	Areas	N	Mean	SD	Df	t-value	Sig(p)
Solid waste collection methods	Rural	205	21.30	4.576	752	.011	0.99
	Urban	549	21.28	3.993			

(t -critical = 1.972, P value > 0.05)

Results of the independent t-test in Table 2 show that there is no significant difference between rural and urban in their methods of solid waste collection. This was because the calculated p-value of 0.99 is higher than the 0.05 alpha level of significance, while the calculated t value of .011 is lower than the 1.972 t critical at df 752. Therefore, the null hypothesis which states that there is no significant difference in the solid waste collection methods employed by household members in rural and urban areas of Kwara State, thus, was retained. This implies that household members in rural and urban areas of Kwara State employ similar methods of solid waste collection.

Discussion of Findings

The study revealed that there is no significant difference in the methods of solid waste disposal employed by household members in rural and urban areas of Kwara State, Nigeria. By implication, household members in rural and urban areas of the study area have similar ways of disposing of their solid waste. This finding agrees with Adogu, Uwakwe, Egenti, Okwuoha and Nkwocha (2013) in a

study on waste disposal practice who found that majority of the respondents (90.1%) knew about waste management. Open dumping was the most well-known strategy for waste disposal among the Respondents 279 (98.9percent), trailed by burning 267 (94.7%). Incineration was the least known waste disposal method. The revelation was however different in South Africa where household wastes are collected every week from households by the local bodies (Ogola, Chimuka&Tshivhase, 2011). Calhoum(2010) observed that most of the household waste in Abuja, including waste from business areas, shops, offices and institutions such as hospitals, hotels, restaurants, construction and demolition wastes, and lots more end up on the streets or are discarded illegally on open plots or released into nearby water bodies, thereby resulting in blockage of drainages, contamination of water sources and increased poor conditions of the environment in the rural and urban areas.

This finding was corroborated by a key informant, that; people do not usually patronize the private waste managers, even if they take their wastes to legal dumping sites, they do not dispose of them appropriately. They prefer to burn their wastes at the back of their house and even inside the containers placed around town (a male respondent).

Conclusion

Based on the findings of the study, the researchers concluded that most households in rural and urban areas of Kwara State, Nigeria employ both legal and illegal ways of waste disposal. The legal methods include sanitary landfill and incineration and patronage of commercial waste managers, while the illegal methods include open burning, dumping of waste in water bodies and dumping of waste in any open space.

Recommendation

Based on the conclusion of the study, the researchers recommended that; household members should try as much as possible to avoid disposing of waste at their backyards, in drainages and water channels in order to prevent disease outbreaks. They should rather take their wastes to designated sites or patronize the commercial waste collectors in order to avoid outbreaks of deadly diseases such as cholera, dengue fever, Lassa fever among others.

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INFLUENCE OF MATERNAL HEALTH LITERACY ON HEALTH STATUS OF CHILDREN UNDER 5 YEARS IN ATISBO LOCAL GOVERNMENT, OYO STATE.

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Abstract

The study investigated influence of maternal health literacy on health status of children under 5 years in Atisbo local government, Oyo State. The purposes of this study were to: (i) identify the sources of information of nursing mothers on health literacy; (ii) determine the influence of maternal health literacy on vaccination up-takes; and (iii) nutritional status of children under 5 years. The design of the study was cross-sectional survey based. The sampling techniques used were purposive, proportionate and systematic to select 200 registered nursing mothers. A validated structured questionnaire was used for data collection. The reliability of the instrument was ascertained using test re-test technique. A reliability co-efficient r = .82 was obtained through PPMC statistical analysis. Data was collected by the researchers with the help of two trained research assistants. The statistical tool used was percentage to answer the research question one, while Chi-square statistic was used to test the null hypotheses at 0.05 level of significance. The findings of the study showed that majority of the nursing mothers (n= 184, 92%) obtained health literacy information from health care providers. Also, maternal health literacy had significant influence on both vaccination up-take and nutritional status of children less than 5 years. Based on these findings, it was recommended that health care providers should intensify efforts on health education including importance of immunization against childhood diseases among nursing mothers. Also, there is need for nursing mothers to be well educated on nutrition from health care providers in order to improve their children's nutritional status.

Keywords: *Maternal health literacy; health literacy; health status.*

Introduction

Good parenting is very vital during early child development. During the early stage of life known as infancy, the child solely depends on parents, most especially mothers for adequate protection and good nurturing. At this period of life, mothers need increased knowledge of health information. Literacy refers to the capacity to read and have basic numeric skills. In health care settings, literacy is regarded as health literacy, which refers to the ability to read, understand and act on health care information, or capacity to obtain, interpret and understand basic health information and services to enhance health (Barnes, Barclay, McCaffery &Aslani, 2018; Ostini &Kairuz, 2014).

Health literacy means more than being able to read pamphlets and successfully make an appointment. Rowlands (2014) defines health literacy as a capacity of obtaining, interpreting and

using basic medical knowledge services such as benefiting from treatment services so as to protect and promote an individual's health condition. Kutner, Greenberg, Jin and Paulsen (2006) viewed health literacy as the ability to comprehend and use printed and written health information to function in the society to achieve one's goal and to develop one's knowledge and potentials.

Tas and Akis (2016) are of the opinion that people with high health literacy level can apply health care services on time, understand their health conditions, and implement suggestions well, due to proper understanding of basic health instructions from health care providers. Otherwise, when people have a low level of health literacy, it can lead to failure of controlling diseases, increase in the occurrence of complications, reduction in quality of life, dissatisfied with the service and reduction of participation in screening programmes.

Elham, Nooshin and Habibollah (2017) defined maternal health literacy as the cognitive and social skills determining the ability to get access to, understand, and use the information to promote mothers' health and that of their children. According to Mojoyinola (2011), literacy or educational level helps pregnant women to understand when to start antenatal clinics, attend nutritional classes for health education, health talks and immunization programmes organized for them by the midwives and nurses. Also, literacy levels of the pregnant women help them to understand danger signs in pregnancy, take adequate care of themselves and adhere to the advice given to them by the midwives and nurses during the antenatal clinics, which help them to experience healthy and safe pregnancy (Mojoyinola, 2011).

Nursing mothers acquire health information from different sources. As revealed by Anasi (2012), interpersonal sources of health information among nursing mothers include medical doctors, nurses, community health workers, friends, family members and informal community groups and associations. Mass media communication channels of health message transmission include radio, television and written materials such as magazines, books, newspapers, posters and leaflets (Parrot, 2004). A further strategy to health messages dissemination is a traditional approach which includes songs, storytelling, community meetings, role-play, proverbs, drama and poems (Anasi, 2012; Parrot, 2004). The study of KamaliLeila, Khajouei and Bahaadinbeigy (2017) showed that the common sources of health information used by pregnant women include physician (n= 353, 88%), internet (n= 287, 72%), family/friends/colleagues (n =287, 72%) and helpline phones (n =21, 5%).

There are several childhood diseases that are preventable and nursing mother could help a lot to avert many of them. Among vaccine, preventable childhood diseases include measles, tuberculosis, diphtheria, pertussis, poliomyelitis, hepatitis, yellow fever, tetanus among others. The report of the study of Jung (2018) showed that mothers with high health literacy had their children immunized. Also, getting information from radio increased the likelihood that women would immunize their children. In the study Jung (2018), high health literacy and radio use were important predictors of East Asian mother's likelihood of having their children immunized. In South Korea, mothers who watched television had their children immunized. In China, mothers who listened to the radio had their children immunized (Jung, 2018). Torun and Bakirci (2006) remark that lack of information and understanding about the importance of vaccines and immunization on the part of the mothers may lead to failure for the children to return for the required follow-up doses.

Maternal health literacy and child under-nutrition were estimated to be underlying causes of 3.5 million child deaths annually (Black &Aboud, 2011). Maternal mental health problems are linked to sub-optimal child feeding practices, lack of psychosocial stimulation maternal-infant bonding, poor hygiene and health-seeking behaviour, all of which may impact children's growth and nutritional status (Rahman, Surkan, Cayetano, Rwagatare& Dickson, 2013; Rahman, Patel, Maselko & Kirkwood, 2008). The result of the study of Sufiyan, Bashir and Umar (2012) revealed that maternal literacy affects the nutritional status of children, as children of illiterate mothers that is, those with no formal education have increased risks for development of malnutrition in children under 5 years.

Stunting as a result of malnutrition is associated with poor child behavioural outcomes including apathy and reduced activity and play; and poor growth. In the first two years, it is associated with worse school performance compared to children with normal growth (Adair, Fall, Osmond, Stein, Martorell & Ramirez-Zea, 2013). Growing evidence suggests that psychosocial factors, including maternal mental health, play an important role in child nutritional outcomes (Rahman, Surkan, Cayetano, Rwagatare & Dickson, 2013). It could, therefore, be inferred that the impact of mothers' health literacy at large determine the health status of their children since children depend on their parents to survive in term of maternal care. Children health status in the locale of the study called for great concern with many underlined factors unchecked. Therefore, the researchers looked at how maternal health literacy influenced the health status of children under 5 years in Atisbo local government, Oyo State.

Statement of the Problem

Child mortality has remained a persistent health challenge in Nigeria. Reports from sub-Saharan Africa and the world at large have revealed a high rate of neonatal mortality, infant and child mortality to maternal mortality (Yaya, Bishwajit & Shah, 2016). As asserted by Ajaegbu (2013), Nigeria still has a high prevalence of mortalities reflected in infants and children Again, in Nigeria, maternal health literacy has been reported to be associated with many women who do not receive adequate antenatal care due to factors such as poverty and lack of knowledge (Singh, Bloom, Haney, Olorunsaiye & Brodish, 2012). Educational level is greatly related to maternal and child mortality in Nigeria and early antenatal visits can help with detection and treatment of adverse pregnancy-related outcomes, but the educational gap, maternal characteristics or mother utilization of antenatal care have potential impacts on the health status of children.

Vaccination up-take, child nutritional status and child care practices are areas of mother's focus and if not properly managed due to mother's level of health knowledge could result in maternal and child morbidity and mortality. These problems are presumed to be associated with a low level of maternal health literacy. However, in Atisbo local government which is the locale of the study, it was observed that the health status of under-five children are poor despite various health interventions and they are still more vulnerable to different childhood diseases. There is no previous work(s) that attempt to check reasons for such poor health status in the areas of child nutrition, vaccination up-take and care practices.

Therefore, the researchers investigated the influence of maternal health literacy on the health status of children under 5 years in Atisbo local government, Oyo State.

Purpose of the Study

The purposes of this study were to:

i. identify the sources of information of nursing mothers on health literacy in Atisbo local government, Oyo State.
ii. determine the influence of maternal health literacy on child vaccination up-take among children under 5 years in Atisbo local government, Oyo State.
iii. assess the influence of maternal health literacy on nutritional status of children under 5years in Atisbo local government, Oyo State.

Research Questions

The following questions were raised in this study:

1. What are the sources of information of nursing mothers on health literacy in Atisbo local government, Oyo State?
2. Would maternal health literacy influence vaccination up-take among children under 5 years in Atisbo local government, Oyo State?
3. Would maternal health literacy influence nutritional status of children under 5 years in Atisbo local government, Oyo State?

Research Hypotheses

The following null hypotheses were tested in this study:

i: Maternal health literacy has no significant influence on vaccination up-take among children under 5 years in Atisbo local government, Oyo State.
ii: Maternal health literacy has no significant influence on nutritional status of children under 5 years in Atisbo local government, Oyo State.

Methodology

The study was a cross-sectional survey research design. The population for this study comprised all nursing mothers attending infant welfare clinics in all twenty-seven Primary Health Care (PHC) centres in Atisbo local government in 2018 estimated at four thousand four hundred and forty-eight (4,448). A sample size of two hundred (200) formed the respondents for the study which was selected using a multi-stage sampling procedure. At stage one, purposive sampling technique was used to select five (5) PHCs with the highest number of registered nursing mothers. Those PHCs selected were Abugudu, Ago Are, Ofiki, Tede comprehensive PHC and Tede PHC with the target population of two thousand, nine hundred and fifty-four (2,954) (PHC Infant Welfare Clinic Registers, Atisbo Local Government, 2018). At stage two, the proportionate sampling technique (using 6.8%) was used to select two hundred respondents from the target population. At stage three, the systematic sampling technique was used to select the required number of respondents from each selected PHC.

Researchers' designed structured questionnaire titled “Influence of Maternal Health Literacy on Health Status of Children under 5 years (IMHLHSC)” was used to obtain relevant data from the respondents. The questionnaire consists of two sections, A and B. Section A elicit information on demographic data of respondents; while section B elicits information on variables under study. The instrument was validated by three experts in the relevant fields. The instrument was trial tested on

twenty (20) nursing mothers attending Infant Welfare clinic at Saki West local government which was not the study area. Test re-test method was used whereby twenty copies of the instrument were administered on twenty respondents. After an interval of two weeks, other same copies of the instrument were re-administered on the same respondents. The two sets of data obtained were correlated using Pearson Product Moment Correlation. A reliability coefficient of 0.82 was obtained. The researchers sought the permission of each of the head of PHC centres selected for the study. This allows the researcher to gain access to the respondents. The researcher sought the consent of each respondent since their active participation in the study was voluntary. The respondents were informed of their right of choice to take part in the study and the option to withdraw at any stage. They were also assured of confidentiality. The researchers in the company of the two (2) trained research assistants who were Community Health Extension Workers administered the copies of the questionnaire. On the spot, the collection was done to maintain a high retrieval rate. A descriptive statistic of percentage was used to answer research question one, while the two postulated null hypotheses were tested using the inferential statistics of Chi-square at 0.05 level of significance.

Results

Research Question One: What are the sources of information of nursing motherson health literacy in Atisbo local government, Oyo State?

Table 1: Sources of information of nursing mothers on health literacy in Atisbo local government

S/N	ITEMS	YES	NO
1	Radio	163(81.5%)	37(18.5%)
2	Pamphlets	182(91%)	18(9%)
3	Newspapers	170(85%)	30(15%)
4	Health care providers	184(92%)	16(8%)
5	Campaigns	157(78.5%)	43(21.5%)
6	Religious Leaders	166(83%)	34(17%)
7	Friends	171(85.5%)	29(14.5%)
8	Sexual Partner	162(81%)	38(19%)
9	Peers	176(88%)	24(12%)
10	Family members	163(81.5%)	37(18.5%)
11	Internet	181(90.5%)	19(9.5%)
12	Billboards	157(78.5%)	43(21.5%)
13	Posters	180(90%)	20(10%)

Table 1 above shows that majority of the nursing mothers who were respondents (n =184, 92%) got their information on maternal health literacy from health care providers; while billboards & campaigns (n= 157/157, 78.5%/78.5%) were their least sources of health information in Atisbo local government, Oyo State.

Hypotheses Testing

Hypothesis One: Maternal health literacy has no significant influence on vaccination up-take of children under 5 years in Atisbo local government, Oyo State.

Table 2: Chi-square analysis showing Influence of maternal health literacy on vaccination up-take of children under 5 years

S/n	Item	Agree	Disagree	Row Total	Cal x^2	Df	Crit. Value	Rem.
1	Lack of awareness about the importance immunization may leads to failure of mothers to get their children vaccinated.	172 86%	28 14%	200				
2	Porous understanding of mothers about immunization schedule negatively influence children vaccination up-take.	184 92%	16 8%	200				
3	Mothers' low health literacy level negatively affects the up-take of vaccine among their children.	166 83%	34 17%	200	119.55 Rejected	4	9.49	Ho
4	Mothers' poor knowledge on usefulness of vaccination can prevent child vaccination up-takes.	153 76.5%	47 23.5%	200				
5	Inability of mothers to access information about vaccination is associated with children default at infant welfare clinic.	170 85%	30 15%	200				
	Column Total	**845**	**155**	**1000**				

The findings from the table 2 revealed that the calculated Chi-square value of 119.55 is greater than the critical value of 9.49 with degree of freedom 4 at 0.05 level of significance. Therefore, the null hypothesis is rejected. This implies that maternal health literacy has significant influence on vaccination up-takes of children under 5 years in Atisbo local government, Oyo State.

Hypothesis Two: Maternal health literacy has no significant influence on nutritional status of children under 5 years.

Table 3: Chi-square analysis showing influence of maternal health literacy on nutritional statusof children under 5 years

S/n	Item	Agree	Disagree	Row Total	Cal x^2	Df	Crit. Value	Rem.
6	Inadequate knowledge of mothers on nutrition increases the risk of child morbidity.	176 88%	24 12%	200				
7	Poor nutritional counselling received by mothers from significant orders can predispose their children to under-nutrition.	159 79.5%	41 20.5%	200				
8	Child stunted growth may be as a result of mothers' lack of enough information about balanced diets.	162 81%	38 19%	200	129.29	4	9.49	Ho
9	Lack of basic knowledge about protein in-take by mothers can cause protein-energy malnutrition among children.	180 90%	20 10%	200	Rejected			
10	Children of mothers with insufficient nutritional education are at risk of nutritional deficiency diseases for example kwashiorkor and marasmus.	181 90.5%	19 9.5%	200				
	Column Total	**858**	**142**	**1000**				

The findings from the table 3 revealed that the calculated Chi-square value of 129.29 is greater than critical value of 9.49 with degree of freedom 4 at 0.05 level of significance. Therefore, the null hypothesis was rejected. This implies that maternal health literacy has no significant influence on nutritional status of children under 5 years.

Discussion of Findings

In the answered research question one, majority of the respondents (nursing mothers) 184 (92%) revealed that they obtained their health literacy knowledge from health care providers. The result of this study corroborates the result of the study of KamaliLeila, Khajoueiand Bahaadinbeigy (2017) which revealed physician (n= 353, 88%) as the most common source of health information used by pregnant women.

The tested hypothesis one revealed that maternal health literacy has a significant influence on vaccination up-takes among children under 5 years in Atisbo local government, Oyo State. This finding justified the assertion of Torun and Bakirci (2006) that lack of information and understanding about the importance of vaccines and immunization on the part of the mothers may lead to failure for the children to return for the required follow-up doses.

The result of the tested hypothesis two revealed that maternal health literacy has a significant influence on child nutritional status of children under 5 years in Atisbo local government Oyo State. This finding corroborates the result of the findings of Sufiyan, Bashir and Umar (2012) that maternal literacy affects the nutritional status of children, as children of illiterate mothers that is, those without formal education have increased risks for the development of malnutrition among children under 5 years. Also, Black and Aboud (2011) asserted that maternal health literacy and child under-nutrition were estimated to be underlying causes of 3.5 million children.

Conclusion

Based on the findings of the study, it was concluded that:

1. Majority of the nursing mothers (n =184, 92%) in Atisbo local government Oyo State obtained health literacy information from health care providers.
2. Maternal health literacy had significant influence vaccination up-take of children under 5 years in Atisbo local government, Oyo State.
3. Maternal health literacy had significant influence on nutritional status of children under 5 years in Atisbo local government, Oyo State.

Recommendations

Based on the conclusion of this study, the following recommendations were made:

1. Health care providers should intensify efforts on health education during the clinic days for nursing mothers so as to improve their knowledge as this will have direct positive impacts on their children general well-being.
2. There is need for more awareness creation by health care providers among nursing mothers on the importance of immunization against childhood diseases, so as prevent childhood killer diseases.
3. During the infant welfare clinic sessions, there is need for health care providers to emphasis more on nutrition education among nursing mothers, so as to increase their knowledge and in turn improve their children's nutritional status.

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IMPACT OF COST SHARING ON THE EFFICIENCY OF PUPLIC PRIMARY SCHOOLS IN JAMA'A LOCAL GOVERNMENT AREA OF KADUNA STATE

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Abstract

The study examined the impact of cost sharing on the efficiency of public primary schools in Jama'a Local Government, Kaduna State. The study was carried out with the objectives to determine the impact of direct costs that parents incur as part of the cost sharing in ensuring the efficiency of primary school education in Jama'a Local Government of Kaduna State;assess the impact of parental contribution to the provision of teaching and learning materials as part of the cost sharing in ensuring the efficiency of primary school education in Jama'a Local Government of Kaduna State; and ascertain the impact of parental contribution to PTA projects as part of the cost sharing in ensuring the efficiency of primary school education in Jama'a Local Government of Kaduna State.These objectives were transcribed into three research questions and three hypotheses respectively. Survey research design was used in the study. The target population of the study was made up of 177 headmasters, 1,850 teachers and 7 PTA members in Jama'a Local Government, Kaduna State. A sample size of 18 headmaster, 185 teachers and 7 PTA members were sampled making the total of 210 respondents, used in the study. The samples were drawn using random sampling technique. The instrument named "cost sharing and efficiency of primary school questionnaire (CSEPSQ)" was used for data collection in the study. The validated instrument was pilot tested, the reliability co-efficient was determined using Cronbach Alpha statistic and a reliability coefficient of 0.75 was obtained. The data collected in the study was computerized into database using Statistical Package for Social Sciences (SPSS) version 21.0. The descriptive statistics of frequency, mean and standard deviation were used to answer the research questions, while analysis of variance (ANOVA) was used to test the hypotheses at 0.05 level of significance. Findings revealed that direct costs that parents incur had impact on the efficiency of primary school education in Jama'a Local Government of Kaduna State. Parental contribution to the provision of teaching and learning materials had impact on the efficiency of primary school education in Jama'a Local Government of Kaduna State. Additionally, parental contribution to PTA projects had impact on the efficiency of primary school education in Jama'a Local Government of Kaduna State. Recommendations made includes; Government should make policy that will make parent share fully from the direct cost of education, School administrators should encourage parents to continue to support schools with teaching-learning materials, the PTA contributions in terms of providing physical facilities and equipment in primary schools should be highly encourage in Jema'a local government area of Kaduna state.

Introduction

Education remains the major factor in which individuals and groups become socio-economically useful to themselves and the society at large. However, access to functional and productive

education is unavoidably affected by the cost of Education. The supply of widely spread quality education has been a long-standing objective of the Federal Republic of Nigeria (FRN). Since independence, the government has sought to address the challenges facing the education sector through a range of policy initiatives, often with mixed results. Nevertheless, a major focus has been the attainment of Universal Basic Education (UBE) and the key concerns of achieving greater access, participation, equity, quality and relevance. However, at the outset of the 21st century, the country is faced with new challenges of educational policy, which marry both the right to universal access to education and the need to enhance rapidly the development of skilled human resources (Otieno & Colclough, 2009). This was at a time when the government scheme for the supply of teaching resources was inadequate and inefficient, and therefore adversely affected the quality of teaching and learning. As a result, the government came up with a policy on cost-sharing between the government and the beneficiaries of public schools.

Costs of education in most economies are incurred at two domains: the private and the public domains, which can also be referred to as individual and institutional domains (Majumdar, 2003). Costs of education incurred at individual domain include costs on education incurred by the learners or by their parents or guardians, such as on books, stationery, fees, hostel, uniforms, transport fare, and so forth. The institutional costs of education, also known as costs of supply of education, mainly includes the recurrent costs, e.g., expenditure on teachers and non-teaching staffs' salaries, scholarships, stipends, etcetera, and the nonrecurring costs which include expenditure on purchase of buildings, furniture, equipment, and the likes. The sum of the costs of education incurred at the individual and the institutional domains, net of transfers such as fees, scholarships and stipends, gives the social costs of education.

The cost-sharing is a shift in the burden of primary education costs from being paid exclusively or predominantly by the taxpayers, to being distributed between the government and students (Orodho&Getange, 2014). The cost-sharing entails the cost incurred by the parents in the provision of primary education. The parents are expected to meet the cost of school uniform, development of infrastructure, health, transport and boarding facilities whereas the government finances teachers' salaries, target support to vulnerable groups, laboratory equipment, the building of new schools especially in arid areas and supply of instructional materials in all government schools (Githinji, 2012). The inability of parents to meet up with such cost results in high dropout rate that diminishes the pool of qualified people from diverse backgrounds who will enter the professional and political ranks that make important public policy decisions. Every school's mission should be to educate students to become knowledgeable, socially skilled, healthy, caring, and responsible citizens.

The concept of efficiency in the provision of education has also come to dominate in education. Scholars and policymakers believe that schools should be efficient in the provision of education. According to Oxford advanced learner Dictionary 8th edition, efficiency is the act of maximising resources while meeting the objectives of an establishment. Efficiency depends on how well inputs are turned into outputs by the behaviours or processes of individuals and organizations (Milanowski, 2005).

The contribution of parents to the schools in the area of instructional materials is of paramount value to the system. This includes the provision of non-educational services to children in a school setting.

It's also referred to all non-academic activities, services and environments which are provided in schools which play great roles in retaining of both teachers and students at schools (Yusuf, Alasoluyi&Bawa, 2017). Robinson and White in Githinji (2012) carried out a similar study on the efficiency of schools in Sweden under (UNU-WIDER). They found that civic organizations impact positively in the aspect provision of instructional aides like chalkboard, textbooks, dictionaries, instructional materials, guidance and counselling services which tangentially improved school attendance and positive attitudes among pupils in Sweden towards schools. They, therefore, recommend that there should be cost-sharing between the government and other players to ensure the efficiency of the school system. Robinson and White in Githinji (2012) further advocate for "bring the community at school program" which aimed at bringing all services found in the community to the schools to improve school efficiency.

Parents Teachers' Association is a formal organisation composed of parents and teaching staffs that is intended to facilitate parental participation in school. Parent teachers' association levies are a financial contribution by parent relating to the cost of education agreed upon by parents/guardians during an Annual General Meeting. These levies include the cost of remedial classes, motivation fee, salaries of PTA teachers, and infrastructure fund among others. It is glaring that the cost of education is growing at geometric progression while the chief cost bearer (i.e the government) is facing an acute paucity of funds in meeting the demands for education by the citizens. The study is therefore geared toward finding out whether cost-sharing can be a possible solution to most of the issues before many Nigerian schools.

Statement of the Problem

The introduction of cost-sharing in public primary schools in Jama'a Local Government Area of Kaduna State seems to be an inevitable thing as most of the primary schools appear to experience failings in infrastructural facilities, number and quality of teachers, poor quality products (graduate) of schools, poor maintenance culture, high rate of indiscipline among the players and loss of confidence by the general public in the sector. The researchers opined that most of these problems arose from inadequate funding of the level of education. Government of the country can no longer afford the free education they promised the citizens due to paucity of funds occasioned by the recession. Thus, there is a need for research investigating the impact of cost-sharing on the efficiency of public primary schools in Jama'a Local Government, Kaduna State.

Objectives of the Study

The objectives of the study are to:

1. determine the impact of direct costs that parents incur in ensuring the efficiency of primary school education in Jama'a Local Government of Kaduna State;
2. assess the impact of parental contribution to the provision of teaching and learning materials in ensuring the efficiency of primary school education in Jama'a Local Government of Kaduna State; and
3. Ascertain the impact of parental contribution to PTA projects in ensuring the efficiency of primary school education in Jama'a Local Government of Kaduna State.

Research Questions

The following research questions were answered in the study:

1. What is the impact of direct costs that parents incur on the efficiency of primary school education in Jama'a Local Government of Kaduna State.
2. What impact does parental contribution to the provision of teaching and learning materials has in ensuring the efficiency of primary school education in Jama'a Local Government of Kaduna State?
3. What impact does parental contribution to PTA projects has in ensuring the efficiency of primary school education in Jama'a Local Government of Kaduna State?

Research Hypotheses

The following null hypotheses were formulated for the study:

$H0_1$: There is no significant difference in the opinions of **headmasters, teachers and** PTA members on the impact of direct costs that parents incur in ensuring the efficiency of primary school education in Jama'a Local Government of Kaduna State.

$H0_2$: There is no significant difference in the opinions of **headmasters, teachers and** PTA members on the impact of parental contribution to the provision of teaching and learning materials in ensuring the efficiency of primary school education in Jama'a Local Government of Kaduna State.

$H0_3$: There is no significant difference in the opinions of **headmasters, teachers and** PTA members on the impact of parental contribution to PTA projects in ensuring the efficiency of primary school education in Jama'a Local Government of Kaduna State.

Methodology

Survey research design is adopted in this study to assess the views of principals, teachers and PTA on the impact of cost-sharing on the efficiency of public primary schools in Jama'a Local Government, Kaduna State. The population of the study is one hundred and seventy-seven (177) headmasters, one thousand eight hundred and fifty (1,850) teachers and seven (7) PTA members in Jama'a Local Government, Kaduna State (Ministry of Education, Science and Technology, Kaduna State, 2018). Using random sampling technique a sample size of eighteen (18) headmaster, one hundred and eighty-five (185) teachers and seven (7) PTA officials were sampled from Jama'a Local Government, Kaduna State, making the total of two hundred and ten (210) respondents, used in the study. The instrument named "cost-sharing and efficiency of primary school questionnaire (CSEPSQ)" was used for data collection in the study and face/content validity of the research instrument was determined by an expert in the field of Educational Administration and Planning. The reliability coefficient was determined using Cronbach Alpha statistic and a reliability coefficient of 0.75 was obtained. In view of this result, the instrument was considered reliable for use as an instrument for data collection in the main study. The data collected in the study was computerized into a database using Statistical Package for Social Sciences (SPSS) version 21.0. The descriptive statistics of frequency, mean and standard deviation were used to answer the research questions, while analysis of variance (ANOVA) was used to test the hypotheses at 0.05 level of significance.

Results

Research Question One: What is the impact of direct costs that parents incur as part of the cost sharing on the efficiency of primary school education in Jama'a Local Government of Kaduna State?

The data collected through the administered questionnaire on headmasters, teachers and PTA members **in respect to research question one was analyzed using frequency, mean and standard deviation.** The summary of analysis made on this research question is presented in table 1.

Table 1: Impact of Direct Costs that Parents Incur on the Efficiency of Primary School Education

SN	Item	Respondents	SA	A	U	D	SD	Mean	SD
1.	Tuition fee incurred by the parent as part of the cost sharing enhances the efficiency of primary school education.	Headmaster	8	4	1	4	1	2.756	1.310
		Teachers	31	50	19	57	28	3.994	1.365
		PTA	4	1	-	1	1	2.837	1.281
2.	The cost incurred by the parenton text books negatively affects the efficiency of primary school education.	Headmaster	12	2	4	-	-	2.526	1.352
		Teachers	44	52	21	51	17	3.745	1.381
		PTA	5	-	2	-	-	3.401	1.023
3.	Direct cost of school uniform incurred by the parent enhances the efficiency of primary school education.	Headmaster	4	3	5	1	5	3.025	1.121
		Teachers	6	79	36	22	42	2.918	1.259
		PTA	3	-	3	-	1	3.061	1.011
4.	The cost incurred by parent in the payment of private tutor do not ensure the efficiency of primary school education.	Headmaster	-	4	7	3	4	2.633	1.162
		Teachers	29	46	21	37	52	3.800	1.473
		PTA	-	2	3	1	1	2.390	0.987
5.	Direct cost of learning materials incurred by parent ensures the efficiency of primary school education.	Headmaster	9	-	3	-	6	3.134	1.096
		Teachers	23	62	28	48	24	3.064	1.270
		PTA	5	-	2	-	-	2.305	1.210
6.	Transportation cost incurred by parent as part of the cost sharing enhances efficiency of primary school education.	Headmaster	6	5	-	4	3	2.667	1.211
		Teachers	-	56	50	66	13	3.805	0.952
		PTA	-	4	-	3	-	2.274	1.250
7.	The cost of text booksincurred by the parent positively impact on the efficiency of primary school education.	Headmaster	7	4	2	-	5	2.890	1.172
		Teachers	32	69	41	2	41	3.524	1.053
		PTA	2	5	-	-	-	2.898	1.241
8.	The cost of uniform incurred by the parent jeopardise the efficiency of primary school education.	Headmaster	4	-	-	8	6	2.911	1.132
		Teachers	6	81	44	29	25	3.075	1.125
		PTA	-	3	-	2	2	2.662	1.128
9.	Direct cost incurred by parent in the payment of private tutor ensures the efficiency of primary school education.	Headmaster	12	-	3	-	3	3.983	1.152
		Teachers	79	49	2	40	15	4.070	1.005
		PTA	6	-	1	-	-	3.986	0.126
10.	The direct cost of tuition fee incurred by the parent hinders the efficiency of primary school education.	Headmaster	4	2	6	-	6	2.983	1.097
		Teachers	49	57	28	10	41	3.843	1.629
		PTA	1	1	3	-	2	2.933	1.279
				Average Mean				**3.14**	**1.16**

Table 1 showed that direct costs that parents incur as part of the cost sharing had impact on the efficiency of primary school education in Jama'a Local Government of Kaduna State. The table presents the average response mean of 3.14 which is higher than the rating mean of 3.0. The implication of this is that, direct cost incurred by parent in the payment of private tutor ensures the efficiency of primary school education. Item number 9 on the table had the highest response mean of 3.983 for headmasters, 4.070 for the teachers and 3.986 for students with detail showing that 12 headmasters strongly agreed, while 3

headmasters stayed undecided and 3 strongly disagreed with the item. Likewise, 79 teachers strongly agreed, 49 agreed against 2 that stayed undecided while 40 disagreed and 15 strongly disagreed. Also, 6 PTA members strongly agreed, against 1 that stayed undecided.

Research Question Two: What impact does parental contribution to the provision of teaching and learning materials has in ensuring the efficiency of primary school education in Jama'a Local Government of Kaduna State?

The data collected through the administered questionnaire on headmasters, teachers and PTA members in respect to research question two was analysed using frequency, mean and standard deviation. The summary of analysis made on this research question is presented in table 2.

Table 2: Impact of Parental Contribution to the Provision of Teaching and Learning Materials in Ensuring the Efficiency of Primary School Education

SN	Item	Respondents	SA	A	U	D	SD	Mean	SD
1.	Parental contribution made to the provision of tape recorder negatively impact on efficiency of primary school education.	Headmaster	1	7	5	-	5	2.922	1.198
		Teachers	22	49	24	36	54	2.724	1.427
		PTA	-	-	4	-	3	2.818	1.276
2.	The contribution made by the parent to the provision of story books helps in ensuring efficiency of primary school education.	Headmaster	10	2	-	4	2	3.751	1.113
		Teachers	61	41	8	34	41	3.816	1.466
		PTA	4	2	-	-	1	3.778	1.080
3.	The efficiency of primary school education can be ensured even if parent do not contributes to the provision of video CD.	Headmaster	6	1	3	6	2	3.011	1.078
		Teachers	17	62	41	18	47	3.562	1.326
		PTA	2	-	4	1	-	2.965	0.992
4.	Parental contribution to the provision of maps and charts enhance the efficiency of primary school education.	Headmaster	8	4	1	4	1	2.799	1.099
		Teachers	39	70	17	37	22	3.021	1.310
		PTA	3	-	3	-	1	2.639	1.084
5.	The contribution made by the parent to the provision of overhead projector increases pupils achievement.	Headmaster	12	1	5	-	-	3.008	1.136
		Teachers	22	57	11	70	25	2.897	1.304
		PTA	5	-	-	2	-	2.986	1.023
6.	Parental contribution to the provision of games helps pupils to gain new knowledge of counting.	Headmaster	6	7	2	-	3	2.702	0.154
		Teachers	27	65	3	32	58	3.073	1.127
		PTA	4	1	1	1	-	2.801	0.226
7.	The efficiency of primary school education can only be ensured when parent contributes to the provision of flashcards.	Headmaster	4	5	-	6	3	2.819	1.170
		Teachers	12	104	35	27	7	3.470	0.950
		PTA	4	2	-	1	-	2.978	0.228
8.	Parental contribution to the provision of filmstrips ensures efficiency of primary school education.	Headmaster	5	7	1	5	-	2.652	1.083
		Teachers	125	4	32	16	8	3.545	0.852
		PTA	4	-	3	-	-	3.346	0.159
9.	The contribution made by the parent to the provision of posters helps in ensuring efficiency of primary school education.	Headmaster	2	1	6	4	5	2.974	1.096
		Teachers	8	58	22	28	69	2.850	1.375
		PTA	3	1	2	-	1	2.872	0.133
10.	The efficiency of primary school educationcan not be ensured if parent do not contributes to the provision of Model clay.	Headmaster	4	2	8	-	4	2.784	1.087
		Teachers	47	69	6	30	33	2.915	1.282
		PTA	1	-	4	-	2	2.879	1.115
				Average Mean				**3.05**	**0.99**

Table 2 showed that parental contribution to the provision of teaching and learning materials ensures the efficiency of primary school education in Jama'a Local Government of Kaduna State. The table presents the average response mean of 3.05 which is higher than the rating mean of 3.0. The implication of this is

that, the contribution made by the parent to the provision of story books helps in ensuring efficiency of primary school education. Item number 2 on the table had the highest response mean of 3.751 for headmasters, 3.816 for the teachers and 3.778 for students with detail showing that 10 headmasters strongly agreed, 2 agreed, while 4 disagreed and 2 strongly disagreed. Likewise, 61 teachers strongly agreed, 41 agreed against 8 that stayed undecided while 34 disagreed and 41 strongly disagreed. Also, 4 PTA members strongly agreed, 2 agreed, against 1 that strongly disagreed.

Research Question Three: What impact does parental contribution to PTA projects has in ensuring the efficiency of primary school education in Jama'a Local Government of Kaduna State?

The data collected through the administered questionnaire on headmasters, teachers and PTA members in respect to research question three was analysed using frequency, mean and standard deviation. The summary of analysis made on this research question is presented in table 3.

Table 3: Impact of Parental Contribution to PTA Projects in Ensuring the Efficiency of Primary School Education

SN	Item	Respondents	SA	A	U	D	SD	Mean	SD
1.	The contribution made by the parent towards perimeter fence for protection of pupils in school ensures efficiency of primary school education.	Headmaster	9	-	2	7	-	2.871	0.332
		Teachers	3	95	21	26	40	2.973	1.261
		PTA	4	-	3	-	-	2.068	1.234
2.	The efficiency of primary school education can be ensured when parent contributes towards burglary proof for window.	Headmaster	2	5	3	4	4	3.927	1.135
		Teachers	6	93	21	20	45	2.973	1.312
		PTA	7	-	-	-	-	3.574	1.155
3.	The contribution made by the parent towards provision of desks and chair ensures efficiency of primary school education.	Headmaster	6	4	-	5	3	3.172	0.930
		Teachers	5	100	33	22	25	3.205	1.128
		PTA	2	4	1	-	-	3.224	0.931
4.	The efficiency of primary school education can be ensured with parental contribution in re-fixing of broken windows.	Headmaster	5	7	3	-	3	3.977	1.032
		Teachers	4	102	24	28	27	3.151	1.165
		PTA	4	1	2	-	-	2.700	0.950
5.	Repairing and amendment of dilapidated toilet by the parent ensures the efficiency of primary school education.	Headmaster	8	-	4	-	6	2.751	1.259
		Teachers	64	50	12	41	18	2.959	1.104
		PTA	3	2	-	1	1	2.506	0.200
6.	The contribution made by the parent towards purchase of textbook ensures the efficiency of primary school education.	Headmaster	4	4	2	-	8	3.830	1.224
		Teachers	1	76	40	35	33	2.875	1.151
		PTA	6	-	1	-	-	3.081	0.208
7.	Reconstruction of good lockable gate by the parent ensures the efficiency of primary school education.	Headmaster	4	1	6	2	5	2.972	1.268
		Teachers	2	82	39	40	22	3.010	1.088
		PTA	3	-	3	-	1	3.154	1.240
8.	The efficiency of primary school education can be ensured when parent contributes towards re-fixing of broken doors.	Headmaster	7	3	4	1	3	3.248	1.117
		Teachers	-	113	25	39	8	3.313	0.949
		PTA	5	-	-	-	2	3.096	1.063
9.	The contribution made by parent in reconstruction of playground ensures the efficiency of primary school education.	Headmaster	6	1	7	-	4	3.011	1.094
		Teachers	-	96	34	20	35	3.032	1.179
		PTA	2	2	1	2	-	3.088	0.953
10.	The contribution made by the parent towards provision of first aid box ensures efficiency of primary school education.	Headmaster	9	2	-	4	3	3.151	1.177
		Teachers	7	108	20	31	19	3.286	1.112
		PTA	3	-	2	1	1	3.005	1.286
				Average Mean				**3.12**	**1.04**

Table 3 showed that parental contribution to PTA projects ensures the efficiency of primary school education in Jama'a Local Government of Kaduna State. The table presents the average response mean of 3.12 which is higher than the rating mean of 3.0. Looking at the table, item number 1 and 5 had the lowest response mean compared to other items on the table. The implication of this is that, the contribution made by the parent towards perimeter fence for protection of pupils in school, and repairing and amendment of dilapidated toiletwas not really felt in Jama'a Local Government of Kaduna State. Item number 1 and 5 on the table recorded the response mean of 2.871 for headmasters, 2.973 for the teachers and 2.088 for PTA members, while item number 5 recoded the response mean of 2.751 for headmasters, 2.959 for the teachers and 2.506 for PTA members respectively.

Hypotheses Testing

The result of the hypotheses tested in the study using analysis of variance (ANOVA) at 0.05 level of significance.

Hypothesis One: There is no significant difference in the opinions of headmasters, teachers and PTA members on the impact of direct costs that parents incur as part of the cost sharing in ensuring the efficiency of primary school education in Jama'a Local Government of Kaduna State.

The opinions of headmasters, teachers and PTA members were gathered and analysed using analysis of variance (ANOVA). The summary of the hypothesis tested is presented in table 4:

Table 4: Summary of Analysis of Variance (Anova) Statistics on the Impact of Direct Costs in Ensuring the Efficiency of Primary School Education in Jama'a Local Government of Kaduna State

Status	Sum of Squares	Df	Mean Square	F-ratio	F-critical	Prob.
Between Groups	2.000	2	2.000	11.073	2.61	.002
Within Groups	340.995	208	1.863			
Total	342.995	210				

Table 4 showed that the critical value (2.61) is less than f-ratio value (11.073), while the probability level (.002) is less than 0.05 level of significance at 208 degrees of freedom. This means that there is significant difference in the opinions of headmasters, teachers and PTA members on the impact of direct costs that parents incur as part of the cost sharing in ensuring the efficiency of primary school education in Jama'a Local Government of Kaduna State. Hence, the null hypothesis which states that there is no significant difference in the opinions of headmasters, teachers and PTA members on the impact of direct costs that parents incur as part of the cost sharing in ensuring the efficiency of primary school education in Jama'a Local Government of Kaduna State was rejected.

Hypothesis Two: There is no significant difference in the opinions of headmasters, teachers and PTA members on the impact of parental contribution to the provision of teaching and learning materials as part of the cost sharing in ensuring the efficiency of primary school education in Jama'a Local Government of Kaduna State.

The opinions of headmasters, teachers and PTA members were gathered and analysed using analysis of variance (ANOVA). The summary of the hypothesis tested is presented in table 5:

Table 5: Summary of Analysis of Variance (Anova) Statistics on the Impact o f Parental Contribution to the Provision of Teaching and Learning Materials in Ensuring the Efficiency of Primary School Education in Jama'a Local Government of Kaduna State

Status	Sum of Squares	Df	Mean Square	F-ratio	F-critical	Prob.
Between Groups	6.012	2	6.012	2.982	2.61	.004
Within Groups	368.929	208	2.016			
Total	374.941	210				

Table 5 showed that the critical value (2.61) is less than f-ratio value (2.982), while the probability level (.004) is less than 0.05 level of significance at 208 degrees of freedom. This means that there is significant difference in the opinions of headmasters, teachers and PTA members on the impact of parental contribution to the provision of teaching and learning materials as part of the cost sharing in ensuring the efficiency of primary school education in Jama'a Local Government of Kaduna State. Hence, the null hypothesis which states that there is no significant difference in the opinions of headmasters, teachers and PTA members on the impact of parental contribution to the provision of teaching and learning materials as part of the cost sharing in ensuring the efficiency of primary school education in Jama'a Local Government of Kaduna State was rejected.

Hypothesis Three: There is no significant difference in the opinions of headmasters, teachers and PTA members on the impact of parental contribution to PTA projects as part of the cost sharing in ensuring the efficiency of primary school education in Jama'a Local Government of Kaduna State.

The opinions of headmasters, teachers and PTA members were gathered and analysed using analysis of variance (ANOVA). The summary of the hypothesis tested is presented in table 6:

Table 6: Summary of Analysis of Variance (Anova) Statistics on the Impact of Parental Contribution to PTA Projects in Ensuring the Efficiency of Primary School Education in Jama'a Local Government of Kaduna State

Status	Sum of Squares	Df	Mean Square	F-ratio	F-critical	Prob.
Between Groups	1.225	2	1.225	5.963	2.61	.001
Within Groups	232.689	208	1.272			
Total	233.914	210				

Table 6 showed that the critical value (2.61) is less than f-ratio value (5.963), while the probability level (.001) is less than 0.05 level of significance at 208 degrees of freedom. This means that there is

significant difference in the opinions of headmasters, teachers and PTA members on the impact of parental contribution to PTA projects as part of the cost sharing in ensuring the efficiency of primary school education in Jama'a Local Government of Kaduna State. Hence, the null hypothesis which states that there is no significant difference in the opinions of headmasters, teachers and PTA members on the impact of parental contribution to PTA projects as part of the cost sharing in ensuring the efficiency of primary school education in Jama'a Local Government of Kaduna State was rejected.

Summary of Major Findings

The following findings were established in the study:

1. Direct costs that parents incur had impact on the efficiency of primary school education in Jama'a Local Government of Kaduna State.
2. Parental contribution to the provision of teaching and learning materials had impact on the efficiency of primary school education in Jama'a Local Government of Kaduna State.
3. Parental contribution to PTA projects had impact on the efficiency of primary school education in Jama'a Local Government of Kaduna State.

Discussion

Findings on research question one revealed that direct costs that parents incur ensure the efficiency of primary school education in Jama'a Local Government of Kaduna State. The implication of this is that direct cost incurred by the parent in the payment of private tutor ensures the efficiency of primary school education. Therefore, hypothesis one which states that there is no significant difference in the opinions of headmasters, teachers and PTA members on the impact of direct costs that parents incur in ensuring the efficiency of primary school education in Jama'a Local Government of Kaduna State was rejected. This finding is in line with the finding of Mwelumbini (2014) which revealed that without cost-sharing, public secondary schools were to some extent inefficient because of a shortage of teachers, social services at schools, absence of individualized programs for special needs and low performed students. This, therefore, means that cost-sharing influence the efficiency of the school.

Findings on research question two revealed that parental contribution to the provision of teaching and learning materials as part of the cost-sharing had an impact on the efficiency of primary school education in Jama'a Local Government of Kaduna State. The implication of this is that the contribution made by the parent to the provision of storybooks helps in ensuring the efficiency of primary school education. Therefore, hypothesis two which states that there is no significant difference in the opinions of headmasters, teachers and PTA members on the impact of parental contribution to the provision of teaching and learning materials as part of the cost-sharing in ensuring the efficiency of primary school education in Jama'a Local Government of Kaduna State was rejected. This finding upheld the finding of Kingori (2015) that cost-sharing have an influence on students participation in education, therefore, ensures the effectiveness of the secondary school. Conversely, the finding contradicts the finding of Orodho and Getange (2014) which revealed that parents contribution to teaching and learning were grossly inadequate to meet the financial requirements of students.

Findings on research question three revealed that parental contribution to PTA projects as part of the cost-sharing had an impact on the efficiency of primary school education in Jama'a Local Government of Kaduna State. The implication of this is that the contribution made by the parent towards perimeter fence for protection of pupils in the school, and repairing and amendment of the dilapidated toilet was not really felt in Jama'a Local Government of Kaduna State. Therefore, hypothesis three which states that there is no significant difference in the opinions of headmasters, teachers and PTA members on the

impact of parental contribution to PTA projects as part of the cost-sharing in ensuring the efficiency of primary school education in Jama'a Local Government of Kaduna State was rejected. This finding corroborated the finding of Githinji (2012) that parents paid extra tuition, bought uniforms, and bought books in support of their children's education. The finding also aligns with the findings of Kiveu and Mayio (2009) that school fees, uniform, transport and stationary were among the direct costs incurred by parents. Conversely, the finding of Kiveu and Mayio (2009) also sees cost-sharing as a burden and it has both a negative and positive impact. Negative in the sense that it has increased dropout, repetition and absenteeism and it has led to inadequate facilities and equipment in schools, positively, it has led to democratization in the management of schools.

Conclusion

The study concluded that the direct costs that parents incur as part of the cost-sharing cost had an impact on the efficiency of primary school education. However, it can be concluded that sharing is a burden and it has both a negative and positive impact. Negative in the sense that it has increased dropout, repetition and absenteeism and it has led to inadequate facilities and equipment in schools, positively, it has led to democratization in the management of schools. Parental contribution to the provision of teaching and learning materials impacted positively on the efficiency of primary school education in Jama'a Local Government of Kaduna State. Additionally, parental contribution to PTA projects as part of the cost-sharing had a positive impact on the efficiency of primary school education in Jama'a Local Government of Kaduna State.

Recommendations

i. Government should make policy that will make parent share fully from the direct cost of education.
ii. School administrators should encourage parents to continue to support schools with teaching-learning materials.
iii. The PTA contributions in terms of providing physical facilities and equipment in primary schools should be highly encourage in Jema'a local government area of Kaduna state.

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KNOWLEDGE OF MALARIA PREVENTION STRATEGIES AMONG PREGNANT WOMEN IN NORTH-EAST, ZONE, NIGERIA

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Abstract

This study assessed the knowledge of malaria prevention strategies among pregnant women in North-East, zone, Nigeria using ex-post facto research design. Multistage sampling technique consisting of simple random, stratified, proportionate and systematic sampling techniques were used to draw a sample from a population of 503,661 antenatal care (ANC) registered pregnant women from six (6) states in North-east zone, Nigeria. The sampled states were; Adamawa (80,578), Bauchi (140,345), Borno (100,345), Gombe (63,290), Taraba (54,785) and Yobe (64,321). Thus, a total of 1,200 pregnant women attending ANC formed the respondents. The instrument for data collection was a researcher-developed validated close-ended questionnaire. The instrument was tested using Cronbach Alpha and a reliability index of 0.80 was obtained from the pilot study result. The data collected was analysed using International Business Machine (IBM) Statistical Package of Social Science (SPSS) version 25.0. The descriptive statistics of mean scores and standard deviations were used to answer the research question. Inferential statistics of one sample t-test was used to test formulated null hypothesis. The finding of the study revealed that; pregnant women in North-East zone have significant knowledge of malaria prevention strategies (t = 33.275; p = 0.000). The conclusion drawn was that the participants used in this study did have the knowledge of malaria prevention strategies. However, whether this knowledge was translated into practice by the participants is beyond the study. Based on conclusion, it was recommended that, health educators and concerned agencies, Ministries, Departments and Agencies of governments should double their efforts in ensuring that knowledge of pregnant women about malaria prevention strategies is improved on and sustained.

Keywords: *Knowledge, malaria, prevention, strategies, pregnant women.*

Introduction

Malaria is a preventable disease that constitutes a major public health problem to humanity, despite various government programmes to reduce its menace, malaria is still challenging in sub-Sahara

Africa, particularly in many parts of Nigeria (Nigeria Malaria Fact Sheet, 2011). Dellicour, Tatem, Guerra, Snow & Ter, Kuile (2010) reported that, in areas where there is the risk of *Plasmodium falciparum (P. falciparum*) and *Plasmodium vivax (P. vivax)* infections, it was estimated that 125 million pregnancies occur every year. This means also that 97% of the population are at risk, while only 3% live in the mountains of the malaria-free highlands in southern Jos in Plateau State at an altitude ranging from 1,200 to 1,400 metres (World Health Organisation - World Malaria Report (WHO-WMR, 2018).

The pregnant women's knowledge about malaria infection risk and treatment options affects their willingness and ability to utilise the available malaria prevention strategies and treatment methods (Tobin-West &Asuquo, 2013). The combination of the effects of knowledge about malaria and pregnant women's attitude towards protecting themselves against malaria is exp1ected to provide the necessary consciousness-raising, concern-arousing, action-stimulating impetus to appropriately engage in preventive health practices (Atulomah & Atulomah, 2012). Lack of awareness of the nature of the health risks individuals are exposed to and what to do about it can significantly limit preventive actions. Health literacy acquired through appropriate health education experience operates to establish this mindset and skills in people (Atulomah & Atulomah, 2012).

Knowledge, however, is a crucial element in health improvement and the education of people on the ways disease prevention is important to the attainment of self-reliance in disease-endemic countries. Also, awareness of mothers to manage malaria appropriately is crucial, especially in sub-Saharan Africa, where the medical facilities are grossly inadequate. Little information exists on the compliance of pregnant women to malaria management in malaria-endemic regions in Nigeria. Meanwhile, there is an improvement in women awareness of malaria prevention strategies due to enlightenment campaigns by government and non-governmental organisations in Nigeria (National Population Commission (NPC), 2014). In Nigeria, there is need to sustain and scale-up current malaria prevention interventions because more females are attaining reproductive age, and periodic assessment to determine the impact of these interventions is pertinent. Malaria protective measures are related to the knowledge and beliefs of the people (Karunamoorthi & Abdi, 2010). A study conducted among pregnant women in two Nigerian states found out that system-based challenges such as essential medical supplies out of stock, poor knowledge on intermittent preventive treatment in pregnancy with sulphadoxine-pyrimethamine (IPTp-SP) by health providers, together with individual women's beliefs and lack of awareness of IPTp-SP have led to low malaria intervention utilisation and adherence (Diala, Pennas, Marin & Belay, 2013).

Many pregnant women are still not utilising various malaria prevention interventions programmes to reduce maternal and child mortality from malaria infection. Nigeria is implementing the prevention of malaria in pregnancy (MiP) intervention as a component of Focused Antenatal Care Services (FANC) which has provision for the most practical place for these malaria interventions delivery. There are barriers which include but not limited to beliefs and corrupt practices by health officials hindering pregnant women from accessing ANC clinics where they could get information on various malaria preventive strategies (Oladimeji, Tsoka-Gwegweni, Gengiah, Daftary& Naidoo, 2018). In 2016, Emmanuel, Joseph, Kopdima, Mba and Abubakar did a study in Bauchi State on the knowledge of ITNs among pregnant women. One of the findings was that pregnant women have adequate knowledge about ITNs (Emmanuel *et al.,* 2016).

A research conducted by Balami, Said, Zulkefi, Bachok and Audu (2019) on effects of a health education intervention on malaria knowledge, motivation, and behavioural skills in the North-

Eastern zone of Nigeria revealed that there is a poor use of ITN as an intervention programme for malaria prevention during pregnancy with only 12.75% that could be due inadequate awareness.

Statement of the Problem

Relying on field survey and observation methods, the authors found that pregnant women are frequently reporting to hospitals and clinics with complaints of fever, headache, vomiting, abdominal discomfort and many more. In some instances, they are diagnosed with MiP. Consequently, many usually developed anaemia, LBW, spontaneous abortion and stillbirth delivery. Against the backdrop of persistent high maternal morbidity, pregnancy-related complications in Nigeria and consequential development attentions by government and international NGOs in North-East zone, it became imperative that a study such as this be carried out to determine the knowledge of malaria prevention strategies by pregnant women. This zone has witnessed so many social and political unrests in the last 10 years and it is assumed these might have certain effects on people's knowledge of malaria prevention, especially among women.

Purpose of the Study

The purpose of this study was to determine the knowledge of malaria prevention strategies among pregnant women in North-East zone of Nigeria.

Research Question

This research work answered the following question:

What is the knowledge of pregnant women about malaria prevention strategies in the North-East zone of Nigeria?

Hypothesis

This null hypothesis formulated was that pregnant women do not have significant knowledge of malaria prevention strategies in North-East zone of Nigeria.

Methodology

Ex-post facto (After the fact) research design was used for this study. The target population of the study comprised of five hundred and three thousand, six hundred and sixty-one (503,661) pregnant women who were registered with the Primary Health Care Centres in the North-East Zone of Nigeria in 2018. The sample for this study consisted of 1,200 pregnant women who were drawn from the target population of 503,661 antenatal clinic registered pregnant women in the North-East zone. This study assessed the knowledge of malaria prevention strategies among pregnant women in the North-East zone of Nigeria. One thousand and two hundred (1200) copies of questionnaire were administered out of which one thousand and one hundred (1100) copies (110;91.7%), were found to be valid for the analysis. The IBM SPSS Version 25.0 was used to analyse the data obtained from the respondents. Descriptive statistics of mean and standard deviations were used to answer the research question on knowledge of malaria prevention strategies among pregnant women in the North-east zone, Nigeria. The inferential statistics of one-sample t-test was used to test the hypothesis postulated for the study.

Results

Research Question: What is the knowledge of pregnant women about malaria prevention strategies in North-east zone, Nigeria?

Table 1: Mean scores and standard deviations of responses on knowledge of malaria prevention strategies among pregnant women in North-east zone of Nigeria

S/N	Knowledge of preventable strategies	Mean	Std. Dev.
1.	Insecticide treated mosquitoes net is a common malaria prevention strategy among pregnant women.	3.72	0.691
2.	Netting doors and windows is a malaria prevention strategy among pregnant women.	3.24	0.905
3.	Wearing long-sleeved clothes at night is a malaria prevention strategy among pregnant women.	2.80	0.996
4.	Mosquito repellent lotion/cream is a common malaria prevention strategy among pregnant women.	2.78	0.934
5.	Burning of mosquito coil/dried billed of orange back/grass is a common practice for mosquito repelling for prevention against malaria by pregnant women.	2.79	0..949
6.	Clearing bushes around residence is a malaria prevention strategy among pregnant women.	3.34	0.825
7.	Proper maintenance of drainage system is a malaria prevention strategy by pregnant women.	3.28	0.841
Aggregate mean		3.13	0.633

Decision mean = 2.50

The data on Table 1 indicates the mean scores for knowledge of pregnant women on malaria prevention strategies. The table shows all the items had mean scores greater than the decision mean (2.50) giving rise to a mean aggregate of 3.13. This shows that pregnant women in the areas of study have knowledge of malaria prevention strategies. This is indicated by the mean score of response of 3.72 revealing that the participant did acknowledge the fact insecticides treated mosquito net is one of the prevention strategy of malaria, these women equally knew about the clearing of bush and drainage system around the house, Netting doors and windows and maintenance of drainage system which has mean scores of 3.34, 3.28, 3.24 and 3.13 respectively as malaria prevention strategies. Also, the use of long-sleeved clothes at night, lighting of mosquitoes' coil/dried peel of orange/grass, and the application of mosquito repellant lotion/cream had mean scores of 2.80, 2.79 and 2.78 respectively as prevention strategies of malaria.

Hypothesis: Pregnant women in North-East zone of Nigeria do not have significant knowledge of malaria prevention strategies.

Table 2: Analysis of One sample t -test on the knowledge of malaria prevention strategies among Pregnant Women.

Variable	N	Mean	Std. Dev.	Std Error	t-calc.	Df	p-value
Knowledge	1100	3.13	0.633	0.019	33.275	1099	0.000
Test mean	1100	2.50	0.000	0.000			

(t-critical = 1.960, P<0.05)

Table 2 shows the summary of the analysis of one sample t-test analysis on the knowledge of malaria prevention strategies among pregnant women. The observed mean of 3.13 was higher than the test mean (2.50) used as decision mean for the variable. The table reveals that the observed p-value

(0.000) was less than 0.05 alpha level of significant ($p < 0.05$). In other words, the observed t-value of 33.275 obtained at 1099 df was higher than the t-critical of 1.960. Therefore, the formulated hypothesis was rejected. This implies that pregnant women in North-east zone had significant knowledge of malaria prevention strategies.

Discussion

The study revealed that pregnant women in the North-East zone of Nigeria have the knowledge of malaria prevention strategies at the t-value 33.275, the t-critical 1.960 and the $p<0.05$ clearly showed that the pregnant women were knowledgeable about malaria prevention strategies. The result indicated that significant knowledge of malaria prevention strategies existed among pregnant women in the North-East zone, Nigeria that is;

1. the use of insecticides treated nets, netting of doors and windows, wearing of long-sleeved clothes, use of mosquitoes' repellant lotion/cream, use of mosquitoes coils,
2. Clearing of bushes and clearing of drainages at ($t = 33.275$; $p = 0.00$).

This study finding is in collaboration with the studies of Titiloye, Onuosa, and Arulogun (2017); Yaya, Bishwajit, Ekholuenetale, Shah, Kadio and Udenigwe (2017) that revealed pregnant women in the study areas had adequate knowledge about ITN for malaria prevention. Also, Ayodeji, Oluwaseun and Eniola (2015) posited that knowledge of malaria prevention strategies in southern Nigeria was satisfactory because most women acknowledged that malaria could be prevented using ITN. This finding is also in line with the study of Emmanuel *et al.* (2016), which was carried out in Bauchi State on knowledge of pregnant women about ITNs. In contrast, Obieche, Enato and Ande (2015), reported that the study population had low knowledge of malaria prevention and the use of ITNs. Similarly, Ayodeji, Oluwaseun and Eniola (2015), revealed in their study that knowledge of malaria prevention strategies among pregnant women in southern Nigeria was satisfactory. That was because most of the women reported that malaria could be prevented by using ITNs.

Based on the finding of the study, it is argued that with the gradual improvement and reduction in malaria transmission following the implementation of various malaria prevention initiatives in Nigeria; the women's knowledge can have increased. Ikenna (2015) reported very high knowledge of malaria preventive measures like ITNs and the IPTp-SP. A total of 65.5% of the respondents in Ikenna's study possessed ITNs; about 83.6% of the respondents used ITNs, 63.7% of the respondents have received IPTp-SP. In a related study in 2015, Adebayo, Akinyemi and Cadmus study in 2015 revealed that a good proportion (83.5%) of the respondents were aware of the importance of ITN for malaria prevention while 30.6% of them had poor knowledge of its use. Similarly, Kimbi, Nkesa, Ndamukong-Nyanga, Sumbele, Atashili and Atanga (2014) assessed the knowledge and perceptions towards malaria prevention among vulnerable groups in the Buea health district in Cameroon. The result revealed that 99% of respondents were aware of the used of prophylaxis, ITNs, clearing of bushes and environmental sanitation are malaria prevention strategies. But only 23 (5.2%) respondents mentioned stagnant drainage water on the ground for mosquito breeding.

Conclusion

Pregnant women who are registered and attended ANC clinic sessions in the North-East zone of Nigeria know malaria prevention strategies.

Recommendation

Health educators and concerned agencies (USAID and ACATMA) and ministries, health departments and agencies of government should double their efforts to ensure that the knowledge of malaria prevention strategies is sustained beyond the ANC registered pregnant women in the study zone of Nigeria.

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AWARENESS OF HEALTH CONSEQUENCES OF SEXUALLY TRANSMITTED INFECTIONS AMONG PREGNANT WOMEN IN JIGAWA STATE, NIGERIA

By

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Abstract

This study investigated the awareness of health consequences of Sexually Transmitted Infections among pregnant women in Jigawa State. Cross-sectional research design was used for this study. The population of the study was estimated to be 252,075 pregnant women in Jigawa State. A multi stage sampling procedure was used to draw a sample of 500 pregnant women. Researchers developed questionnaire named Awareness of the Health Consequences of Sexually Transmitted Infections among Pregnant Women Questionnaire (AHCSTIP- Q) was used as instrument for data collection. The questionnaire has a reliability index of 0.69. Four hundred and ninety eight (498) copies of questionnaire were distributed. One sample t-test, independent t-test and Analysis of Variance (ANOVA) were used to test the hypotheses at 0.05 levels of significance. The results revealed that pregnant women have no significant awareness of the health consequences of STIs among pregnant women (t=45.361; df=497, P=0.001). There is no significant difference in the awareness of health consequences of STIs based on the age of pregnant mothers (t = 1.046, df=496 p=0.296). There is significant difference in the awareness of health consequences of STIs based on educational qualification of pregnant women, (F5,492=75.622, p=0.001). Therefore, it is recommended among others that Jigawa State Ministry of Health and other stake holders should create awareness to pregnant women on STIs consequences and vaccination women of child bearing age against vaccine preventable STIs.

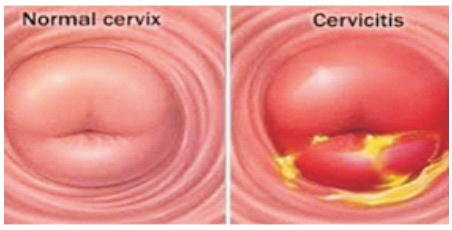
Key Words: *Awareness, STIs, expectant mothers, health consequences.*

Introduction

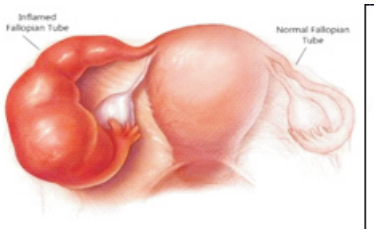
Sexually Transmitted Infections (STIs) are diseases that are transmitted via sexual intercourse, traditionally referred to as venereal diseases. STIs include chlamydia, gonorrhoea, syphilis, herpes simplex virus, Acquired Immunodeficiency Diseases, hepatitis, genital warts, trichomoniasis, vaginal vaginosis, Human PapillomaVirus (HPV)**,** Granuloma Inguinale, vulvovaginal candidiasis, Lymphogranuloma venereum (LGV) and Cyclomegavirus etcetera (Adekanbi, 2013).

Centre for Disease Control and Prevention [CDC] (2011), explained that STIs remain a major public health challenge because of their health consequences, severe complications especially among women who excessively bear its long-term consequences and affect their future reproductive plans. Maternal chronic pelvic pain, infertility, ectopic pregnancy, post-abortion sepsis, premature death, chronic liver problem and cervical cancer are some of the health consequences of STIs (Balfe

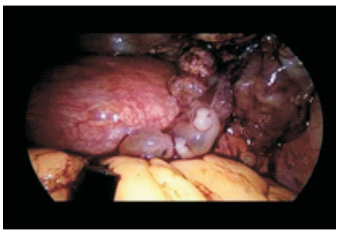
&Brugha, 2010; Waugh & Grant, 2010; Vårdguiden, 2011; Marrazo, 2009; and Edmonds, 2007). In a cohort study by Bakkem and Ghaderi (2009) on laboratory data and hospitalisation for PID from 1990-2005, showed that women admitted with PID are confirmed laboratory test for chlamydia trachomatis. In another large cohort study on birth and ectopic pregnancies in the Gambia, the result showed ectopic pregnancy incidence rates were higher among women with positive tests for chlamydia (Bakken, Skjeldestad, Lydersen & Nordbo, 2007). Also study conducted by Ugwa (2015) on Vulvovaginal Candidiasis in Aminu Kano Teaching Hospital, reported that Candida albicans was the most frequent cause of positive high vaginal swabs constituting 84.5% (316/374).



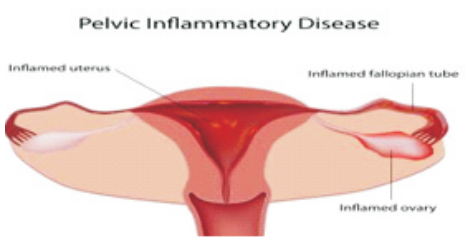
gonococcal Inflammation of cervix

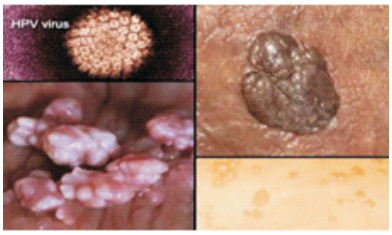


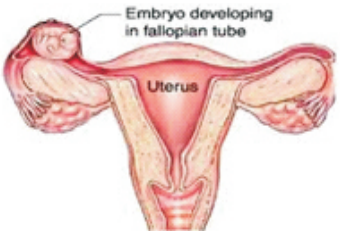
Imflammation of fallopian tube



Ectopic pregnancy







Carcinogenic tissue of HPV

Figure 1: Health Consequences of STIs to the pregnant women
Source: planbwelness.com/stis-impact-pregnancy-women

Kaiser, Hoff and Davis (2003) explained that few young people are aware of the consequences and many hold misperceptions that could put their health at risk. Females also tend to know more about their risks, transmission, and long-term health consequences. Studies showed that many people are unaware of their risks for contracting an STI or the serious, and sometimes deadly, health consequences that may result from an untreated infection (Marrazzo, 2009). In a study on Vulnerability and Knowledge of STIs among female traders of reproductive age in Enugu, Nigeria by Ikeako, Ekwueme, Ezegwui and Okeke (2014), it was explained that Knowledge of specific STIs was highest for HIV/AIDS than other STIs 90 per cent (130/200). Asians are less aware of STI risks and some of the long-term consequences than whites, African Americans or Latinos (Low, 2002). In a study by Lundberg (2013) on knowledge and attitude of STIs among Thai University students, the findings showed that the students had a low level of knowledge on STIs In a systematic review of published literature on Awareness and knowledge of STIs among school-going adolescents in Europe, Samkange-Zeeb, Spallek and Zeeb (2011) reported low levels of awareness and knowledge of STIs, except for HIV/AIDS.

United Nations Millennium Development Goals Report (2006) explained that even though on track, Jigawa State is still behind in the attainment of two of the most critical health-related MDGs goal;

reducing the under-five mortality rate by two-thirds and maternal mortality ratio by three-quarters between 1990 and 2015. However, measuring awareness for other STIs is been neglected, a concerted effort is still required to assess the awareness of other STIs among pregnant women in Jigawa state.

It is important for pregnant women to be aware of the harmful effects of STIs and how to protect themselves and their children against the infection. Sexual partners of infected women should also be tested and treated (CDC, 2006). Awareness for pregnant women about STIs can be obtained in hospitals during health education sessions in antenatal care units, outpatient instruction and public enlightenment campaign through mass media. Adequate awareness of STIs of pregnant women will help them realize the consequences of STIs, will enable them to take preventive measures and or seek early medical attention thus reducing maternal, neonatal and infant mortality and morbidity rate in the country (WHO, 2013).

Given the above, the magnitude of awareness about the consequences of STIs especially among the expectant mothers in Jigawa State is not clearly understood, and many women experience adverse pregnancy outcome without knowing why. It is against this background that the researcher assessed the knowledge of health consequences of STIs among pregnant women in Jigawa state, Nigeria.

The study answered the following research questions:

1. Do pregnant women have awareness of the health consequences of STIs in Jigawa State?
2. Does awareness of the health consequences of STIs by pregnant women differ based on their age?
3. Does awareness of the health consequences of STIs by pregnant women differ based on their parity?

Hypotheses

The following hypotheses were formulated to guide the study:

1. Pregnant women do not have significant awareness about health consequences of STIs on their unborn babies in Jigawa State.
2. Awareness of health consequences of STIs among pregnant women do not significantly differ based on their age in Jigawa state.
3. Awareness of health consequences of STIs among pregnant women will not significantly differ based on their parity (number of pregnancies) in Jigawa state.

Methodology

Cross-sectional research design was used for this study; the population comprised of all pregnant women attending antenatal clinics in Jigawa state with an estimated population of 252,075 pregnant women in Jigawa state. Multi stage sampling procedure was used to draw a sample of 500 pregnant women. The state was clustered based on the five emirates councils in the state, namely, Dutse, Hadejia, Kazaure, Gumel and Ringim. Simple random sampling was used to select two (2) LGAs from each cluster. Purposive sampling technique was used to select one (1) general hospital from each LGA (making a total of 10 hospitals) because the general hospitals serve as the referral centre for all the health facilities in each LGA. Proportionate sampling technique was used to select the sample of respondents attending antenatal clinic from the population of each health facility using sample selection formula adopted from McPake and Kutzin (1997) that is population of pregnant women attending ANC in each selected health facility monthly, multiplied by estimated sample size

used for the study which is 500 divided by 3,712. Systematic sampling technique was used to select respondents. Every respondent's number being an even number was selected up to the required sample size. Researchers developed questionnaire was used as instrument for data collection which was validated by three (3) experts in Health Education. The questionnaire was further exposed for pilot study in which 0.69 reliability index was obtained. Five hundred (500) copies of questionnaire were distributed to pregnant women who attended antenatal clinics in ten (10) General Hospitals in ten LGAs of Jigawa State with the help of five instructed research assistants. Out of 500 copies of questionnaire distributed to the respondents, 498 were duly filled and returned for data analysis. One sample t-test, independent t-test and Analysis of Variance (ANOVA) were used to test the hypotheses 1, 2 & 3 respectively at 0.05 levels of significance.

Result

Table 1: One sample t-test summary on awareness of health consequences of STIs among pregnant women in Jigawa State

Variables	N	Mean	S.D	S.E	t. value	df	p.value
Awareness of the health consequences of STIs among pregnant women.	**498**	**39.72**	**19.540**	**.876**	**45.361**	**497**	**.001**
Population Mean		**50**					

t_{tab}=3.310, P<0.05.

The statistical computation of one sample t-test on Table 1 revealed significant awareness of health consequences of STIs among pregnant women (t = 45.361), df: 497; P= 0.001<0.05). Therefore, the hypothesis is rejected because the p.value of 0.001 obtained is less than 0.05 level of significance. This means that pregnant women in Jigawa state are aware of the health consequences of Sexually Transmitted Infections.

Table 2: Independent t-test summary of awareness of health consequences of STIs among pregnant women based on their Age in Jigawa State

Variables	Age	N	Mean (X)	S.D	S.E	T	df	P
Knowledge of health consequences of STIs on pregnant women	<30 yrs	256	38.83	21.661	1.354	1.046	496	.296
	31-45yrs	242	40.66	17.006	1.093			

t_{tab} =3.310, P˃0.05.

The results on Table 2 indicates no significant difference on knowledge of health consequences of STIs among pregnant women based on their age (t=1.046, df 496; P=0.296˃0.05). The mean score of the respondents below the age of 30 years is 38.83 while those that are between 31-45 years is 40.66.

This means pregnant women in Jigawa State that are between 31-45 years are more aware of the health consequences of STIs than those that are less than 30years. Therefore, the null hypothesis is retained. Hence, Awareness of health consequences of STIs among pregnant women does not significantly differ based on their age in Jigawa state.

Table 3: Independent t-test summary of awareness of health consequences of STIs on pregnant women based on their parity

Variable	Parity	N	Mean(X)	S.D	S.E	t.value	df	p.value
Awareness of the health consequences of STIs on pregnant women	< 3 pregnancies	246	38.70	20.181	1.287	1.151	496	.250
	4 pregnancies & above	252	40.71	18.880	1.189			

t_{tab}=3.310, P˃0.05.

The result on Table 3 indicated no significant difference on awareness of health consequences of STIs among pregnant women based on their parity (t_{cal} =1.151 at df: 496; P=0.250 ˃ 0.05). The mean score of the respondents with <3 pregnancies is 38.70 while respondents that has 4 pregnancies and above is 40.71. Therefore the null hypothesis which stated that awareness of health consequences of STIs among pregnant women will not significantly differ based on their parity (number of pregnancies) in Jigawa state was accepted because the p.value obtained (0.250) is greater than 0.05 alpha level. This means that pregnant women that had <3 pregnancies and those who had 4 pregnancies & above have significant awareness of the health consequences of STIs.

Discussion

The purpose of the study was to assess the awareness of health consequences of STIs among pregnant women in Jigawa State. The result showed that there is significant awareness of health consequences of STIs among pregnant women (t=45.361, P<0.05). The finding of this study is in disagreement with the study of Lundberg (2013) who carried out a study on knowledge and attitude of STIs among Thailand University students, the findings showed that the students had low level of knowledge on STIs. Also the present study is not agreement with Marrazo (2009) on complications of STIs who explained that studies in USA shows pregnant women are unaware of their risks for contracting an STI or the serious, and sometimes deadly, health consequences that may result from an untreated infection. The finding of this study is also in contrary with the findings of Low, (2002) who reported that Asians are less aware of STI risks and some of the long-term consequences than whites, African Americans or Latinos. As explained by CDC (2011) that STIs remain a major public health challenge because of their health consequences, severe complications especially among women who excessively bear its long-term consequences and affect their future reproductive plans. The findings of this study is in line with the study of Kaiser, Hoff and Davis (2003) that carried out a study on attitudes, knowledge and behaviour of HIV/AIDS and other STIs which revealed that young people say they know "a lot" and young adults are more knowledgeable than adolescents and also females tend to know more about the risks of transmission, and long-term health consequences.
The result of this study also indicated differences in awareness based on age of pregnant women; less than 30 years have no significant awareness and 31-45 years have significant awareness of health consequences of STIs among pregnant women based on their age. This finding is in agreement with the findings of Kaisar, Hoff and Davis (2003) who reported that there is little difference in knowledge by age about the long-term health consequences of HIV and other STIs. The agreement

between these two studies shows that the differences of awareness between ages may results from maturity and experience. Also the finding disagree with the study conducted by Mustapha (2012) who stated that the age range of the respondents was 18 - 41 years and all the respondents interviewed were aware of HIV/AIDS. The finding of this study agree with the study of Samkange-Zeeb (2013) who concluded that HIV/AIDS remains the only STIs most school-going adolescents are aware of. The similarities may be Samkange-Zeeb (2013) and Mustapha (2012) assessed level of awareness on HIV/AIDS only while this study assessed the awareness of health consequences of STIs including HIV/AIDS.

The findings of this study also indicated that there is no significant difference in the awareness of health consequences of STIs among pregnant women based on their parity. This finding is in disagreement with Useh, et al (2013) in a study conducted on Knowledge and Attitude of pregnant women towards MTCT of HIV/ AIDS in South Africa, they explained that pregnant women that had previous pregnancies (94.5% multiparous) are more knowledgeable than women with first pregnancy (49.1 % primigravidae). The difference might be maturity and level of experience from previous pregnancies.

Conclusions

Based on the findings of this study, it was concluded that:

1) Pregnant women in Jigawa State are aware of health consequences of STIs.
2) Both the pregnant women that are below 30 years and those that are 31-45 years are not different in the awareness of health consequences of STIs in Jigawa State.
3) Both the pregnant women with less than 3 pregnancies and those with 4 pregnancies & above are not different in the awareness of health consequences of STIs in Jigawa State.

Recommendation

Based on the findings of this study, the following recommendations were made:

1) Jigawa State Ministry of Health should intensify on the principles of educating pregnant women during antenatal care services.
2) Non-governmental organizations and other stakeholders should collaborate with the state government to create strategies on how to detect and treat STIs and its consequences to women of child bearing age.
3) No matter the number of pregnancies pregnant women may have, they should be continuously enlighten on the consequences of sexually transmitted infections during and after antenatal care.

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KNOWLEDGE, ATTITUDE AND PREVENTIVE PRACTICE AGAINST LASSA FEVER AMONG UNDERGRADUATE OF ACHIEVERS UNIVERSITY OWO, ONDO STATE.

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Abstract

Lassa fever is a dangerous disease that affects human. It is caused by Lassa fever virus which is found mostly in multi-mamate rats (rat that have many breasts. Lassa fever is an animal-borne or zoonotic acute viral illness and member of Arenaviridae.

This study assessed the knowledge, attitude and preventive practices against Lassa fever among students of Achievers University, Owo, Ondo State, Nigeria. The research design was descriptive survey, using a structured questionnaire which was administered to 330 respondents.

Findings showed that 315 (99.5%) of respondents reported high level of knowledge, 281 (85.1%) respondents had positive attitude towards preventing Lassa fever. Majority 277 (83.9%) of respondents employed a good practice method against Lassa fever. Based on the findings, policy makers at all level should provide administrative support for providing the necessary equipment and logistics for care. The general public should continually be sensitized on the need on precautionary measures to take against Lassa fever, health workers should engage in sustained and improved health information for the general public on the causes, course, symptoms and prevention of Lassa fever.

***Key words**:* knowledge, attitude, practice, Lassa fever and undergraduate.

Introduction

Lassa fever is a dangerous disease that affects human. It is caused by Lassa fever virus which is found mostly in multi-mamate rats (rat that have many breasts). Lassa fever is an animal-borne or zoonotic acute viral illness and member of Arenaviridae. It is endemic in parts of West Africa. Lassa fever virus was discovered in a village called Lassa in Borno State, Nigeria. (Bowen, Rollin &Ksiiazek (2017)).

Lassa fever is called a "viral haemorrhagic fever" because it can damage severe organs. Several organs of the body including the blood vessels that may rupture and lead to bleeding. This bleeding could be the cause of death. The incubating period from contracting the infection symptoms is around 3weeks (Bauman, 2013). It is also a Zoonotic disease, meaning that humans become infected from contact with an infected animal. The animal reservoir or host, of Lassa virus, is the rodent of the genus Mastomys, commonly known as "multimammate rat." Mastomys rat infected with Lassa virus does not become ill, but they can shed the virus in their urine and faeces. (World Health Organization, 2017).

Lassa fever is mainly a disease of the developing world. However, several imported cases with hazardous outcomes have been reported in different parts of the world including North America (Titus, 2012). A fatal case of Lassa fever was reported in London in January 2009. Lassa fever is endemic in the rodent population in parts of West Africa, including Sierra Leone, Liberia, Guinea, Nigeria and the Central African Republic and it is indigenous to most in sub-Sahara Africa (Jan 2019). According to Bowen et.al (2017) the disease causes approximately 5000 deaths annually. It is believed that human infections also exist in Democratic Republic of Congo, Mali and Senegal. In Nigeria, the outbreak of Lassa fever has been reported in various part of the country with the worst outbreak in 2012 where 623 cases and 70 deaths were reported from 19 out of the 36 states. (Geisbert, Jones, Fritz (2005). Nigeria usually experiences an outbreak of the deadly Lassa fever during the dry season that starts in October.

In the first quarter of 2019 in 20 states; 2217 suspected cases were reported, 540 cases confirmed, 1662 negatives, 15 probable, 122 deaths (22.6% cases fatality). (NCDC, 2019). This disease typically has a risk of fatality, no known cure and no vaccine have been developed against it yet. Usually, the case fatality of Lassa fever is around 1 per cent. The percentage of fatality rate, however, rises if the patient is a pregnant, 80% risk of the mother and the baby dying. Diagnoses can be done using patient blood or tissue samples in specialized laboratories only.

There have been several outbreaks of Lassa fever in various part of Nigeria. Since the last 5 years which has been very severe, affecting people of different ages, sexes, works, religion and social groups given no respect to anybody. Health workers were not left out in its ravaging attack. This occurred due to poor medical practices, late diagnosis, treatment and harmful traditional practices in our societies. The morbidity and mortality are influenced by some key factors such as the time of presentation, diagnosis and commencement of appropriate treatment. (Titus, 2012).

In 2018, Ondo State reported an increase in the cases of Lassa Fever, thus overwhelming local health care systems in most of the affected areas presumably the Southern State of Edo and Ondo where 75% of the total confirmed cases have been reported. 1081 were suspected cases, 317 were confirmed cases and 90 deaths were recorded and 14 health workers were involved in six states. In Owo Local Government in Ondo State, no fewer than 170 cases were reported at various health centres in the Local Government areas of Ondo (Peter, 2019). Although, no outbreak has been recorded among tertiary institutions so far any outbreak among students of tertiary institutions can pose some serious grave consequences among them because of their proximity to one another. Hence, the study to assess the student's knowledge, attitude and prevention of Lassa Fever using the following questions:.

- What is the level of knowledge of undergraduates of Achievers University Owo on Lassa fever?
- What is the level of attitude of undergraduates of Achievers University Owo on Lassa fever?
- What is the level of prevention practice of undergraduates of Achievers University Owo against Lassa fever?

The following hypotheses were tested:

1. There is no significant relationship between age and knowledge of Lassa fever among student.
2. There is no significant relationship between attitude and knowledge to prevention of Lassa fever.

Methodology

The study adopted a descriptive study design to assess the knowledge, attitude to prevention and prevention practices against Lassa fever among undergraduates of Achievers University, Owo. Using the Taro Yamane formula and multistage sampling, a sample size of 354 was obtained.

Sampling Matrix

Department	Population	Sample Size
Engineering	49	14
Nursing	651	185
Medical laboratory science	495	141
Law	50	14
Total	**1245**	**354**

The study employed a self-structured questionnaire to collect data required for the study using the Likert Scale. The face and content validity of the questionnaire was obtained with the reliability of the research instrument ascertained by Test-re-Test method in a pilot study. The data was analysed using Statistical Package for Social Science version 23 and presented using both descriptive and inferential statistical method. The ethical consideration was done and informed consent was obtained from the participants.

Results

Table 2: Knowledge of Lassa fever

Variables	Strongly Agreed	Agreed	Disagreed	Strongly Disagreed	Undecided
Are you aware of Lassa Fever	181(54.8)	134(40.6)	15 (4.5)	0	0
Causes of Lassa Fever					
Virus	152(46.1)	76(23.0)	49(14.8)	48 (14.8)	4 (1.2)
Bacteria	25 (7.6)	64 (19.4)	111 (33.6)	125 (37.9)	5 (1.5)
Animal	198(60.0)	63 (19.1)	26 (7.9)	26 (7.9)	17 (5.2)
Species affected by Lassa Fever					
Rats Only	134(40.6)	111(33.6)	38 (11.5)	34 (10.3)	13 (3.9)
Rats and Humans	206(62.4)	124(37.6)	0	0	0
Humans and other animals	106(32.1)	93 (28.2)	72 (21.8)	48 (14.5)	11 (3.3)
Means of Transmission					
Contact with the urine of rats only	72 (21.8)	76 (23.0)	115 (34.8)	62 (18.8)	5 (1.5)
Contact with faeces of rats only	116(35.2)	46 (13.9)	92 (27.9)	67 (20.3)	9 (2.7)
Eating bush meat	164(49.7)	78 (23.6)	54 (16.4)	33 (10.0)	1 (0.3)
Exposure to open cuts or sores	56 (17.0)	103(31.2)	97 (29.4)	52 (15.8)	22 (6.7)
Other fluids from an infected person	150(45.5)	110(33.3)	62 (18.8)	8 (2.4)	0
Animal species that transmit Lassa Fever virus to humans					
Rabbits only	59 (17.9)	61 (18.5)	94 (28.5)	82 (24.8)	34 (10.3)
Rats Only	155(47.0)	111(33.6)	39 (11.8)	22 (6.7)	3 (0.9)
Rat and squirrel	38 (11.5)	55 (16.7)	133 (40.3)	83 (25.2)	21 (6.4)
Other animals	53 (16.1)	31 (9.4)	130 (39.4)	116 (35.2)	0
Signs and symptoms of Lassa Fever					
Sore throat Retrosternal pain and cough	130 (39.4)	94 (28.5)	60 (18.2)	36 (10.9)	10 (3.0)
Bleeding manifestations	174 (52.7)	73 (22.1)	37 (11.2)	45 (13.6)	1 (0.3)
Nausea and vomiting	191 (57.9)	95 (28.8)	28 (8.5)	16 (4.8)	0
Gastro intestinal manifestation	125(37.9)	111(33.6)	54 (16.4)	38 (11.5)	2 (0.6)

Table 2 above showed the knowledge of respondents on Lassa Fever. 181(54.8%) of respondents have heard of Lassa Fever before. 152(46.1%) strongly agreed that it is caused by a Virus, only 25 (7.6%) said bacteria while 198 (60.0%) strongly agree that it is caused by an animal. Knowledge of the species affected by Lassa Fever shows that 111 (33.6%) agree that that Lassa fever is affected by

rats only, 124 (37.6%) said rats and humans while 106 (32.1%) said humans and other animals. On the mode of transmission, 72 (21.8%) strongly agree that Lassa fever can be transmitted by contacts with urine of rats only, 116 (35.2%) said contact with faeces of rats only, 164 (49.7%) said eating bush meat while 56 (17.0%) said exposure to cuts or sores while 150 (45.5%) said other fluids from an infected person. Of the animal species that can transmit Lassa Fever Virus to humans, 59 (17.9%) strongly agree that it is rabbits only, 155 (47.0%) said rats only, 38 (11.5%) said rats and squirrel only while 53 (16.1%) said other animals. Of the signs and symptoms of Lassa Fever, 130 (39.4%) strongly agree that sore throat and restrosternal pain and cough is a symptom, 174 (52.7%) said bleeding manifestations, 191 (57.9%) said nausea and vomiting while 125 (37.9%) of them said gastrointestinal manifestations.

Table 2: Attitude of Respondents to Lassa fever

Variables	Strongly Agree	Agree	Disagree	Strongly Disagree	Undecided
There are rats and rodents in your hostels	216(65.5)	70(21.2)	10 (3.0)	23 (7.0)	11 (3.3)
Rodents have contact with your foods	81 (24.5)	118(35.8)	76 (23.0)	41 (12.4)	14 (4.2)
I feed on rodents contaminated foods	42 (12.7)	16 (4.8)	96 (29.1)	151(45.8)	25 (7.6)
I eat rodents	40 (12.1)	36(10.9)	75 (22.7)	162(49.1)	17 (5.2)
I believe Lassa Fever virus exists	196(59.4)	58(17.6)	44 (13.3)	7 (2.1)	25 (7.6)
I would keep the information secret if a colleague of yours contact Lassa Fever	89(27.0)	5316.1)	83 (25.2)	91 (27.6)	14 (4.2)
I would show a discriminatory attitude towards colleagues suspected to have Lassa Fever	50 (15.2)	36(10.9)	90 (27.3)	130(39.4)	24 (7.3)
I accept to take an approved vaccine that could prevent Lassa Fever	259(78.5)	22 (6.7)	9 (2.7)	17 (5.2)	23 (7.0)
People who have direct contact with a person who has been diagnosed with Lassa Fever must be quarantined for some weeks	243(73.6)	42(12.7)	15 (4.5)	8 (2.4)	22 (6.7)
I have heard of people that have survived Lassa Fever	208(63.0)	46(13.9)	36 (10.9)	27 (8.2)	13 (3.9)

Table 2 above shows the attitude of respondents towards Lassa Fever prevention. 216 (65.5%) of respondents strongly agree that there are rats and rodents in their hostels, 118 (35.8%) agree that rodents have contact with their foods, 151 (45.8%) strongly disagree that they feed on rodents contaminated foods while only 40 (12.1%) agree to eating rodents and 196 (59.4%) strongly agree that believe Lassa Fever virus exists. The table also shows that 89(27.0%) of respondents strongly agree that they will keep the information secret if a colleague of theirs contact Lassa Fever, only 36 (10.9%) of them said they would show a discriminatory attitude towards colleagues suspected to have Lassa Fever, 259 (78.5%) strongly agree that they accept to take an approved vaccine that could

prevent Lassa Fever and 243 (73.6%) strongly agree that people who have direct contact with a person who has been diagnosed with Lassa.

Fever must be quarantined for some weeks while 208 (63.0%) strongly agree that they have heard of people that have survived Lassa Fever..

Table 3: Practice towards Lassa Fever Prevention Among Respondents

Variables	Yes	No
Have seek for information about Lassa Fever before	277 (83.9)	53 (16.1)
Washes hand often	271 (82.1)	59 (17.9)
Properly store my food	292 (88.5)	38 (11.5)
I do have contacts with rats	99 (30.0)	231 (70.0)
Do not remove rat faeces from my food	48 (14.5)	282 (85.5)
Take herbs for treatment	94 (28.5)	236 (17.5)
Engage in sun drying my food stuffs over the night	105 (31.8)	225 (68.2)

Table 3 above shows the practice towards Lassa fever prevention among respondents. 277 (83.9%) of respondents have sought for information about Lassa fever prevention, 271 (82.1%) wash hands often, 292 (88.5%) properly store food and 99 (30.0%) do not have contacts with rats while 48 (14.5%) of them said they remove rat faeces from their food. Also, 94 (28.5%) of respondents take herbs for treatment while 105 (31.8%) of them engage in sun drying of food stuffs over the night.

Hypotheses Testing.
There is no significant relationship between gender and the level of knowledge of Lassa fever among respondents.

Table 5: Hypothesis Testing 1

Socio-demographic Variables	Level of Knowledge			Chi Square	DF	P value	Remark
	Good	Average	Poor				
Age							
11-15	5	0	0	31.59	10	0.01	Significant
16-20	97	10	10				
21-25	182	8	8				
26-30	13	2	2				
31-35	4	4	4				
36-40	1	0	0				

The table above shows that age (X2 =31.59, p = 0.01) had a significant relationship with the level of knowledge.

Hypothesis 2
There is no significant relationship between level of attitude and the level of knowledge of Lassa Fever among respondents.

Table 6: Hypothesis Testing 2

Socio-demographic Variables	Level of Knowledge			Chi Square	DF	P value	Remark
	Good	Average	Poor				
Attitude			`				
Good	268	23	3	1.978	2	0.372	Not Significant
Poor	34	1	1				

The table above shows that level of attitude (X2 =1.978, p = 0.372) had no significant relationship with the level of knowledge.

Discussion of Findings
The results from the assessment of respondents' knowledge of Lassa Fever revealed that majority of the respondents 301 (91.5%) had good knowledge of Lassa fever. This was corroborated by Abdulkadir & Mohammed (2019) in their study carried out among residents where it was discovered that 76% had inadequate knowledge of Lassa Fever. Also, Tobin et al., 2013 reported average knowledge among 41.2% of respondents. The study also shows that majority of the respondents were aware of Lassa Fever, 152(46.1%) said it is caused by a Virus while 134(80%) of them said the virus can only be transmitted by rats only. However, it at variance with the study conducted among students of University of Benin by Ighedosa, Odigie, Usifoh, Asemota, &Aighewi (2016) where it was reported that the knowledge of the majority 276 (91.7%) of the study population about Lassa fever disease was poor.

Attitude of respondents towards Lassa fever prevention
Results show that the majority of respondents 294(89.1%) have a good attitude towards preventing Lassa fever. This was supported by Udak, 2018 showing that positive attitude increase with an increase in the level of education. This suggests that the high positive attitude observed among the majority of respondents in this study is due to their level of educational exposure since all respondents are residents of a tertiary institution.

Further results show that only about one-fourth respondents said they would show discriminatory attitude towards colleagues suspected to have Lassa Fever and 281 (85.1%) said they are ready to take an approved vaccine that could prevent Lassa Fever.

In a similar study by Udak, 2018 positive attitude towards Lassa Fever improved with an increase in the level of education, as respondents with no formal education were 2 times more likely to have a negative attitude (OR = 0.23, 95% cl on OR = 0.,13 – 0.54) than those with less education. Positive

attitude towards Lassa Fever virus improved with an increase in the level of education, as respondents with no formal education, were 2 times more likely to have a negative attitude (OR = 2.04, 95% Cl on OR = 0.66 – 6.33).

Preventive practices against Lassa fever

Result of the study shows that 241(73.0%) of respondents have good preventive practices against Lassa fever. This is similar to Ighedosa et al., (2016) who reported good practices among 73.3% of respondents at the University of Benin, Benin City, Nigeria. Ijarotimi, Ilesanmi, Aderinwale, Abiodun-Adewusi, &Okon (2018) also supported this view as he reported good preventive practices among health workers in Owo, Ondo State. However, Abdulkadir & Mohammed 2019 reported poor practice among 51% of residents in North-Eastern Nigeria.

Prevention practices against Lassa fever

The result shows that 51% of respondents poor practice towards preventing Lassa fever while the remaining 49% shows good prevention practice against Lassa Fever.

This finding was corroborated by Abdulkadir & Mohammed 2019 and Ijarotimi, Ilesanmi, Aderinwale, Abiodun-Adewusi, &Okon (2018) in their studies. Reports show that about 183 (96.3%) reported that they routinely used gloves when handling body secretions and contaminated items.

Recommendations

Policymakers at all level should provide administrative support for providing the necessary pieces of equipment and logistics for care. The general public should continually be sensitised on the need for precautionary measures to take against Lassa fever.

Health workers should engage in sustained and improved health information for the general public on the causes, course, symptoms and prevention of Lassa fever.

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ASSESSMENT OF SOCIO-CULTURAL BELIEF DETERMENT OF THE UTILIZATION OF TRADITIONAL BIRTH ATTENDANTS SERVICES AMONG WOMEN OF CHILDBEARING AGE IN NORTH EAST ZONE, NIGERIA

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Abstract

The main purpose of this research was to assess the socio cultural determinant of the utilization of traditional birth attendants' services among women of childbearing age in north east zone, Nigeria. Multistage sampling procedures that involve more than one were used. This include: stratified, simple random, proportionate, systematic and simple random sampling technique. Stratified to divide the zone into thee strata, simple random to select three states and six LGAs and also simple random sampling technique to select twelve 12 wards while proportionate sampling technique was use to select 22% of women of childbearing age per each selected ward, systematic sampling procedure were used to administered the instrument to the respondents at house to house while simple random sampling technique was use in a house that has more than one respondent in the house. The population comprised women of childbearing age in north east zone, Nigeria. Total population of north east zone, Nigeria was 26, 249, 800, 22% of this figure was the total population of women of childbearing age 5,774, 956 while the target population of this research was 1, 270,487 (NBS,2016; NGNADOP, 2018). The sample size was 800 women of childbearing age which were drawn from the target population of 1,270, 487 women of childbearing age in north east zone Nigeria. Ex-post facto research design was used. Ex post facto means after the fact, design. In ex-post facto, experimentation is not feasible, the researcher identifies extent that already occurs or conditions that already were present and then collects data to investigate possible relationship between factors and subsequent characteristics of behavior (Salkind, 2010). Researcher developed four points Likert scale questionnaire was used in this research that contained section A- G. Data was collected and analyses using SPSS vision 25.0 and result were presented in frequency count and percentage, mean and standard deviation, one sample T test. Result revealed that, majority of the respondents were within the age range of 24-32yrs (53.7%), followed by 15-23yrs (29.7%), 33-42yrs (13.8%) and 43-49yrs (2.8%). also revealed that majority of the respondents were married (92.8%), while 3.9% were widowed, 2.0% were divorcees while 1.3% were still single. Result revealed that all the items had mean scores greater than the decision mean (2.50) which gave rise to mean aggregate of 3.79. This shows that Socio-cultural beliefs determine the utilization of traditional birth attendants' services among women of childbearing age in North East zone, Nigeria. The result also revealed that the p-value (0.000) is less than 0.05 alpha level of significant, and the t-Cal of 320.118 is greater than t-crit of 1.960. The hypothesis is therefore rejected. It was recommended that, Government should integrate traditional birth attendants because their services were culturally acceptable by the women of childbearing age in the North east zone, Nigeria,

Symposium, lectures, seminars and training of Traditional Birth Attendants should be organized from time to time to update their professional knowledge and meet modern health care technology.

Key words: *Socio-cultural belief, Women of childbearing age, Traditional birth Attendantsservices*

Introduction

Culture can be described as central to the existence of any society on earth without which there will be no language of expressions, self-consciousness and ability to think or reason. Cultures are values, beliefs, and behaviours that are shared by members of a society and which provide direction for people as to what is acceptable or unacceptable in given situations (Fawole& Nayak, 2012). Research has shown that on average Nigerian, urban population constitute 50% of the total population and most Nigerians (irrespective of where they live) is strongly influenced by the cultural and traditional norms of their ethnic origin. So also, it is obvious that there are two dominant ethnic groups in Northeast zone, Nigeria: Hausa and Fulani groups, but within these groups, there are sub-categories each with specific norms and value attached to it This explains the differences in socio-cultural behaviours that affect the lifestyles of the entire society (Majali, 2013). Besides, he further expatiates that socio-cultural can influence woman behaviours depending on one's' social values. Such social values could be religion, economic status, education, family, politics and cultural values as well. Therefore, the norms, values and practices in maternal healthcare utilization, early marriage, child spacing, gender inequality and family structure (Owensibeie, 2011).

Norms are the specific cultural expectations or agreed-upon expectations and rules by which the members of a culture behave in a given situation for instance practices such as early marriage and traditional maternal health practices. Ottong, (2014), identified that socio-cultural belief in witchcraft, super-natural forces, extra-marital affairs and customary faith in Traditional Birth Attendants services utilization at pregnancy, delivery and breastfeeding as factors associated with not seeking orthodox maternity services within the community. Traditional Birth Attendant is not only a healer but also a mother. She seeks to know every aspect of the pregnancy and administers leaves, herbs, roots to ward off devices of the wicked people and witchcrafts. She could also tell the "fortune" of the pregnancy and seeks ways to ameliorate if it portrays bad omen during delivery, upon all these, they charge very little or nothing and are readily available whenever you need their attention (Egunjobi, 2014). Kayongo, & Butera, (2016) Traditional Birth Attendants services patronage is mostly due to the influence of cultural belief, Traditional Birth Attendant sallow women to deliver in a more comfortable position and receive support and encouragement (Harries, Cooper, &Stebel, 2014). Maternal and infant morbidity and mortality still remain a global concern, most especially in many Sub-Saharan African Countries (Njikam, 2014). The estimate shows that there are more than 500 maternal mortalities out of every 100,000 live births in most African countries (Awotunde, Fehintola, Adesina &Ajala, 2017). Despite advances in modern healthcare, Traditional Birth Attendants services have continued to be heavily utilized in rural communities of Nigeria. Major disparities in maternal healthcare services in Nigeria remain present despite the goal of the United Nations Millennium Development Goals to reduce maternal mortality by 2015 (Ndidiamaka, Onukagha, & Hassan, 2017). Nigeria has an estimated population of 200 million and about 80% of the populations live in rural communities. Women living in rural areas are 77% more likely to give birth at home than in a healthcare facility, which contributes to the high demand for Traditional Birth Attendants services (John, Muktar, Hussaini&Nayawo, 2016).

Nigeria has made slow but progressive results in reducing maternal mortality rates since 1990 with a baseline figure of 1000 deaths per 100,000, 545 per 100,000 in 2007, 350 deaths per 100,000 births

in 2012 and then 243 per 100,000 births in 2014. However, maternal mortality rates remain high compared to other developing countries and it is important to address structural factors that are contributing to the high Maternal Mortality Rate witnessed in Nigeria (Ndidiamaka, et al, 2017).

It is against this background that, the researcher intends to assess the influence of Socio-cultural belief of the utilization of traditional birth attendants' services among women of childbearing age in the Northeast zone, Nigeria

Statement of Problem

Over 500,000 preventable maternal deaths were recorded in 2014 and about four million babies' deaths were found prevailing globally with a large proportion in low and middle-income countries (World Health Organization, 2014). Complications from pregnancy and childbirth-related conditions account for about 1600 death among women of childbearing age mostly occurring in Asia and Sub-Saharan Africa (Addai & Kayode, 2012). The use of skilled healthcare services among women of childbearing age plays an important role in determining their health status during pregnancy, childbirth and even after delivery. The care a woman receives before and during pregnancy, at the time of delivery, and soon after delivery, is important for the survival and well-being of the mother and her child (Nigeria Demographic Health Survey, 2013).

It is now widely recognized that cultural belief is deeply involved in all affairs of human, including health and sickness. Not all customs and cultural beliefs are bad. Some are based on centuries of trial and error and have positive values, while others may be useless or harmful. Some of these cultural factors, hallowed by centuries of practice have stood the way of implementing healthcare programmes in Africa including Nigeria particularly northern region (Imogie, 2016). The researcher observed that there was wide Gap between utilization of skilled healthcare services and cultural belief of untrained services providers by women of childbearing age in Africa countries, Nigeria not exceptional particularly, North-East Zone, Nigeria.

Research Question

Does socio-cultural belief determine the utilization of TBAs services among women of childbearing age in north east zone, Nigeria?

Hypothesis

Socio-cultural belief is not significant determinant of the utilization of TBAs services among women of child bearing age in north east zone, Nigeria.

Methodology

Expo- facto research design was used as in expo facto experimentation is not possible, the information is on the ground with the respondents therefore, the researcher cannot manipulate the dependent and independent variables. The population of this study was 1,270,489, the sample size was 800 women of childbearing age, sampling technique, multistage sampling technique. The researcher developed four points Likert scale contained section A assess the information of demographic characteristics that has five items and section B which assessed socio-cultural determinant. The instrument was vetted by five jurors in the department of Human Kinetics and Health education, nursing science, Ahmadu Bello University, Zaria. Data was collected using a pretested structured interviewer-administered questionnaire. Data analysis was done using SPSS version 25.0 and results were presented in frequencies and percentages, mean and standard deviation and one sample T-Test.

Result- The purpose of this research was to assess the socio-cultural determinant of the utilization of Traditional birth attendants 'services among women of childbearing age in the Northeast zone, Nigeria. To achieve this purpose, the data collected were statistically analyzed with the help of Statistical Package for Social Science (SPSS) version 25.0, a total of eight hundred (800) copies of questionnaire were distributed to women of childbearing age in Northeast zone, Nigeria through multi-stage sampling technique. Seven hundred and eighty-nine (789) 98.6% questionnaire copies were retrieved and also found valid for analysis. The responses were scored based on four (4) points Likert Scale. The relative mean for each of the item was calculated with 4 as the highest and 1 the lowest score. Thus, the criterion or acceptance mean of 2.5 was used in making decisions. If the relative means of an item was equal to or greater then 2.5, it was considered that the respondents agreed with the suggested item, while any mean score less than 2.5 implied disagreement. The demographic variables are presented in frequencies and percentages, while all other items are represented by their mean scores as expressed by the respondents. The corresponding standard deviations for each of the items are also shown in the respective tables. One sample t-test was used to test the stated hypothesis.

Table 4.1: Description of Demographic Characteristics of respondents

Variable		Frequency	Percentage
Age	15-23yrs	234	29.7%
	24 - 32yrs	424	53.7%
	33-42yrs	109	13.8%
	43-49yrs	22	2.8%
	Total	**789**	**100%**
Marital status	Married	732	92.8%
	Single	10	1.3%
	Widow	31	3.9%
	Divorce	16	2.0%
	Total	**789**	**100%**
Education	Non-Formal	549	69.6%
	Primary	156	19.8%
	Secondary	66	8.4%
	NCE/OND	17	2.2%
	HND/DEG	1	0.1%
	Total	**789**	**100%**
Income	1-18,000	101	12.8%
	19-39,000	19	2.4%
	60,000 and above	8	1.0%
	None of the above	661	83.8%
	Total	**789**	**100%**
Religious Belief	Islam	636	80.6%
	Christian	130	16.5%
	Non-religious	5	0.6%
	Traditional belief	18	2.3%
	Total	**789**	**100%**

Table 4.1 shows the description of demographic variables of the respondents. The tables revealed that majority of the respondents were within the age range of 24-32yrs (53.7%), followed by 15-23yrs (29.7%), 33-42yrs (13.8%) and 43-49yrs (2.8%). The lowest percentage observed from the age range 43-49yrs (2.8%) is due to the fact that only few women still give birth to children; this is because of their age. Women stop childbearing when they are at the middle of 40s. In the same vein, the table also revealed that majority of the respondents were married (92.8%), while 3.9% were widowed, 2.0% were divorcees while 1.3% were still single. Furthermore, majority of the respondents had non-formal education (19.8%) followed by those with primary school education (19.8%), secondary school education (8.4%), NCE/OND (2.2%), while only 0.1% had HND/Degree. Also, based on income, 12.8 of the respondents earned within the range of 1-18,000 Naira per month while 2.4% earned between 19-39,000 naira per month and only 1.0% earned 60,000 and above. The table also revealed that majority 636 (80.6%) of the respondents' practices Islam, 130 (16.5%) were Christians, 5 (0.6%) were non-religious while 18 (2.3%) were traditional believers

Research Question

Do Socio-cultural belief determine the utilization of traditional birth attendants in North East zone, Nigeria?

Table 4.2: Mean and Standard Deviation of Socio-Cultural Belief determine the utilization of Traditional Birth Attendantsservices among women of childbearing age in north east zone, Nigeria

S/N	Statement	Mean	Std.Dev
1.	The use of hot water after delivery is very good to the women, this encourage me to go for Traditional Birth Attendants services in my village	3.85	.370
2.	Fear of operation (caesarian) make me to deliver at home	3.69	.596
3.	Traditional Birth Attendants use method familiar to me this urges me to patronize their services	3.76	.451
4.	I am too shy to deliver in hospital, this necessitates me to choose Traditional Birth Attendants services at home	3.77	.489
5.	In the modern healthcare facility, clients are asked to lie down in their backs during delivery , thus motivates me to use Traditional Birth Attendants services	3.77	.488
6.	Flexibility of Traditional Birth Attendant allows me to deliver in place of choice, encourages me to use their services	3.80	.430
7.	Traditional Birth Attendant support and encourage me to deliver at home	3.82	.408
8.	My culture allow only women to take part in the delivery of mothers	3.81	.403
	Traditional Birth Attendant allows the use of herbal medicine which is link to my cultural belief. This encourage the use of their services	3.81	.429
9.	My husband belief in Traditional Birth Attendant and he allows me to visit available services in the community	3.80	.475
Decision Mean = 2.50	***Aggregate Mean = 3.79***		

Table 4.2 shows Mean and Standard Deviation of Socio-cultural belief determinant of the utilization of Traditional Birth Attendants services as a influence of the utilization of traditional birth

attendants' services in north-east zone, Nigeria. The table revealed that all the items had mean scores greater than the decision mean (2.50) which gave rise to mean aggregate of 3.79. This shows that Socio-cultural belief determine the utilization of traditional birth attendants' services among women of childbearing age in North East zone, Nigeria.

Hypothesis - Socio-cultural belief is not a significant determinant of the utilization of traditional birth attendants' services among women of childbearing age in North East zone, Nigeria.

Table 4.3: One sample t-test analysis on Socio-cultural belief as determinant of the Utilization of traditional birth attendants services among women of childbearing age in north east zone, Nigeria

Variable	N	Mean	Std. Dev.	df	t-cal	t-crit	p-value
Socio-cultural	789	37.88	3.105	788	320.118	1.962	0.000

Significant at p<0.05

Decision mean = 2.50

df (788), t-1.96, < 0.05

Table 4.3 shows the summary of one sample t-test analysis Socio-cultural belief as a determinant of the Utilization of traditional birth attendants among women of childbearing age. The table revealed that the p-value (0.000) is less than 0.05 alpha level of significant, and the t-cal of 320.118 is greater than t-crit of 1.960. The hypothesis is therefore rejected. This implies that Socio-cultural belief is a determinant of the utilization of traditional birth attendants services among women of childbearing age in North east zone, Nigeria.

Discussion

The socio-cultural belief was significantly determining the utilization of traditional birth attendants' services in the North East Zone, Nigeria. World Health Organization, (2010) in Juneava Swaziland reported that most societies in the past and present, women are socially disadvantaged group; a status which affects the reproductive behaviour regarding utilization of health care services and vulnerability to harmful traditional practices. These reports agreed with the outcomes of the present research that, socio-cultural belief variable is significant determinants of the utilization of traditional birth attendants' services among women of childbearing age in the northeast zone, Nigeria The researcher observe it could be because, women cultural practices as gender-sensitive they hate hospital delivery, fear of operation shy to laying down in back position, or due to an informed decision. Findings on Socio-cultural belief as a determinant of the Utilization of traditional birth attendants among women of childbearing age these findings revealed that the Socio-cultural belief is a determinant of the Utilization of traditional birth attendants services among women of childbearing age this is agreed with the study conducted by Majali, (2012) in African journal of medicine and health science in Asia pacific Reported that socio-cultural determinant can influence woman behaviours depending on one's' social values. Such social values could be, economic status, family, and cultural values as well. Therefore, the norms, values and practices in maternal health, early marriage, child spacing, gender inequality and family structure. Norms are the specific cultural expectations or agreed-upon expectations and rules by which the members of a culture behave in a given situation for instance practices such as early marriage and traditional maternal health practices. The researcher agrees with great scholars because his findings revealed that, socio-

cultural belief is a significant determinant of the utilization of traditional birth attendants services among women of childbearing age in the northeast zone, Nigeria.

Ottong, and Egunjobi, (2014), Department of Primary Healthcare Lagos, Nigeria a textbook of essential safe motherhood 2nd edition maldden mass black well sciences 203-420 reported that socio-cultural belief like witchcraft, super-natural forces, extra-marital affairs and customary faith in Traditional Birth Attendants services utilization at pregnancy, delivery and breastfeeding that associated with not seeking orthodox maternity services within the community. Traditional Birth Attendant is not only a healer but also a mother. She seeks to know every aspect of the pregnancy and administers leaves, herbs, roots to ward off devices of the wicked people and witchcrafts. She could also tell the "fortune" of the pregnancy and seeks ways to ameliorate if it portrays bad omen during delivery, upon all these, they charge very little or nothing and are readily available whenever you need their attention. The researcher agrees with these scholars because their findings are similar with his own that, revealed socio-cultural belief was a significant determinant of the utilization of traditional birth attendants services among women of childbearing age in the northeast zone, Nigeria. Study conducted by Zampas and Gher, (2013) World summit report and international conference who delivered the report on maternal health as human right international and regional standards human right law, reported that there is Gap in awareness evidence and researches have consistently shown that maternal mortality in Africa is prone to crises as a result of multiple socio-cultural factors. For instance, male-domination, women education is culturally prohibited, high fertility is accepted which affect pregnancy outcomes in most societies in the continent, particularly in Sub-Saharan Africa. It should also be mentioned that, although, with very few exceptions, African societies are patriarchal in nature and as such norms, values and expectation are defined and sustained by women childbearing mothers in virtually all spheres of reproductive life including healthcare utilization findings agreed with the present research revealed that, the socio-cultural belief was a significant determinant of the utilization of traditional birth attendants services among women of childbearing age in the northeast zone, Nigeria. Another study was done by Kyomuhendo, (2013) in Bangladesh who wrote on women education and autonomy for utilization of healthcare services among women of childbearing age in Bangladesh he added that Traditional Birth Attendants services patronage is mostly due to the influence of cultural belief, Traditional Birth Attendants allow women to deliver in a more comfortable position and receive support and encouragement from the Traditional Birth Attendants. Traditional Birth Attendants are also flexible about where they help a woman to deliver either delivering from a prepared place in her own home or travelling to the home of the pregnancy. Findings agreed with the present study which revealed that socio-cultural belief was a significant determinant of the utilization of traditional birth attendants' services among women of childbearing age in the northeast zone, Nigeria.

Recommendation

- It was recommended that, Government should integrate traditional birth attendants because their services were culturally acceptable by the women of childbearing age in the North east zone, Nigeria
- Symposium, lectures, seminars and training of Traditional Birth Attendants should be organized from time to time to update their professional knowledge and meet modern health care technology
- Traditional Birth Attendants should be enlightened on other primary health care components with the view to incorporate them into the healthcare sector so that they can be trained to keep records of their services and report on monthly bases

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IMPACT OF PSYCHOLOGICAL CAPITAL AND QUALITY EDUCATION ON GRADUATE EMPLOYABILITY IN THE 21ST CENTUARY

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Abstract

Preparing students for employment is inherently part of the goals of tertiary educations. With the current trends of events in the labour market, employability has become a thing of paramount important. This paper is an attempt to provide information base in regards to Psychological Capital as having the indispensable contents for quality education with which to shape a graduate for suitable employment. To achieve this objective, the researcher formulated two null hypotheses to guide the study. Ex-post facto research design was adopted for the study. Purposive sampling technique was used in the selection of the samples. A total of 100 respondents were used for the study. The major instrument for data collection was a four-point Likert scale questionnaire titled Psychological Capital and Graduate Employability Questionnaire (PCGEQ). This was designed by the researcher with the aid of four research experts to establish its validity and reliability. The data collected were analysed using Pearson Correlation in IBM SPSS version 22. The result shows that there was a strong positive correlation between psychological capital and graduate employability, which was statistically significant ($r = 0.752$, $n = 100$, $p<0.001$). There was a strong positive correlation between quality education and graduate employability, which was statistically significant ($r = 0.670$, $n = 100$, $p<0.001$). Based on this finding, it was recommended among others, that the psychology courses in tertiary institutions curriculum should be reformed and made core to provide students of higher institutions with the skills requirements of contemporary labour market. It was also recommended that emphasis on certificate instead of skill oriented training should be minimized.

Keywords: *Psychological Capital; Quality Education; Graduate Employability*

Introduction

Education is a process by which an individual is assisted formally and informally through proper direction and guidance to develop their potentials for the development of self and society. Education makes people to live effectively and efficiently in society and to contribute to its advancement and upliftment. Therefore, through education, the attitudes and practices of the people could be patterned along that direction. In other words, quality education will make people understand and appreciate one another better and help to restore the dignity of man. Thus, it is imperative to recognize the roles education plays in equipping individuals with requisite knowledge and skills for survival and societal progress (Odunayo&Nkoro, 2014).

Higher education is perceived as an important form of investment in home capital development. Higher education institutions are charged with the formation of human capital through teaching,

building a knowledge base through research and knowledge development, and dissemination and use of knowledge by interacting with the knowledge users (Okwakol in Odunayo and Nkoro,2014).

Teaching and learning as a component of education in the tertiary institutions are deeply entrenched in the core values of educational psychology. By implication, educational psychology provides the platform and benchmark upon which effective, efficient and functional education can be obtained. No educational process can thrive if it ignores educational psychology. The transversal competency required for effective labour and graduate employability skills in the workplace is embedded in psychology as the discipline aimed at the building and development of human capital. This is one of the responsibilities of schools as one of the most aching challenges confronting the world today (Nigeria inclusive) is the issue of unemployment.

The 21st century has witnessed a rising interest of scholars and academicians in measuring employability skills of graduates of higher education institutions to guide the policymakers to make graduates' transition from education to work meaningful. These skills and competencies are directly linked to the needs of the labour market and the mandatory inclusion of employability skills in higher education curriculum have thus become imperative. On this issue, Pan and Lee, (2011) argued that these employability skills can promote performance in the workplace as the relationship between higher education and the economy for a long time has been the sphere that higher education has been making significant contributions. Employability skills have is strongly aligned with the academic valuing of good learning that takes place in the tertiary institutions. Symington, (2012) posits that "University graduates stand at the dawn of their careers, seeking meaningful employment in a labour market that is characterised by volatile change and globalisation. This new world of work requires flexibility, versatility, and creativity – skills not traditionally required of an employee.

Graduates today are required to develop a skills-set that enables pro-active career behaviour and, furthermore, aid the employer to utilise such abilities as business solutions. There is a lack of consensual scientific knowledge available on employability, despite the rise in its importance to the 21st century employer and graduate employee.

Psychology is the largest scientific discipline overall as such, Psychology is very well positioned to respond positively to these opportunities in learning, teaching and research because the quality of psychological research undertaken has recently been judged to be the best in the world.

Harry Jerome's theory of Structural Unemployment (1934) as cited in Edinyang, Odey and Joseph, (2015) can best be used to buttress the graduate employability the world over. Jerome in this theory developed the concept of technological unemployment, which formed the base of structural unemployment.

According to him, Structural unemployment refers to a social condition in which a labour market is unable to provide jobs for all eligible job-seekers because there is a mismatch between the skills of the unemployed and the skills needed for the available jobs. He maintained that Structural unemployment is a lubricant for the wheel of a vicious cycle of poverty to propel and that it could sometimes be sustained by persistent cyclical unemployment.

Psychological capital is a construct that is rooted in positive organizational behaviour (POB). According to Luthans, Youssef, and Avolio, (2015) psychological capital (PsyCap) is defined as An individual's positive psychological state of development that is characterized by (1) having

confidence (efficacy) to take on and put in the necessary effort to succeed at challenging tasks; (2) making a positive attribution (optimism) about succeeding now and in the future; (3) persevering towards goals and, when necessary, redirecting paths to goals (hope) in order to succeed; and (4) when beset by problems and adversity, sustaining and bouncing back and even beyond (resiliency) to attain success.

UNICEF, (2000) Quality Education refers to a system of education that through the programming process, structure and content enables: Learners who are healthy, well-nourished and ready to participate and learn, and supported in learning by their families and communities; Environments that are healthy, safe, protective and gender-sensitive, and provide adequate resources and facilities; Content that is reflected in relevant curricula and materials for the acquisition of basic skills, especially in the areas of literacy, numeracy and skills for life, and in such areas as gender, health, nutrition, HIV/AIDS prevention and peace. Processes through which trained teachers use child-centred teaching approaches in well-managed classrooms and schools and skilful assessment to facilitate learning and reduce disparities. Outcomes that encompass knowledge, skills and attitudes, and are linked to national goals for education and positive participation in society. Odunayo and Nkoro (2014) Quality Education is the one that frees the mind of its recipients from their misconceptions. Education has earlier been defined as a process by which individuals are assisted formally through proper direction and guidance to develop their capacities for their own benefits and that of society.

According to Eurosat, (2013) employability is about having the capability to gain initial employment, maintain employment and obtain new employment if required. In the words of Babalola, (2011) employability skills denote characters that may make an individual attractive to potential employers.

Knight and Yorke (2001) demystified the concept of employability to be a 'synergic combination of personal qualities, skills of various kinds and subject understanding.'

There is no doubt that the synergy between quality education and psychological capital would lead to employability competency of a graduate. The higher institutions of learning that are provided with all facilities necessary for quality education serves as the most important means through which high-quality human capital can be developed through education (Bakari, Hunjra, &Saman, 2017; Qenani, MacDougall, & Sexton, 2014). This is because the institutions of higher learning prepare the graduates to be firm in the face of challenges bedevilling the industries (Martin, Milne-Home, Barrett, Spalding, & Jones, 2000). Psychological capital in combination with quality education gives rise to the employability status of every graduate. Rawat and Sharma, (2018) maintained that employability consists of a bunch of fulfilment of various skills, comprehension and personal qualities that help to mould graduates and makes them more likely to secure employment and to be significantly efficacious in their selected occupations. The fact still remains that employability involves quality education along with job competence and development. Psychological capital refers to the actual and real constructive position of an individual.

Statement of the problem

Marock, 2008; Pool and Sewell, (2007) posits that graduates who enter the world of work today face a number of problems, like decreases in employment opportunities and job security, fast-changing technology and increasing personal responsibility for continual upskilling and lifelong learning – as well as keeping up with changes in their fields of knowledge. Fallows and Stevens in Marock, (2008)

stressed that it is no longer sufficient for people to have only technical skills and academic knowledge in order to find employment. The 21st century requires young adults who enter the world of work to be work-ready, employable and to sustain their employability. Their employability constitutes a sense of self-directedness or personal agency in retaining or securing a job or form of employment which according to Marock, 2008; Pool and Sewell, (2007) most graduates are lacking.

Objectives of the study

1. To examine the Psychological Capital influence on graduate employability
2. To examine Quality Education as a significant factor in graduate employability

Research Questions

1. Does Psychological Capital influence graduate employability?
2. Is Quality Education significant factor in graduate employability?

Research Hypotheses

1. There is no significant effect of Psychological Capital influence on graduate employability.
2. There is no significant influence of Quality Education on graduate employability.

Methodology

In this study, the ex-post facto research design was adopted. This design gives the researcher the chance to conduct the study without tempering with the variables. The variables were already in existence before the researcher commenced the study thus could not be manipulated by the researcher. The population of the study comprised of all unemployed graduates in Sabon Gari Local Government Area of Kaduna State. Data were gathered through purposive sampling technique. Foley, (2018) and Crossman, (2020) posits that purposive sampling is a non-probability sampling technique which is also known as judgmental, selective or subjective sampling. This sampling technique is useful especially when a target is needed to be reached quickly and proportionality is not the major concern. It allows the researchers to rely on their judgment, to deliberately choose a sample size with which the study can be carried out. A total of 100 respondents were purposefully used for the study. The major instrument for data collection was a four-point Likert scale questionnaire titled Psychological Capital and Graduate Employability Questionnaire (PCGEQ). This was designed by the researcher with the aid of four research experts to establish its validity and reliability. The test-retest method of reliability was used to test the reliability and the coefficient index of 0.763 was reported. The research question was subjected to a descriptive statistical test of frequency and percentage table. The researcher targeted only the unemployed graduates and administered the instruments. The instrument for data collection was a four-point Likert scale. The instrument has two sections namely: A and B. Section A consists of demographic or personal data such as gender, age, educational qualification. Section B contained ten items, which sought to get data on the relationship between the variables.

Result

Null Hypothesis One: There is no significant relationship between psychological capital and graduate employability. To test null hypothesis one, whether psychological capital significantly influence graduate employability, Pearson product moment correlation was carried out and the result was presented in table 1.

Table 1. Pearson Correlations on influence of educational psychology on quality education.

		Psych Capital	Graduate employability
Psychological capital	Pearson Correlation	1	.752**
	Sig. (2-tailed)		.000
	N	100	100
Graduate employability	Pearson Correlation	.752**	1
	Sig. (2-tailed)	.000	
	N	100	100

**. Correlation is significant at the 0.01 level (2-tailed).

From the correlation table a Pearson product moment correlation, it can be seen that correlation coefficient (r) equals 0.752, indicating a strong relationship between psychological capital and graduate employability. We can conclude that educational psychology can improve quality education. By implication there was a strong positive correlation between educational and quality education, which was statistically significant ($r = 0.752$, $n = 100$, $p<0.001$). It can therefore be said that to a large extend psychological capital significantly influence graduate employability. Therefore, the null hypothesis which states that: there is no significant relationship between psychological capital and graduate employability was rejected.

Hypothesis Two: There is no significant relationship between quality education and graduate employability. To test null hypothesis two, whether quality education significantly influence graduate employability, Pearson product moment correlation was carried out and the result was presented in table.2.

Table 2 Pearson Correlations on influence of quality education on graduate employability.

Correlations

		Quality Education	Graduate Employability
Quality Education	Pearson Correlation	1	.670**
	Sig. (2-tailed)		.000
	N	100	100
Graduate Employability	Pearson Correlation	.670**	1
	Sig. (2-tailed)	.000	
	N	100	100

**. Correlation is significant at the 0.01 level (2-tailed).

From the correlation table a Pearson product moment correlation, it can be seen that correlation coefficient (r) equals 0.670, indicating a strong relationship between quality education and graduate employability. We can conclude that quality education can improve graduate employability. By implication there was a strong positive correlation between quality education and graduate employability, which was statistically significant ($r = 0.670$, $n = 100$, $p<0.001$). It can therefore be said that to a large extend quality education significantly influence graduate employability. Therefore, the null hypothesis that there is no significant relationship between quality education and graduate employability was rejected.

Conclusion

Psychological Capital significantly influences Quality Education and Graduate Employability. The problem of graduate unemployment in this 21st century is poignantly alarming. In another vein, graduate employability which is a situation whereby even graduates, with 'good class of degrees' cannot get gainful employment immediately after graduation is equally staring at us. The employers of labour are lamenting that the higher institutions are pouring out graduates that do not possess the requisite skills for employment. Based on the finding of this study, it is concluded that employability of graduates is significantly influenced by psychology and psychological capital due the fact that they possessed strongly the values, skills and content that can pave the opportunities for quality education which in turn makes the graduates employable.

Recommendations

Based on the findings and conclusions, the following recommendations are forwarded:

- Psychological values and skills should be extended to all disciplines or field of learning in the tertiary institutions so that graduates can value their potential, ability and interest as psychology helps to prepare them for life skills training ior to their graduation.
- Psychology Capital should be inculcated in all courses been offered in our tertiary institutions as this would enable the graduates perform outstandingly in the place of work.
- *Psychology courses in tertiary institutions curriculum should be reformed and made core to provide students of higher institutions with the skills requirements of contemporary labour market.*
- *Emphasis on certificate instead of skill oriented training should be minimized*

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IMPACT OF HEALTH EDUCATION ON PRIMARY HEALTHCARE DELIVERY SYSTEM IN MAIDUGURI METROPOLITAN COUNCIL, BORNO STATE

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Abstract

This study assessed the impacts of health education in primary health care delivery system in Maiduguri Metropolitan Council, Borno state. Survey research design was used. The population of the study was one thousand four hundred (1400) health workers. The simple random sampling method was used to select the sample for the study which consisted of ten (10) health workers in each ward totalling one hundred and fifty (150) respondents. Data collected was described using frequency counts and percentage score and the hypothesis was tested using Chi-Square test at 0.05 level of significance. The result of the study revealed that health education has helped to prevent diseases, lessen money spent on treatment, change people attitude towards health care and has also encouraged health workers to devote more time to improving the health status of the community through primary health care delivery system. Health education has tremendous impact on modification of individuals behaviour which reduced mobility and mortality rate and has also provided more aids to situations of extreme stress, anxiety, depression and other emotional disturbances in an affordable and acceptable manner. But not all communities have benefited or engaged in health and community development activities. It was concluded that health education has played a major role in primary health care system by preventing diseases, lessen money spent on treatment, changed people attitudes to positive behaviours. Based on the findings, it was recommended that the government should bring free and compulsory health care services to every doorstep of individuals in the community. Moreso, regular monitoring and evaluation should be carried out on primary health care delivery system to ensure availability of health services to every community in the metropolis.

Keywords: Primary Healthcare delivery system, Health Education

Introduction

Most of the health problems in the communities result from failure to develop their full health potentials. These failures are due to lack of adequate health knowledge. Most of the health centres focus on treatment instead of prevention, health workers spent most of their time treating sick people, a large sum of money are being spent on treating diseases that could have been prevented in the first place. Patients expressed frustration with their inability to participate in decision making to obtain the information they need to be heard and to participate in the system of care that is responsive to their families, needs and values (Baba, 2007).

Akinsola (1993), revealed that increasing chronic care needs also highlight the importance of health professionals being better prepared in preventive health care and health promotion. It has been estimated that approximately 40 per cent of deaths are caused by a behaviour pattern that could be

modified. Therefore, we do not tolerate exorbitant hospitals and drugs prices and above all, that we can do something to change our community priorities and attitudes towards health care so that individual should have the opportunity to combat anti-health practices through comprehensive health education.

According to Naomi and Gbefwi (2004), most health centres and hospitals spend valuable time running clinics and attempting to cure illness with little time for health education such approaches never improves the health status of any community. Among the most important tools for the solution is to use health education to reduce the healthcare delivery cost by helping people to make their own choice about the patterns of living which enhances the well functioning of the body and mind.

Furthermore, John and Rhode (1993) emphasised that in a situation where health education takes no recognition for the real cause of problems and conditions of the community, all effort in that respect would always be fruitless. Therefore, health education is valuable tools for the practitioners in the campaign to change attitudes towards healthy living and adequate utilization of health care. (Lankester, 1992). Primary healthcare is therefore very much concerned with health education and promotion. To achieve effective participation by the community something needs to be done by the health care services by creating and expanding methods of existing health programs that will improve the quality of healthcare that people need to be informed and involved on their potentials by increasing the general level of education for improving their health through their own capacity and their efforts towards health care and there is need to empower communities to facilitate more community involvement, capacity, building, empowerment, orientation and mobilization as regards to training, information sharing could further enhance the primary healthcare service3 by the community, and help people feel valued and supported in more areas of life and will contribute to their health (Baba, 2007; Ibrahim &Ronke, 1992).

The National Health Policy (2005), "provide policy guidelines and strategies support to state, local government and private sectors in their effort at establishing health care delivery system that is primary health-oriented and are accessible to all people. The primary healthcare provides health services at the grassroots to the community through dispensaries and health clinics. Affairs of primary health care services usually run by the local government and supervised and supported by state and federal government. They make a referral of cases to comprehensive health centres and general hospitals. The services provided at primary health care (PHC) includes; prevention and treatment of communicable disease immunization, maternal and child health services, family planning, public health education, environmental health, collection of statistical data and health-related event.

Elaine, Stephen &Gambescia, (2015), stated that the different component of primary health care of local government (PHC) are manned by personnel of diverse speciality, the local government is running primary health care service delivery in compliance with the principles/framework of national health policy. The primary health care is divided into various health district/wards, so as to enhance maximum benefits of the principle of decentralizing of the health sector whereby people are involved, participate and mobilized in the primary health care process.

According to Lawrence & Daniel (2002), success in health education has to be measured in human terms life saved, suffering and disability reduced, productivity and creativity enhanced and something called quality of life made rewarding for everyone. The goals of health education are those of medicine as a whole (curative and preventive) that is to reduce morbidity, mortality and disability and more recently to reduce the cost of healthcare.

Health education teaches the basic health knowledge and prevention and ideas that reshape the everyday habit of the people with an unhealthy lifestyle in communities. This type of changing condition not only affects the immediate recipient of such education but also future generation will benefit from improved and properly cultivated ideas about health that will lead eventually be ingrained with widely spread health education. Moreover, besides disease prevention, health education can also provide more aids and help people deal healthier with situation of extreme stress, anxiety, depression or other emotional disturbances to lessen the impact of these sort of mental. Social and emotional constituents which can consequently lead to the detrimental health condition. Many illnesses are completely and easily preventable if the people are properly informed via some educational channels, even the chronic complication of many illnesses and many more of serious diseases can often be everted among well-informed individuals by the process of education early diagnosis and treatment. Health education commonly includes an appraisal of what is known by a population about disease control, an assessment of habit and attitudes as they relate to spreading of diseases and the prevention of specific means to remedy (Ransome, 1990; Joint committee on Health education and promotion terminology, 2001).

Maiduguri is a cosmopolitan area inhabited by people with diverse cultural background. Many lives in a dirty environment and poor sanitation health literacy is low and also receive treatment from unqualified trained personnel and patients medicine stores that are physically available in the communities. Many lives in poverty and ignorance.

The health scenario is positioned at unique cross-road as the communities facing a triple burden of diseases, the factors which aid urbanization, development and trade act as a double-edged sword as they lead to a positive outcome on one hand and increase the vulnerability to poor health on the other hand, as these contribute to the sedentary lifestyle and unhealthy pattern. Due to that socioeconomic background in respect of education, economy and health management, the degree of implementation and achievement of the programme undergo certain constraints in the study; which constitute a problem in the achievement of health for all by the year 2000 and beyond in the local government. Therefore, it is against this background that this study was designed to assess the impacts of health education in primary health care delivery system in Maiduguri Metropolitan Council of Borno State, so as to determine the degree of implementation, its coverage, success and failures in order to ascertain areas of commendation and recommendation to improve the programme.

Research Question

1. What are the impacts of health education in primary health care delivery system in Maiduguri Metropolitan Council, Borno State?

Hypothesis

Ho1: There is no significant difference on the impacts of health education in primary health care delivery system in Maiduguri Metropolitan Council?

Methodology

The survey research method was used for the study. The target population for this study comprises all categories of health workers in the fifteen (15) wards of Maiduguri metropolis with the total population of one thousand four hundred (1400) health workers. Simple random sampling method was used to select the sample ten (10) health workers in each ward totalling one hundred and fifty (150) respondents. In general, random sampling techniques are preferred by the researcher in many

studies as compared to non-random sampling techniques, random selections are more accurate and less biased (Udoh &Ajala, 1991).

The research instrument used to collect data for this study was a self-structured questionnaire with the response mode of "Agree or Disagree". The questionnaire deals with the impacts of health education in primary healthcare delivery system. Also, the instrument certifies face validity as it was validated by the project supervisor and other experts in the Department of Physical and Health Education, University of Maiduguri.

With the introduction letter from the researchers seeking permission from whom it may concern to conduct the study attached to the questionnaire. The distribution and collection of the questionnaire were carried out by the researchers. The researchers explained to the respondents on how to fill the questionnaire. The questionnaire was collected back immediately. The data collected for this study were grouped according to responses of each of the items on the questionnaire. The data were analysed using frequency counts and percentage scores. The hypotheses were tested using Chi-square at 0.05 level of significance.

Results

Research Question One: What are the impacts of health education in primary health care delivery system?

Table 1: Respondents view on the impacts of health education in primary health care delivery system.

S/N	Statement	Responses	Respondents	Percent (%)
1.	Does health education help in modification of individuals in order to reduce mobility and mortality rate?	Yes	100	66.7
		No	50	33.3
		Total	**150**	**100**
2.	Is there friendly relationship between the health workers and the communities?	Yes	90	60
		No	60	40
		Total	**150**	**100**
3.	Beside disease prevention, will health education provide more aids with situation of extreme stress, anxiety, depression and other emotional disturbances?	Yes	130	86.7
		No	20	13.3
		Total	**150**	**100**
4.	Do communities engage on health and community development activities?	Yes	70	46.7
		No	80	53.3
		Total	**150**	**100**
5.	Are the services affordable and acceptable by the community?	Yes	93	62
		No	57	38
		Total	**150**	**100**

Table 1 indicated the impacts of health education in primary health care delivery system. Item 1, shows 100(66.7%) of the respondents agreed that health education help in modification of individuals in order to reduce mobility and mortality rate, while 50(33.3%) of the respondents disagreed. Item 2, shows 90(60%) of the respondents that there is friendly relationship between the

health workers and the communities, while 60(40%) of the respondents disagreed with the statement. Item 3, shows 130(86.7%) of the respondents agreed that health education provide more aids with situation of extreme stress, anxiety, depression and other emotional disturbances, while 20(13.3%) of the respondents disagreed. Item 4, shows 70(46.7%) of the respondents agreed that communities engage on health and community development activities, while 80(53.3%) of the respondents disagreed. Item 5, shows 93(62%) of the respondents agreed that the services are affordable and acceptable by the community, while 57(38%) of the respondents disagreed with the statement. Therefore, the result of the study revealed that health education has tremendous impact on modification of individuals behaviour which reduced mobility and mortality rate and has also provided more aids to situations of extreme stress, anxiety, depression and other emotional disturbances in an affordable and acceptable manner. But not all communities have benefited or engaged in health and community development activities.

Hypothesis One: There is no significant difference on the impacts of health education in primary health care delivery system in Maiduguri Metropolitan Council?

Table 2: A summary of Chi-square (X^2) test on the impacts of health education in primary health care delivery system in Maiduguri Metropolitan Council

Impacts of Health Education	Yes(%)	No(%)	df	χ^2	X^2Crit	P-val	Decision
Health modification.	100(66.7)	50(33.3)					
Community relationship	90(60)	60(40)					
Disease Prevention	130(86.7)	20(13.3)	4	54.99	5.991	0.0001	*Rejected
Community Development	70(46.7)	80(53.3)					
Affordable services	93(62)	57(38)					

χ^2, **df 3 = 5.991 (P**<0.05)

Results of Chi-square (x^2) analysis in Table 2 shows that the x^2 value 54.95 is greater than x^2Critical which is 5.991 and p-value 0.0001 is less than the significance level of 0.05 with degree of freedom 3 (54.95>3.84, p=0.0001<0.05, df.3).The null hypothesis is thereby rejected. This implies that there is significant difference on the impacts of health education in primary health care delivery system in Maiduguri Metropolitan Council.

Discussion

The study aimed to assess the impacts of health education in primary health care delivery system in Maiduguri metropolitan council of Borno state. The findings of the study revealed that health education has tremendous impact on modification of individuals behaviour which reduced mobility and mortality rate and has also provided more aids to situations of extreme stress, anxiety, depression and other emotional disturbances affordably and acceptably. But not all communities have benefited or engaged in health and community development activities. This conforms with Landmark Report, (2001) stated that Healthy people 2020, reflects the assessment of major risk to health and wellness, changing public priorities and emerging issues related to our nation's health preparedness and prevention. By focusing on prevention, health education reduces the lost (both human and financial) that individuals, employers, families, insurance companies, medical facilities, communities, the nation and the state would spend less on medical treatment.

Moreover, the results of the study revealed that there is significant difference on the impacts of health education in primary health care delivery system in Maiduguri Metropolitan Council. This health education has helped to prevent diseases, lessen money spent on treatment, change people attitude towards health care and has also encouraged health workers to devote more time to improving the health status of the community through primary health care delivery system. This is in line with Indian Journal of Community Medicine (2012) who stated that primary health care is the art and science of promoting and protecting good health, preventing disease, disability and premature death, restoring good health when it is impaired by disease or injury and minimizing the quality of health. Primary health care requires collective action by society, collaborative teamwork by nurses, physicians, engineers, environmental scientist, health educators, social workers, nutritionist, administrators and other specialized professionals and technical workers and effective partnership with all level of government.

Conclusion

Based on the findings and limitations of this study, it was found out that health education has played a major role in primary health care system by preventing diseases, lessen money spent on treatment, change people attitude and has provided more aids to situations of extreme stress, anxiety, depression and other emotional disturbances affordably and acceptably. It also accommodated the diverse cultural needs and in combating anti-health practices. But not all communities have benefited or engaged in health and community development activities.

Recommendation

The study recommended that the government should bring free and compulsory health care services to every doorstep of individuals in the community. More so, Regular monitoring and evaluation should be carried out on primary health care delivery system to ensure availability of health services to every community in the metropolis.

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PERCEIVED EFFECTS OF SELF-MEDICATION ON THE HEALTH OF THE PEOPLE IN SHANONO LOCAL GOVERNMENT AREA OF KANO STATE

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Abstract

This paper assessed the perceived effect of self-medication on health of the people in Shanomo Local Government Area of Kano State. Four (4) research questions were formulated and answered. Descriptive survey research design was used, three hundred and eighty four (384) men and women was selected systematically from the population of this study which consist of 162,030 people in Shanono Local Government Area of Kano State. Closed-ended questionnaire was used to collect data from the sample selected. Simple percentage and frequency count was used to analyze the items on the questionnaire after collection. The findings revealed that financial constraint, cultural believe and location of the clinic are the reasons for self-medication, self-medication have effect on the brain, increase the chance of mental illness, self-medication have effect on the social misbehavior, social misconduct, level of social adjustment and drug addiction and self-medication increases emotional distress and mood. It was concluded that self-medicationhave effect on the brain and social misbehavior and also increases emotional distress, chance of mental illness and mood. It was therefore recommended that people need to be more informed on the effect of self-medication by government and non-governmental organization through staging mass campaign and health agencies should create awareness on the effect of self-medication on the health through the mass media.

Keywords*: perceived, self-medication, health*

Introduction

Self-medication involves the use of medicines to treat self-recognized diseases or symptoms; or the intermittent or continued use of prescribed medication for chronic or recurring disease or symptoms; or the use of medications of family members. Self-medication allows individuals to take responsibility of their health, enhances access to medications, improves medicine knowledge; and promotes the efficient use of scarce resources of the health care system especially in the developing world (World Health Organization, WHO, 2016). Self-medication is a common practice in developing countries. About 60-80 % of health problems are self-medicated (Barros, 2014).

Connell, Brazier, O'Cathain, Lloyd-Jones and Paisley (2012) stated that self-medication often co-exists with depression. Studies has reported that one of the reasons that people continued smoking marijuana was that they felt it relieved their symptoms of depression and anxiety (Winfield and Richards, 2016). Users of psychedelic drugs were usually motivated by a desire to discover in themselves something not obvious or attainable in normal experience (Grob, Danforth, Chopra, Hagerty, McKay, Halberstadt& Greer, 2011). Indeed, self-medication is a common practice both in the economically deprived society (rural area) as much as in the economically privileged society (urban area). Without doubt, self-medication has its positive and negative aspects. The World Health

Organization (WHO, 2016) has pointed out that responsible self-medication can help prevent and treat ailments that do not require medical consultation and provides a cheaper alternative for treating common illness. It is therefore necessary to develop tools in every environment to evaluate the appropriateness of self-medication. The challenge and opportunity for government, health care professionals, and providers of self-medication products all over the world and in developing nations particularly, have a responsibility in the framework of self-medication (Mithoefer, Grob& Brewerton, 2016; Sharma, Verma, Sharma & Kapoor, 2005).

However, successful self-medication practices have been associated with the general education and socio-economic status. For an individual to self-medicate appropriately, he must be able to accurately recognize symptoms, set therapeutic objectives, select appropriate medicine to be used for his medical condition, and determine appropriate dosage and dosage schedule taking into account his medical history, contraindication and possible side effects of the medicine for an individual to indulge in self-medication he therefore require adequate knowledge about medicines (Omolase, Adeleke, Afolabi and Afolabi, 2013; Afolabi, 2016).

Self-medication affects people from all social class and also exerts influence on the general attitude of society towards drug abuse and misuse. Drug abuse is not a new phenomenon in this act of taking a drug to fulfil a need that the drug cannot pharmacologically fulfil. While drug abuse is the repeated misuse of drugs (Omolase, Adeleke, Afolabi & Afolabi, 2013). This prompted the researcher's interest to carryout a study with full aim of finding out the perceived effects of self-medication on the health of the people in Shanono Local Government Area of Kano State.

Research Questions

i. What are the reasons of self-medication among people of Shanono Local Government Area of Kano State?
ii. What are the perceived effects of self-medication on the mental health of people in Shanono Local Government Area of Kano State?
iii. What are the perceived effects of self-medication on the social health of people in Shanono Local Government Area of Kano State?
iv. What are the perceived effects of self-medication on the emotional health of people in Shanono Local Government Area of Kano State?

Methodology

Descriptive survey was used for research design for this research work. This method was deemed appropriate as the research requires the researcher to collect personal and general information from the respondents. Adewunmi (1998) contended that descriptive survey research method is used in describing an area of interest factually and accurately. It is used to find the meaning and obtaining an understanding of the present condition. This is because it seeks to obtain information that discloses existing phenomenon by asking individuals about their perceived effect of self-medication.

The population of this study consists of 162,030 people in Shanono Local Government Area of Kano State (NPC projection, 2019). From the population, systematic sampling technique was used to select the respondents. Three hundred and eighty-four (384) men and women were selected according to Krejecie and Morgan (1970) that 384 sample can be used to generalize population of over 100,000.

The research instrument that was used for research is a closed ended questionnaire which was divided into two sections; Section A and Section B. Section A contains five (5) items designed to obtain personal data of the respondents such as; Sex, age, marital status, religion, and educational status while section B contains twenty five (25) items that test the research questions. The questions in Section B allowed the respondents to choose from the available options by ticking the boxes corresponding to their appropriate choices.

One hundred percent (100%) of the questionnaire were retrieved at the end of the study, the questionnaires was filled and collected from the respondents, thereafter, the researcher collected the questionnaire at a spot, collate and subject them for coding, sorting, analysis and interpretation. Simple percentage and frequency count were used to analyze the items on the questionnaire after collection, the researcher was then scored the items on the questionnaire in other to answer the research objectives and research questions.

Results

Table 1: Demographic Characteristics of the Respondents

Gender	Frequency	Percentage
Male	238	58.0
Female	146	42.0
Total	**384**	**100.0**
Age		
18 - 25 years	131	34.1
26 – 35 years	130	33.9
36 - 45 years	123	32.0
Total	**384**	**100.0**
Religion		
Christianity	172	44.8
Islam	198	51.6
Traditional	14	3.6
Total	**384**	**100.0**
Marital Status		
Single	144	37.5
Married	202	52.6
Divorce	38	9.9
Total	**384**	**100.0**
Educational Qualification		
Primary School	74	19.3
SSCE	42	5.7
OND/NCE	136	24.5
B.Sc	94	35.4
M.Sc	26	12.0
Ph.D	12	3.1
Total	**384**	**100.0**

Table 1 above shows the gender of the respondents, 238 (58.0%) of the respondents were male while 146 (38.0%) of the respondents were female. Therefore, majority of the respondents were male. Table 1 above shows the age of the respondents, 131 (34.1%) of the respondents fell between the age range of 18 – 25 years, 44 (33.9%) of the respondents fell between the age range of 26 – 35 years while 123 (32.0%) of the respondents fell between the age range of 36 – 45 years. Table 1 above shows the religion of the respondents, 172 (44.8%) of the respondents were Christian, 198 (51/6%)

of the respondents were Islam while 14 (3.6%) of the respondents were Traditional. Table above shows the marital status of the respondents, 144 (37.5%) of the respondents were single, 202 (65/6%) of the respondents were married while 38 (9.9%) of the respondents were divorce. Table above shows the educational qualification of the respondents, 74 (14.0%) of the respondents primary school holder, 42 (5/7%) of the respondents were SSCE holders, 136 (35.4%) of the respondents were OND/NCE holders, 94 (24.5%) of the respondents were B.Sc holders, 26 (12.0%) were M.Sc holders while 12 (3.1%) of the respondents were Ph.D holders.

Answering of Research Questions

Research Question 1: What are the reasons of self-medication among people of Shanono Local Government Area of Kano State?

Table 2: Reasons of self-medication among people

	Frequency	Percentage
Some people self-medicate when they have minor ailment or illness		
Strongly Agreed	170	44.3
Agreed	142	37.0
Disagreed	53	13.8
Strongly Disagreed	19	4.9
Total	**384**	**100.0**
Financial constraint is one of the reason by people self-medicate		
Strongly Agreed	164	42.7
Agreed	174	45.3
Disagreed	34	8.9
Strongly Disagreed	12	3.1
Total	**384**	**100.0**
Some people self-medicate because they believe they know what to do better than doctors		
Strongly Agreed	124	32.3
Agreed	114	29.7
Disagreed	99	25.8
Strongly Disagreed	47	12.2
Total	**384**	**100.0**
Some people self-medicate because clinics are far away to their localities		
Strongly Agreed	118	30.7
Agreed	234	60.9
Disagreed	22	5.7
Strongly Disagreed	10	2.7
Total	**384**	**100.0**

Table 2 above shows the responses of respondents that some people self-medicate when they have minor ailment or illness, 170 (44.3%) of the respondents choose strongly agreed, 142 (37.0%) of the respondents choose agreed, 53 (13.8%) of the respondents choose disagreed while 19 (4.9%) of the respondent choose strongly disagreed. Therefore, majority of the respondents agreed that some people self-medicate when they have minor ailment or illness.

Table 2 above shows the responses of the respondents that financial constraint is one of the reason people self-medicate, 164 (42.7%) of the respondents choose strongly agreed, 174 (45.3%) of the respondents choose agreed, 34 (8.9%) of the respondents choose disagreed while 12 (3.1%) of the respondent choose strongly disagreed. Therefore, majority of the respondents agreed that financial constraint is one of the reason by people self medicate.

Table 2 above shows the responses of the respondents that some people self medicate because they believe and know what to do better than doctors, 124 (32.3%) of the respondents choose strongly agreed, 114 (29.7%) of the respondents choose agreed, 99 (25.8%) of the respondents choose disagreed while 47 (12.2%) of the respondent choose strongly disagreed. Therefore, majority of the respondents disagreed that some people self medicate because they believe they know what to do better than doctors.

Table 2 above shows the responses of the respondents whether some people self medicate because clinics are far away to their localities, 118 (30.7%) of the respondents choose strongly agreed, 234 (60.9%) of the respondents choose agreed, 22 (5.7%) of the respondents choose disagreed while 10 (2.7%) of the respondent choose strongly disagreed. Therefore, majority of the respondents disagreed that some people self-medicate because clinics are far away to their localities.

Research Question 2: What are the perceived effects of self-medication on the mental health of people in Shanono Local Government Area of Kano State?

Table 3: Frequency on the Perceived effect of self-medication on the mental health

	Frequency	Percentage
Self-medication can lead to mental disorder		
Strongly Agreed	173	45.1
Agreed	134	34.9
Disagreed	48	12.5
Strongly Disagreed	29	7.5
Total	**384**	**100.0**
Self-medication affect the brain		
Strongly Agreed	133	34.6
Agreed	184	48.0
Disagreed	45	11.7
Strongly Disagreed	22	5.7
Total	**384**	**100.0**
Self-medication causes anxiety.		
Strongly Agreed	98	25.5
Agreed	192	50.0
Disagreed	61	15.9
Strongly Disagreed	33	8.6
Total	**384**	**100.0**
Self-medication increases the chance of mental illness		
Strongly Agreed	150	39.0
Agreed	144	37.5
Disagreed	54	14.1
Strongly Disagreed	36	9.4
Total	**384**	**100.0**

Table 3 above shows the responses of the respondents whether self-medication can lead to mental disorder, 173 (45.1%) of the respondents choose strongly agreed, 134 (34.9%) of the respondents choose agreed, 48 (12.5%) of the respondents choose disagreed while 29 (7.5%) of the respondent choose strongly disagreed. Therefore, majority of the respondents disagreed that self-medication can lead to mental disorder.

Table 3 above shows the responses of the respondents whether self-medication affect the brain, 133 (34.6%) of the respondents choose strongly agreed, 184 (48.0%) of the respondents choose agreed,

45 (11.7%) of the respondents choose disagreed while 22 (5.7%) of the respondent choose strongly disagreed. Therefore, majority of the respondents agreed that self-medication affect the brain.

Table 3 above shows the responses of the respondents whether self-medication causes anxiety, 98 (25.5%) of the respondents choose strongly agreed, 192 (50.0%) of the respondents choose agreed, 61 (15.6%) of the respondents choose disagreed while 33 (8.6%) of the respondent choose strongly disagreed. Therefore, majority of the respondents disagreed that self-medication causes anxiety.

Table 3 above shows the responses of the respondents whether self-medication increases the chance of mental illness, 150 (39.0%) of the respondents choose strongly agreed, 144 (37.5%) of the respondents choose agreed, 54 (14.1%) of the respondents choose disagreed while 36 (9.4%) of the respondent choose strongly disagreed. Therefore, majority of the respondents agreed that self-medication increases the chance of mental illness.

Research Question 3: What are the perceived effect of self-medication on the social health of people in Shanono Local Government Area of Kano State?

Table 4: Perceived effect of self-medication on the social health of people

	Frequency	Percentage
Self-medication can lead to social misbehavior		
Strongly Agreed	131	34.1
Agreed	152	39.6
Disagreed	48	12.5
Strongly Disagreed	53	13.8
Total	**384**	**100.0**
Self-medication increase social misconduct		
Strongly Agreed	83	21.6
Agreed	225	58.6
Disagreed	45	11.7
Strongly Disagreed	31	8.1
Total	**384**	**100.0**
Self-medication have effect on the level of social adjustment		
Strongly Agreed	163	42.4
Agreed	133	34.6
Disagreed	38	9.9
Strongly Disagreed	50	13.1
Total	**384**	**100.0**
Self-medication can cause drug addiction		
Strongly Agreed	83	21.6
Agreed	232	60.4
Disagreed	44	11.5
Strongly Disagreed	23	6.5
Total	**384**	**100.0**

Table 4 above shows the responses of the respondents on whether self-medication can lead to social misbehavior, 131 (34.1%) of the respondents choose strongly agreed, 152 (39.6%) of the respondents choose agreed, 48 (12.5%) of the respondents choose disagreed while 53 (13.8%) of the respondent choose strongly disagreed. Therefore, majority of the respondents agreed that self-medication can lead to social misbehavior.

Table 4 above shows the responses of the respondents on whether self-medication increase social misconduct, 83 (21.6%) of the respondents choose strongly agreed, 225 (58.6%) of the respondents choose agreed, 45 (11.7%) of the respondents choose disagreed while 31 (8.1%) of the respondent choose strongly disagreed. Therefore, majority of the respondents agreed that self-medication increase social misconduct.

Table 4 above shows the responses of the respondents on whether self-medication have effect on the level of social adjustment, 163 (42.4%) of the respondents choose strongly agreed, 133 (34.6%) of the respondents choose agreed, 38 (9.9%) of the respondents choose disagreed while 50 (13.1%) of the respondent choose strongly disagreed. Therefore, majority of the respondents disagreed that self-medicationhave effect on the level of social adjustment.

Table 4 above shows the responses of the respondents whether self-medication can cause drug addiction, 83 (21.6%) of the respondents choose strongly agreed, 232 (60.4%) of the respondents choose agreed, 44 (11.5%) of the respondents choose disagreed while 23 (6.5%) of the respondent choose strongly disagreed. Therefore, majority of the respondents disagreed that self-medication can cause drug addiction children.

Research Question 4: What are the perceived effects of self-medication on the emotional health of people in Shanono Local Government Area of Kano State?

Table 5: Perceived effect of self-medication on the emotional health of people

	Frequency	Percentage
Self-medication affect the emotional health of the people		
Strongly Agreed	233	60.0
Agreed	104	27.0
Disagreed	23	6.0
Strongly Disagreed	23	6.0
Total	**384**	**100.0**
Self-medication increases emotional distress		
Strongly Agreed	229	59.6
Agreed	104	27.1
Disagreed	33	8.6
Strongly Disagreed	18	4.7
Total	**384**	**100.0**
Self-medication depress the mood of the person		
Strongly Agreed	79	20.6
Agreed	182	47.4
Disagreed	85	22.1
Strongly Disagreed	38	9.9
Total	**384**	**100.0**
Self-medication affect the emotional health of the person		
Strongly Agreed	119	31.0
Agreed	142	37.0
Disagreed	31	8.0
Strongly Disagreed	92	24.0
Total	**384**	**100.0**

Table 5 above shows the responses of the respondents on whether Self-medication affect the emotional health of the people, 233 (60.0%) of the respondents choose strongly agreed, 104 (27.0%)

of the respondents choose agreed, 23 (6.0%) of the respondents choose disagreed while 23 (6.0%) of the respondent choose strongly disagreed. Therefore, majority of the respondents disagreed that self-medicationaffect the emotional health of the people.

Table 5 above shows the responses of the respondents on whether self-medication increases emotional distress, 229 (59.6%) of the respondents choose strongly agreed, 104 (27.1%) of the respondents choose agreed, 33 (8.6%) of the respondents choose disagreed while 18 (4.7%) of the respondent choose strongly disagreed. Therefore, majority of the respondents disagreed that self-medication increases emotional distress.

Table 5 above shows the responses of the respondents on whether self-medication depress the mood of the person, 79 (20.6%) of the respondents choose strongly agreed, 182 (47.4%) of the respondents choose agreed, 85 (22.1%) of the respondents choose disagreed while 38 (18.0%) of the respondent choose strongly disagreed. Therefore, majority of the respondents disagreed that self-medicationdepresses the mood of the person.

Table 5 above shows the responses of the respondents on whether self-medication affect the emotional health of the person, 119 (31.0%) of the respondents choose strongly agreed, 142 (37.0%) of the respondents choose agreed, 31 (8.0%) of the respondents choose disagreed while 92 (24.0%) of the respondent choose strongly disagreed. Therefore, majority of the respondents disagreed that self-medicationaffects the emotional health of the person.

Findings

1. Financial constraint, cultural beliefs and locations of the clinic are one of the reasons of self-medication.
2. Self-medicationhas effect on the brain and increase the chance of mental illness.
3. Self-medicationhas effect on the social misbehavior, social misconduct, level of social adjustment and drug addiction.
4. Self-medication increases emotional distress and mood.

Discussion

This paper finds out that there is perceived effect of self-medication on the health of the people. This finding is in line with Connell, Brazier, O'Cathain, Lloyd-Jones and Paisley (2012) stated that self-medication often co-exists with depression. Studies has reported that one of the reasons that people continued smoking marijuana was that they felt it relieved their symptoms of depression and anxiety (Winfield and Richards, 2016). Users of psychedelic drugs were usually motivated by a desire to discover in themselves something not obvious or attainable in normal experience (Grob, Danforth, Chopra, Hagerty, McKay, Halberstadt& Greer, 2011). Indeed, self-medication is a common practice both in the economically deprived society (rural area) as much as in the economically privileged society (urban area). Without doubt, self-medication has its positive and negative aspects. The World Health Organization (WHO, 2016) has pointed out that responsible self-medication can help prevent and treat ailments that do not require medical consultation and provides a cheaper alternative for treating common illness. It is therefore necessary to develop tools in every environment to evaluate the appropriateness of self-medication. The challenge and opportunity for government, health care professionals, and providers of self-medication products all over the world and in developing nations particularly, have a responsibility in the framework of self-medication (Mithoefer, Grob& Brewerton, 2016; Sharma, Verma, Sharma & Kapoor, 2005).

However, successful self-medication practices have been associated with the general education and socio-economic status. For an individual to self-medicate appropriately, he must be able to accurately recognize symptoms, set therapeutic objectives, select appropriate medicine to be used for his medical condition, and determine appropriate dosage and dosage schedule taking into account his medical history, contraindication and possible side effects of the medicine for an individual to indulge in self-medication he therefore require adequate knowledge about medicines (Omolase, Adeleke, Afolabi and Afolabi, 2013).

Conclusion

Self-medication is thus seen as an attempt by people to take care of their own health. Some of the reasons for the increase in prevalence of self-medication practice are rising socioeconomic status of people, increased literacy rates, easy access to information, shortage of time, easy availability of the over the counter drugs, etc. Responsible self-medication requires that medicines be consumed only after ensuring that they are of good quality and are accompanied with information about drug administration, monitoring, adverse drug reactions, interactions and warnings, etc. However, most people pop the pills directly from previous left overs, or purchase from the pharmacies without prescription, and often without any health advice.

Recommendations

Considering this research findings, the following recommendations can be drawn;

1. People need to be more informed on the effect of self-medication by government and non-governmental organization through staging mass campaign.
2. Health agencies and health educators should create awareness on the effect of self-medication on the health through the mass media.

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UNDERGRADUATES' PERCEPTION ON TRANSPORTATION ISSUESIN THE NIGERIAN PUBLIC UNIVERSITIES

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Abstract

Students of public universities face many challenges of transportation issues which affect their well-being. The study investigated undergraduates' perception of transport issues in public universities in Nigeria. The study adopted descriptive study design. The sample of the study was undergraduates in public universities in four selected states in South-west in Nigeria using simple random sampling technique. The instrument employed for data collection was self-structured questionnaire tagged "Undergraduates' Perception on Transport Issues in Public Universities Questionnaire (UPTIPUQ)". The data collected were analysed using descriptive statistics of mean and rank order to answer the research questions. Finding revealed that major problems of transportation issues in public universities in Nigeria as perceived by undergraduates was the limited available buses/cars in the school. The finding also revealed that major causes, effects and solutions to transportation issues were the limited available cabs/buses, spending long hours at the school park to board cabs/buses make undergraduates get home late and affected their learning activities. ***It was recommended that*** *means of increasing transport service should be explored. Ensuring the punctuality of the students for lectures rests on the brief and cogent university transport strategy and policy in the university communities.*

Key Word: Transportation Issues, Undergraduates, Causes, Solutions, Public Universities

Introduction

Government at all levels and other stakeholders including parents and educators are constantly examining the best solutions that may improve the education system to provide education for all. The establishment of a university as the highest level of education is one of the prospects to access and acquire quality education for young learners. The success of universities in achieving their initial responsibilities of educating and socialising students depend on their regular and punctual attendance in schools. According to Jones (2006), attendance is a priority to educators. Good attendance indicates the level of learners' seriousness with the study, intended behavioural modification and attainment of educational goals of a particular level of the education. Committed facilitators take students attendance before teaching their subjects to determine the number of students who attended the class. This attendance depends on the mobility of students from their various destinations to the school which is referred to as transportation.

Transportation is an important part of human activity. It forms the basis of all socio-economic activities. In many developing countries, lack of transport facilities most of the times hinders economic development, a good transport system is essential to support economic growth and

development. Bad roads, heavy traffic trains, overcrowded aeroplanes and congested ports are common features in developing countries. Physical problems such as untrained transport managers and planners, capital restructuring and bureaucracies, ineffective traffic regulations are present in the country. Generally, transportation is the actual physical movement of people and goods from one destination to another (Ahukannah, Ndinaechi&Arukwu, 2003). Various means of transportation exist for both human and material resources. These means have emerged through the length of time of human existence on the planet.

Man, nations, regions and the world would not develop without transportation, which is a key factor in physical and economic growth (Oyesiku, 2002). Transportation systems and land use are interdependent. Indeed research findings indicate compelling and consistent connections between them (Ewing & Cervero, 2001; Polzin, 2004). According to Bailey, Mokhtarian, and Little (2008), transportation route is part of distinct development pattern or road network and mostly described by regular street patterns as an indispensable factor of human existence, development and civilisation. The route network coupled with increased transport investment result in changed levels of accessibility that reflected through Cost-Benefit Analysis, savings in travel time, and other benefits. These benefits are noticeable in increased catchment areas for services and facilities such as shops, schools, offices, banks, and leisure activities.

Road networks are observed in terms of its components of accessibility, connectivity and traffic density, level of service, compactness, and density of particular roads. Level of service is a measure by which the quality of service on transportation devices or infrastructure is determined. It is a holistic approach considering several factors regarded as measures of traffic density and congestion rather than the overall speed of the journey (Mannering, Walter & Scott, 2004). Access to major roads provides relative advantages upon which commercial users locate to enjoy. Modern businesses, industries, trades and general activities depend on transport and infrastructure, with the movement of goods and services from place to place, it is becoming vital and inseparable aspects of global and urban economic survival. Developments of various transportation modes have become pivotal to physical and economic developments. Such modes include human porterage, railways, ropeways and cableways, pipelines, inland waterways, sea, air and roads (Said & Shah, 2008).

Students' transport is very important, although, there is little attention by the government to impact significantly on its demands by students during peak hours. As a result of this, Lurdes Didier and Pascal (2003) reported that transport issues can discourage dropouts among children from poor homes. Numbers of studies have established that poor students' attendance is an important predictor of students' failure (Janes, 2009). Achievement gains in education are determined to an extent degree by time-on-task and time allocated for learning. Students who expend more time on task tend to demonstrate more achievement gains than those who spend less time on a given task (McKinney, 2000).

According to Olomola (2003), inadequate provision of transport facilities and services provide a basis for the incidence of poverty across various Nigerian communities, especially in areas. The categories of transport problems that can be identified are bad roads, scarcity of fuel (high fuel price,

shortage of fuel supply and consequential high transport cost), traffic congestion (long waiting time, bad driving habits, traffic hold-ups among others), inadequate high passenger capacity/mass transit, vehicles and overloading, high cost and shortage of spare parts, poor vehicle maintenance and archaic vehicles. It is established that inadequate transport facilities and services, as well as the constraints imposed on the mobility and accessibility of people to facilities such as markets, hospitals and water sources, hinder the progress and development of African nations.

Despite the crucial role transportation plays in the socio-economic development of every society, most developing countries are characterised by the inadequate transport system. Since transport is one of the major problems facing students in public universities to attend their classes at a specific time due to distance where the schools located is a great challenge. Students have an issue with boarding bus, car and most difficultly tricycles on campus. This makes it difficult for students to trek the long distance to the school park after the long lecture hours to meet a long queue at the park. It is difficult for students to get to school in the morning as a result of poor transportation. People and other road users compete with them to board public buses when they are going to schools (Onyango, 2012). Transport has consistently caused problems for students although the school management has tried to make an effort to improve the transport services the problem is still persistently increasing as the students' population on continuously rises. In summary, the urban transport challenges in Nigeria today include traffic congestion, parking lots, accidents and environmental pollution. In some major cities, vehicles are seen crawling on the roads especially in both the morning and evening peak or rush hour periods. This amounts to a daily loss of time and energy in the various urban centres.

Also, Traffic delay problems are manifesting in many of the major urban centres in Nigeria. They are indeed becoming a menace to free flow of traffic in these cities. These problems are caused by ineffective use of road space and growth in the number of vehicles on the roads. The issue of traffic delay (especially at road intersections) in South-west like many other states in Nigeria draws significant attention each day. Intra-urban movements to work, recreational centres, markets, shops and schools are becoming more and more difficult and are characterized by discomfort, delays, waste of time, energy and resources. The problem is more pronounced during the rush hour of morning and evening when vehicles standstill in long queues resulting in stress and reduction in the productive hours of commuters. Although the situation in private universities has not grown out of control signs of potential bottlenecks of vehicles are already emerging along some routes in public universities. It is on this menace that the study wishes to look into the transportation issues among undergraduates in public universities in Nigeria.

The main purpose of this study was to investigate undergraduates' perception of transport issues among public universities in Nigeria. Specifically, this study investigated undergraduates' perception of transport issues, causes, effects and solutions to transport issues in public universities in Nigeria. The following questions answered in this study.

1. What is undergraduates' perception of transport issues in the Nigerian public universities?
2. What are the causes of transport issues in Nigerian public universities?
3. What are the effects of transport issues in Nigerian public universities?
4. What are the solutions to the transport issue in Nigerian public universities?

Methodology

This study focused on the transport issues in public universities in Nigeria as perceived by undergraduates. This study was a descriptive design of a survey type. Eight hundred (800) undergraduates were sampled from four (4) public universities in four states in Nigeria. Four states were selected in the South-west geo-political zone using a simple random sampling technique. The instrument employed for the collection of data was self-structured questionnaire tagged "Undergraduates' Perception on Transport Issues in Public Universities Questionnaire (UPTIPUQ)". It was divided into two sections 'A' and 'B'. Section 'A' comprises the demographic data of respondents like age range, gender, faculty and level while section B consisted of items that elicited undergraduate perception of transport issues in the University of Ilorin. The questionnaires were structured with closed responses which were restricted to the respondents for a set of responses on four points Likert type scale. The data collected were analyzed using descriptive statistics of mean and rank order were used to answer the research questions.

Results

Research Question 1: *What is undergraduates' perception of transport issues in the Nigerian public universities?*

Table 1: Rank Order on Transportation Issues in the Nigerian Public Universities as Perceived by Undergraduates

S/N	Items	Mean	Rank Order
1.	Limited available buses/cars in the school constitutes a problem of transportation service in the Nigerian public universities.	3.70	1st
2.	Long distance between the school main park and some faculties discourages undergraduates from boarding cabs at the main park.	3.27	4th
3.	Inadequate hostel accommodation within the university poses transportation issues in the Nigerian universities.	3.65	2nd
4.	Fuel scarcity at times poses as a problem to transportation issues in the Nigeria public universities.	3.46	3rd
5.	Schedule of lecture constitutes transportation issues as all undergraduates would want to go to school at the same time.	3.24	5th

Table 1 indicated that out of five items that address problems of transportation issues in public universities in Nigeria as perceived by the undergraduates, items 1, 3 and 4 which were ranked 1st, 2nd and 3rd respectively are prevalent transportation issues in public universities in Nigeria among undergraduates. However, the least of the items were items 2 and 5.

Research Question 2: *What are the causes of transport issues in the Nigerian public universities?*

Table 2: Ranking Order on the Causes of Transportation Issues in the Nigerian Public universities as Perceived by Undergraduates

S/N	Items	Mean	Rank Order
1.	Large number of undergraduates on campus is a major cause for transport issue in public universities.	3.05	4th
2.	Early/Late lecture hours lead s to transportation issues in the Nigerian public universities.	3.20	2nd
3.	Prohibition of cabs/buses conveyingundergraduatesto and from each faculty lead to transportation issues in the Nigerian public universities.	3.04	5th
4.	Limited available cabs/buses lead to transportation issues	3.50	1st
5.	Unavailability of a formal park at each faculty leads to transportation problem in the Nigerian public universities.	3.09	3rd

Table 2 indicated that out of five items that address the causes of transportation issues in the Nigerian public universities as perceived by the undergraduates, items 4, 2 and 5 which were ranked 1st, 2nd and 3rd respectively are the prevalent causes of transportation issues in the Nigerian public universities as perceived by the undergraduates. However, the least of the items are items 1 and 3 which are ranked 4th and 5th respectively.

Research Question 3: *What are the effects of transport issues in the Nigerian public universities*

Table 3: Rank Order on the Effects of Transportation Service Problems in the Nigerian Public Universities as Perceived by the Undergraduates

S/N	Items	Mean	Rank Order
1.	Spending much hours at the school park to board cab/buses makes undergraduates to get home late and affect their study.	3.69	1st
2.	Undergraduates are not able to read their books due to fatigue as a result of transportation issues in getting off/on campus.	3.43	3rd
3.	Transportation delay wastes undergraduates' time in terms of traffic jam at the park and along the university road.	3.41	4th
4.	Traffic delay at time forces undergraduates to go home on foot thereby preventing them from attending lectures the following day.	3.19	5th
5.	Struggle to get transport leads to damage and loss of undergraduates' property and at times causes injuries on them.	3.51	2nd

Table 3 indicated that out of five items that address effects of transportation issues in the Nigerian public universities as perceived by the undergraduates, items 1, 5 and 2 which were ranked 1st, 2nd and 3rd respectively are prevalent effects of transportation issues in the Nigerian public universities as perceived by the undergraduates. However, the least of the items were items 3 and 4 which are ranked 4th and 5th respectively.

Research Question 4: *What are the solutions to the transportation issues in the Nigerian public universities as perceived by the undergraduates?*

Table 4: Rank Order on the Solutions to the Problems of Transportation Issues in the Nigerian Public Universities as Perceived by the Undergraduates

S/N	Items	Mean	Rank Order
1.	Management should endeavour to fast track quick completion of park under construction.	3.56	3rd
2.	Car parks should be made available at different locations or faculties.	3.21	6th
3.	Lecture times should not be highly restricted to evening time.	3.32	4th
4.	Provisions of more hostel accommodations should be encouraged.	3.67	2nd
5.	More cabs / buses should be made available to undergraduates.	3.69	1st
6.	There should be provision of alternative routes leading to the school.	3.23	5th

Table 4 indicates that out of six items that address the solutions to problems of transportation issues in the Nigerian public universities as perceived by the undergraduates, items 5, 4 and 1 which are ranked 1st, 2nd and 3rd respectively are prevalent solutions to problems of transportation issues in the Nigerian public universities as perceived by the undergraduates. However, the least of the items were items 6 and 2, which are ranked 5th and 6th respectively.

Discussion

This study examined the undergraduates' perception of transport issues in Nigerian public universities. Findings revealed that major problems of transportation issues in public universities as perceived by undergraduates was that limited available buses/cars in the school constitute a problem of transportation service in public universities. This finding is consistent with Basorun and Rotowa (2012) who reported that the main problem of transportation issues was the limited available buses and cars.

Another finding revealed that one of the major causes of transportation issues in public universities as perceived by undergraduates was that the limited available cabs/buses lead to transportation issues. This finding is contrary to that of Mugoro (2014) who reported that the major cause of transportation in community secondary schools in Darus Salaam City, Tanzania is limited buses.

Furthermore, finding also revealed that major effects of transportation service in public universities as perceived by undergraduates was that spending many hours at the school park to board cab/buses which made undergraduates get home late and in turn affect their study negatively.

This finding is in line with that of Mugoro (2014) who reported that the effect of transportation problems was on a student than other school attendance.

The last finding revealed that the major likely solutions to the problems of transportation issues in public universities in Nigeria as perceived by the undergraduates were that more cabs/buses should be made available to undergraduates. This finding is line with that of Sunday and Olatunde (2011) who posited that funds should be provided to private transporters by the government.

Conclusion

Based on the findings of this study, it was concluded that limited available buses/cars in the school constituted the problem of transportation in the Nigerian public university's students. Spending long hours at the school parks to board cabs/buses make undergraduates get to school and get home late and affects their learning process. The major likely solutions to the problems of transportation issues in public universities in Nigeria is that more cabs/buses should be made available to undergraduates.

Recommendations

Based on the findings of the study, it was recommended that the means of increasing public transport should be explored in public universities. Meeting the travel demands of the commuters, therefore, rests on a concise and cogent university transport system. The thrust of easy transportation should be promoted to sustain high-quality links for undergraduates to improve the efficiency and effectiveness of the transport system. Transportation sector should also be assisted with funds through soft loans/grants to enhance their operations in the public universities. These recommendations if fully implemented, would contribute significantly to the technical capabilities of operators and lead to the more effective transportation system in the Nigerian public universities.

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RELATIONSHIP BETWEEN PARENTING STYLES AND SOCIAL HEALTH OF UNDERGRADUATES OF UNIVERSITY OF ILORIN, ILORIN, NIGERIA.

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Abstract

This study inquired the relationship between parenting styles and social Health of undergraduates of University of Ilorin, Ilorin, Nigeria. Descriptive research design of survey type was adopted for the study. The population consisted all the undergraduates of the University of Ilorin, Ilorin, totalling 36,435 (2019). Multi- stage sampling technique of simple random technique and proportionate of simple balloting were used to select 390 respondents for the study. A researcher's designed questionnaire was used for data collection. Reliability of the instrument was ascertained through split-half method, Cronbach-Alpha was used for the analysis and reliability coefficient of 0.68 r. was obtained. Inferential statistics of Pearson Product Moment Correlation (PPMC) was used to analyse the three postulated hypotheses at 0.05 alpha level, using Statistical Package for Social Sciences(SPSS) version 23.0 software. The findings of the study showed that there is no relationship between parenting styles and friendliness, but there is correlation between some parenting styles, loneliness and self-actualization of undergraduates of University of Ilorin. The researcher recommends that, parents should adopt parenting styles that will inculcate good human relations and interactions in their children to encourage friendliness; allow their children to socialize with family, friends and neighbours and discourage living an isolated life; adopt parenting styles which has high positive effects on the children and speak positive words that build confidence and efficacy in children and make them believe in themselves

Key words: relationships, parenting, parenting styles, social health.

Introduction

Fostering children to become responsible adults is the responsibility of the parents or caregivers and the raising of children forms the foundation of his/her character formation. Parenting is the act of raising a child through the provision of physical, psychological, social and emotional needs for that child (Starr, 2011). Parenting or child rearing is the process of enhancing and supporting the physical, emotional, social, financial and spiritual development of children from infancy to adulthood (Dewar, 2010).

A parent is one who births a child; legally adopts a child or is traditionally obligated with the responsibility of nurturing children from infancy to adulthood. Parents are male and female who collectively take up the responsibility of providing the physical, economical, emotional and spiritual

needs of children from infancy into adulthood (Ehiozuwa, 2011). There are different types of parents. These include; Biological parent (one who has a direct genetic relationship to a child); adoptive parent (an individual who through legal means voluntarily takes responsibility for another person's child); foster parent (an individual who gives parental care to a child that is not his/her biological or adopted child); step-parent (an individual who provides parental care for a child whose father or mother he/she married after the divorce or death of a child's biological father or mother) and single parent which may be a biological or adoptive father or a mother who singly provides parental care for a child (Ehiozuwa, 2011).

Parenting is deuced from a Latin word '*parere*' which means "to bring forth, develop or educate". Parenting, therefore, is the long-term nurturing activity, involving the children, parents and other family members to bring about positive desired development in children. It is the purposive activities geared towards ensuring the survival and development of children. Child-rearing is not a technical term with definite significance, it refers to all the relationships and interactive activities between parents and their children. These interactions include the parental interest and care (responsiveness) and enforcing and inculcating values, beliefs, norms and positive attitudes (demandingness) in child-rearing Clarke-Stewart (2016). Parenting is a ceaseless process and each interaction has some effect on both the present behaviour and the child's capabilities for future habits. It should be noted that generally speaking, the role of parents concerning their children mainly involves caring, protecting and providing for basic needs such as food, clothing, shelter, education and love; emotional supports and shock absorber or spring to rise when the children fall. Many parents do not understand this. Many parents think parenting involves providing the child's basic needs and to help whenever the child asks for aid (Sternberg, 2006).

Parenting is often taught to be a difficult task by many parents who realised the seriousness of the task. As a result of this, parenting is pregnant with self-doubt, insecurity and psychological pain for an average parent. Many parents in developed countries often express a wish or desire that they would ideally like to attend schools, seminars, workshops or some sort of classes where parenting is taught. However, it must be noted that there is no one perfect method that can bring about the correct desired results. Even though there are books, magazines and advertisements and workshops on parenting, it should be noted that there is no perfect technique that can work in every circumstance and for every child. Parents have to learn by trial and error, and what may work for one child may not bring out the desired result in another. The parents, therefore, need to study and tune in to their children and study situations. Parenting is a responsibility that comes naturally to some; however, it is a herculean task for others (Vidyanathan, 2007).

United Nations International Children Emergency Fund (UNICEF)(2012) showed that young people below age 25years represent about 50% of the world population and about 20% of that category of people experience social health problems yearly on a global level. With such a large population at the threshold of suffering social problems which may lead to mental problems, this requires interventions from stakeholders. However, this report stated that the most consistent indicator of adolescents' social and mental well-being is the essential distinguishing attribute of the relationship they have with their parents. This means that good parenting decreases the risk of unacceptable behaviour among adolescents.

Good parenting is evidenced by when a person creates for a child a stable nurturing home environment, act as a positive role model and plays a positive and active role in a child's life. Good parents provide moral and spiritual guidance, set restrictions, and provide consequences for a child's behaviour. Good parents accept responsibility for the overall development of the child and guide the child in making sound, healthy life decisions through open communication and mutual respect (Kwaiji, 2014).

Parenting style is the various system of nurturing adopted by parents in bringing up their children to be able to fit into society. The way people raise their children plays an important role in the child's all-round development (Boundless, 2010). Baumrind's typology of parenting identified three parenting styles, authoritative, authoritarian and permissive, the uninvolved or neglectful style was later included in the typology. Steinberg, Blatt-Eisengart and Cauffman (2006), later observed that not every parent falls neatly into one category. Those parents who use authoritative, mostly adopt the authoritarian style in some cases, while the permissive parents sometimes become un-involved. These parenting styles generally closely correlates with the type of discipline a parent chooses to use with his or her child.

The commonly recommended styles of parenting by many researchers are authoritative, a little authoritarianism style and a little permissiveness. Although it is advisable to study individual child to know the appropriate style that can bring out the positive outcome from that child. Boundless (2010) pointed out two basic elements that help in shaping successful parenting, these are parental responsiveness and parental demandingness. Responsiveness refers to the extent to which parents intentionally foster individuality, self-regulation and self-assertion by being attuned, supportive and acquiescent to children's special needs and demands. While demandingness, on the other hand, means control, which refers to the claims parents make on their children to become integrated into the family wholly by their maturity demands, supervision, disciplinary efforts and willingness to confront the child who disobeys (Gwen 2010).

Authoritative parenting is a style of raising a child using a democratic method of administration. In using this method, the parents still hold the authority but they are lenient and permissive enough to allow the child to ask questions and take some personal decisions (Birgitte 2008). Typical traits of authoritative parenting style include child discipline strategy that put demands on children such as assigning house chores, been expected to do as they are told most of the time (so they are raised in this spirit of disciplined, conformity, general obedience and sticking to rules). There are rules but they made logical sense. The relative freedom of choice, independent thinking is encouraged and discussions are allowed but the parent will always have the last say (Birgitte, 2008).

An authoritarian style of parenting is the style which institutes must follow rules and regulations. The children are not allowed to ask questions or make any contribution. This style of parenting is similar to autocratic administration. Baumrind (1966) and Kingsley (2011). Authoritarian parenting style is characterized by high behaviour control, (demandingness) but with low parental responsiveness (warmth). The traits include a value system that is conservative and predictable, adhering to a strict family hierarchy

of authority and submissiveness, constituent upholding of rules without discussions, suppression of emotions, aggressiveness, lacks closeness and cordiality among family members, the mental mindset that is characterized by rigidity, harshness, order, rules; punishment and strict discipline. The most common traits of authoritarian style of parenting are fear, sadness and loneliness.

Permissive parenting which is also known as indulgent is a style that follows strong intercommunication and self -control measures. In using this style parents permit children to groom themselves. They do not demand the children to follow strict orders. The parents nurture the children properly and expect matured and disciplined behaviour from them. It is characterized by low behavioural control and high parental responsiveness. (Birgitte, 2008).

The un-involved parenting style which is also known as neglectful parenting is evidenced by low behaviour control (demandingness), low parental responsiveness (warmth), lack of responsiveness to child's needs and very little emotional involvement with the children. They often meet physical needs but neglects emotional needs. The parents are mentally distant and disengaged from their children's lives. Un-involved parents fail to set limits on behaviour or expectations, does not offer a response at all to her hungry child (Lim & Smith 2011). The ability of a child to grow well socially as time progresses is known as social development. Social development involves learning the values, knowledge and skills that enable children to relate to others effectively and to contribute in positive ways to family, school and the community. This kind of learning is transmitted on to children directly by those who care for and teach them, as well as indirectly through social relationships within the family or with friends, and through children's participation in the culture around them (Koshuta, 2015).

Social health is the ability of an individual to make and maintain acceptable interactions with other people, such as feeling sad when people around you are grieved and celebrating with people when they are rejoicing. Social health has to do with one's ability to form satisfying interpersonal relationships with others. It is the ability to adapt intimately to different social situations and act appropriately in a variety of settings (Olawale 2014). It is how one gets along with other people, how other people react to you and how you interact with society. Developing social skills can improve the relationships you have with other people and help you to make friends. The variables under social health include friendliness, self-esteem, loneliness, self-actualization and rejection (Koshuta, 2015). Social health is also defined as the ability to form a meaningful relationship with other people in healthy and positive ways.

Statement of the Problem

University students are expected to have a high level of friendliness, sociability and self-actualization after the first initial feelings of arriving in a new environment. This seems not to be true for every student. There are differences in students' behaviour, habits, attitudes, and comportment, and this makes the researcher wonder why some students' behaviours are so appropriate and others leave much to be desired and inappropriate. Santrock (2010) revealed that children respond or react differently in society because of differences in their parental upbringing. The researcher assumed that there may be correlations in the way children are brought up and the way they react to situations, relate with people and take up challenges.

Mensah and Alfred (2013) carried out a study on the influence of parenting styles on the social development of children among 480 basic school pupils in Ghana, who were in their adolescent stage. The result showed that a large number of the parents adopted the authoritative style in the upbringing of their children and this has an influence on the students' social development. It is therefore deduced that the authoritative parenting style resulted in pro-social behaviour while authoritarian resulted in anti-social behaviour. This study further reported that a positive and significant relationship exists between authoritative parenting and good social conduct. This connotes that children of authoritative parents exhibit teachers in pro-social behaviour such as cooperativeness, friendliness and empathy but authoritarian style shows a significant relationship with social incompetency. This may be because authoritative parenting allows children to make their contributions in whatever goes on in the house.

Williams (2006) reported research conducted among African-American high school students to find out the influence of parenting styles on the family environment. The finding revealed that adolescents who reported less conflict in their family perceived their parents as more authoritative. These students were reported to have high self –actualization, were more friendly and possess high self-esteem. Also, Abrhiem (2014) reported in a study conducted in the USA among students of high school, Adolescents from authoritarian families were found to be more dependent and less active. They were found to be less self-assured, had low self-esteem and weak communication skills. These may be because authoritarian parents give instructions which children must follow strictly without question or criticism. This can lead to low self –actualization. Baumrind's research as reported by Abrhiem (2014) shows that adolescents of authoritarian parents were associated with low sociability, obedience, and are more likely to be involved in delinquency, while those of authoritative style was fearful, aggressive and experience difficulty in regulating emotion.

However, the result of the study of Newman; Harrison; Dashiff and Davies (2012) on relationships between parenting styles and social health in adolescents among 175 Mexican-origin families of 11-15year old adolescents showed that there are concrete relationships between parenting style and adolescents' social development. The adolescents raised in authoritative households consistently demonstrate higher protective and fewer risk behaviours than that of other parenting styles families. The outcome of the study also revealed that there is considerable evidence to show that parenting styles have relationships with warmth, friendliness, mode of disciplinary practice, communication and psychosocial adjustment. All these experimental studies showed a link between parenting styles used on children with one social behaviour or another. However, one cannot conclude or generalise that every parenting style will have a link with all the children's behaviour.

Objectives of the study

The general objective of this study was to investigate on the relationship between parenting styles and social health of undergraduates of University of Ilorin, Ilorin, Kwara state, Nigeria. The specific objectives of the study were to:

1) investigate the relationship between the four major parenting styles (authoritarian, authoritative, permissive and un-involved) and friendliness of undergraduates of university of Ilorin.
2) determine the relationship between parenting styles and loneliness of undergraduates of

university of Ilorin.

3) investigate the relationship between parenting styles and self –actualization of undergraduates of university of Ilorin.

Research Questions

The following research questions guided the study:

1. Is there any relationship between parenting styles and friendliness of undergraduates of university of Ilorin?
2. Is there any relationship between parenting styles and loneliness among undergraduates of university of Ilorin?
3. Is there any relationship between parenting styles and self-actualization of undergraduates of university of Ilorin?

Research Hypotheses

1. There is no significant relationship between parenting styles and friendliness of undergraduates in university of Ilorin.
2. There is no significant relationship between parenting styles and loneliness of undergraduates in university of Ilorin.
3. There is no significant relationship between parenting styles and self-actualization of undergraduates in university of Ilorin.

Methodology

Descriptive research design of survey type was used for this study. The population for the study consists all male and female undergraduates of University of Ilorin, Ilorin, Kwara State, Nigeria, with total population of thirty -six thousand four hundred and thirty- five (36,435) from fifteen faculties. (registrar's office, university of Ilorin 2019). A multistage sampling procedure consisting of simple random sampling and proportionate technique of simple balloting was employed to select 390 students from the five (5) selected faculties out of the fifteen faculties in the university. A researcher's developed questionnaire of four point Likert format rating scale, named relationships between parenting Styles (RBPS), was used in the collection of data for the study. A four point Likert rating scales with alternatives of Strongly Agree, Agreed, Disagree and Strongly Disagree was used. The instrument consists of seven (7) items on demographic data of the respondents and fifteen (15) items on the relationships between parenting styles and social health of students of university of Ilorin. In order to ascertain the validity of the instrument used, three copies of the questionnaire were given to three experts in the related field at the department of health promotion, university of Ilorin. The result was analysed and correlated using Cronbach Alpha. The reliability of the instrument was ascertained, and a reliability correlation Co-efficient of 0.68 alpha level was obtained. Descriptive statistics of factorial/ regression table was used to answer the research questions while inferential statistics of Pearson Product Moment Correlation was used to analyse the three (3) postulated hypotheses at 0.05 alpha level, using Statistical Package for Social Science (SPSS) version 23.

Results

Research questions 1, 2 and 3: Is there relationships between parenting styles and friendliness, loneliness and self- actualization among undergraduates of university of Ilorin?

Table 1: Showing regression table on relationships between parenting styles and friendliness, loneliness and self-actualization.

Variables	Authoritarian	Authoritative	Permissive	Uninvolved
Friendliness	0.007	0.056	0.073	0.163*
Loneliness	0.121*	0.286*	0.590*	0.115*
Self-actualization	0.004	0.256*	0.350*	0.421*

0.05 level of significance

Research questions 1, 2 and 3:

For authoritarian and friendliness, the table shows that there is no significant relationship between authoritarian and friendliness (because Cal. r. value 0.007 < Crit. r. value= 0.082).

For authoritarian and loneliness, the study revealed that there is significant relationship between authoritarian and loneliness, (because Cal. r. value 0.121 > Crit. r. value= 0.082).

For authoritarian and Self Actualization, the study revealed that there is no significant relationship between autocratic and self-actualization (because Cal. r. value=0.004 < Crit. r. value= 0.082).

For authoritative and friendliness, the result showed that there is no significant relationship between authoritative and friendliness (because Cal. r. value=0.056 < Crit. r. value= 0.082).

For authoritative and loneliness, the result of the study revealed that there is significant relationship between authoritative and loneliness because (cal. r. val. 0.286 is greater than crit. r. val. 0.082).

For authoritative and self-actualization, it was indicated that there is significant relationship between democratic and self-actualization (because Cal. r. value=0.256 < Crit. r. value= 0.082).

For permissive and friendliness, it was indicated that there is no significant relationship between permissive and friendliness (because Cal. r. value=0.073 < Crit. r. value= 0.082).

For permissive and loneliness, the study revealed that there is significant relationship between permissive and loneliness (because Cal. r. value=0.590 > Crit. r. value= 0.082).

For permissive and self-actualization, it was indicated that there is significant relationship between permissive and self-actualisation (because Cal. r. value=0.350 > Crit. r. value= 0.082).

For uninvolved and friendliness, it was indicated that there is significant relationship between uninvolved and friendliness (since Cal. r. value=0.163 > Crit. r. value= 0.082).

Hypotheses Testing

Hypothesis 1: There is no significant relationship between parenting styles and friendliness of undergraduate students in university of Ilorin.

Table 2: Pearson's 'r' showing relationship between parenting styles and friendliness of undergraduate students in university of Ilorin.

Variable	N	Mean	SD	Df	Calc. r - value	Critical r - value	Decision
Parenting Style	390	55.154	4.17	388	0.072	0.082	Accepted
Friendliness	390	13.4179	2.24				

Table 2 shows the Relationship between parenting styles and friendliness of undergraduate students in university of Ilorin. Based on the analysis of the results, it indicated that the calculated r of 0.072 is less than the critical r. value of 0.082 at 0.05 level of significant. Thus the hypothesis is hereby accepted. This implies that there is no significant relationship between parenting styles and friendliness of undergraduates in university of Ilorin, Ilorin, Kwara state, Nigeria.

Hypothesis 2: There is no significant relationship between parenting styles and loneliness of undergraduate students in university of Ilorin.

Table 3: Pearson 'r' showing relationship between parenting styles and loneliness of undergraduate students in university of Ilorin

Variable	N	Mean	SD	Df	Calc. r - value	Critical r - value	Decision
Parenting Style	390	55.154	4.17	388	0.443*	0.082	Rejected
Loneliness	390	13.6282	2.20				

Table 3showed the Relationship between parenting styles and loneliness of undergraduate students in university of Ilorin, Ilorin, Kwara state, Nigeria. Based on the analysis of the results, it indicated that the calculated r. value of 0.443 is greater than the critical r. value of 0.082 at 0.05 level of significant. Thus, hypothesis two is therefore rejected. This implies that, there is significant relationship between parenting styles and loneliness of undergraduate students in university of Ilorin, Ilorin, Kwara state, Nigeria.

Hypothesis 3: There is no significant relationship between parenting styles and self-actualization of undergraduate students in university of Ilorin.

Table 4: Pearson's 'r' showing relationship between parenting styles and self-actualization of undergraduate students in university of Ilorin

Variable	N	Mean	SD	Df	Calc. r - value	Critical r - value	Decision
Parenting Style	390	55.154	4.17	388	0.508*	0.082	Rejected
Self-actualization	390	13.7821	2.00				

Table 4shows the Relationship between parenting styles and self-actualization of undergraduate students in university of Ilorin. Based on the analysis, the results indicated that the calculated r of 0.508 is greater than the critical r of 0.082 at 0.05 level of significant. Thus, the hypothesis is hereby rejected. Meaning that, there is significant relationship between parenting styles and self-actualization of undergraduate students in university of Ilorin, Ilorin, Nigeria.

Discussion of findings

In research question one, the result indicated that there is no significant relationship between parenting styles and friendliness of undergraduates of the University of Ilorin, therefore hypothesis one was accepted, which means that the parenting style used in bringing up a child has no significant relationship with the friendliness of undergraduates in the University of Ilorin, Ilorin, Nigeria. This may be because of some inborn and inherited tendencies. Some children are naturally friendly, while some are timid or reserved. The finding is at variance with the findings of Newman; Harrison; Dashiff and Davies (2008) which found that there is considerable evidence to show that parenting styles have an influence on adolescents' social behavioural development. The finding further stated that parenting styles and behaviours that are related to warmth and good communication favour good psychosocial adjustment. This finding may be because of other variables such as environment and inner tendency that could be responsible for friendliness or otherwise of undergraduates apart from parenting styles were not considered in their own study.

In research question two, result from the majority of the respondents indicated that there is an important relationship between parenting style and loneliness because of the calculated r. value is greater than the table value, therefore parenting styles have a significant relationship with loneliness. This finding is in agreement with the finding of Mensah and Alfred (2013) which says that there is a relationship between authoritative and authoritarian parenting styles and social development of adolescents and these two parenting styles favour social competence. Similarly, Akhtar (2012) found out the effects of parenting styles on the attachment styles of undergraduate students. The study revealed that, students that are brought up by authoritative parent experience loneliness if he/she has no friends to converse with when the decision is to be taken because he/she is used to sampling opinion.

In research question three, the majority of the responses institutes the relationship between parenting styles and self-actualization. Also, the result of hypothesis three indicated that there is a significant relationship between parenting styles and self-actualization because the calculated Pearson's 'r' is greater than critical Pearson's 'r'. hypothesis three was rejected, implying that, there is a significant

relationship between parenting styles and self-actualization of undergraduate at the University of Ilorin. The finding is in-line with that of Martinez and Garcia (2007) that stated that adolescents from indulgent parents had a high score in self- esteem, self-actualization and internalization of self-transcendence values than those from authoritative parents. It means some parenting styles actually favour self- actualization

Conclusions

Based on the findings of the study, it was concluded that:

1. There is no significant relationship between parenting styles and friendliness of undergraduates of the University of Ilorin, Ilorin Kwara State, Nigeria.
2. There is a significant relationship between parenting style and loneliness of undergraduates of the University of Ilorin, Ilorin, Kwara State, Nigeria.
3. There is a significant relationship between parenting styles and self-actualization of undergraduate students of the University of Ilorin, Ilorin, Kwara State, Nigeria.

Recommendations

Based on the conclusion of the study, the researcher made the following recommendations:

1. Parents should develop a good relationship and use parenting styles that encourage friendliness and permissiveness in their homes. The most widely recommended parenting style which has always yielded positive result is authoritative and a little authoritarianism. University authority should organize and encourage periodic social gathering that will correct the lives of those students who have a problem with their social health.
2. Parents should encourage their children to socialize and interact with relatives, friends and neighbours as early as possible in life. This will give them the opportunity to learn how to make and keep friends. Parents should also create time to play and discuss with their children so that they will not be living an isolated/lonely life.
3. Parents should speak positive and encouraging words to their children, no matter how poor their performance may be so as to facilitate the level of confidence of their children which will help in building confidence to achieve their goals in life.
4. The government and health counsellors should create a platform through which parents and caregivers could be advised on how to improve the social health of their children through counselling, periodic seminars and jingles on the media.

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HEALTH AND PYSCHOLOGICAL IMPLICATIONS OF DIVORCE AMONG RESIDENTS IN ILORIN SOUTH LOCAL GOVERNMENT AREA, KWARA STATE.

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Abstract

This study probed into the health and psychological implications of divorce among residents in Ilorin south local government area, Ilorin, Kwara state. The study inquired whether Health problems of heart attack and high blood pressure and psychological problems of frustration, depression, anxiety and stress are implications of divorce among residents in Ilorin South Local Government Area, Kwara State.

The research design used for the study was a descriptive research design of the survey type. The population for the study comprised of all residents in Ilorin South Local Government Area consisting of 11 wards. A sample of two hundred (200) respondents was selected for the study using stratified, proportionate and simple random sampling techniques. The instrument employed for the study was a researcher structured questionnaire. The instrument was well-grounded by three experts and tested for reliability using Test re-test method. Pearson's Product Moment Correlation statistics was used to test re-test and a reliability coefficient of 0.71was obtained. Data was gathered and sourced by the researcher and two trained research assistants. The data collected were analyzed using descriptive and inferential statistics of chi-square (x^2) at 0.05 alpha level.The results revealed that; Health problems of heart attack and high blood pressure is a significant implication of divorce on residents (cal.x^2 value 72.21 > table value =24.99 @ df = 15) and Psychological health problems of frustration, depression, anxiety and stress is a significant implication of divorce on residents(cal.x^2 value 96.45 > table value =55.76 @ df = 33).

It was concluded that health problems of, heart attack, high blood pressure and psychological problems of, frustration, depression, anxiety and stress is a significant implication of divorce among residents in Ilorin South Local Government Area, Kwara State. It was recommended that divorce should be avoided among married people so that it will not result into health problems of heart attack, high blood pressure and psychological health problems of frustration, depression, anxiety and stress.

Keywords: *Health, Psychological, Implication, Divorce, Residents*

Introduction

Most people think of health as the absence of disease or when one is not ill but this is not. Health is a state of complete physical, mental and social well-being not merely the absence of disease or infirmity. Human effectiveness is the qualifying factor of living, the healthier we are, the greater our potential or effectiveness. It is also the functional and metabolic efficiency of a living being; it is a general condition of a person in moral, body and spirit, meaning to be free from illness and be in good health. Good health is achieved through a combination of physical, mental and social well-being, this sometimes referred to as the "health triangle". Psychology is the scientific study of all forms of human behaviours, the mental make-up or structure of an individual that causes him or her to think or act in the way he or she does. It is also the science of mind and behaviour; the mental or behavioural characteristics of an individual; the study of mind and behaviours concerning a particular field of knowledge or activity (Merriam-Webster Dictionary, 2016).

Divorce is the ending of a marriage by a legal process. It is a legal dissolution of the marriage bond which confers on the two parties the right to remarry. It is also the legal ending of a marriage between husband and wife, once the couple decides to divorce they are free to remarry again (Merriam-Webster Dictionary, 2016). Every human establishment is faced with one problem or the other. The difficulty facing the family unit today is divorce. It is a social problem which has become a threat to the existence of marriage institution.

Divorce impairs children's capacity to learn and achieve their educational attainment. George (2000) opined that the effect of divorce on the children educational performance in the examination and continuous assessment pose a great problem in our society. Unstable parents must bear in mind that children's education is the crucial point on which their lives depend, and considered to be the most essential avenue for producing worthwhile children. Failure to uphold and sustain a stable family and give the children sound education will hinder their progress in life, growth and development and even the society on the whole. Education is one of the investments that can last for eternity and make them fit for socio-political functions and roles. It is not in incertitude that children from divorced families perform poorly in academics as a result of emotional instability and maladroit direction in life. Empirical research confirms that children of divorce are at an increased risk for the development of psychological, behavioural, social and academic problems (Amato, 2001).

Each year over a million Nigeria children suffer the divorce of their parents. Divorce causes irredeemable harm to all neck-deep, but most especially to the children. Though it might not show to profit some individuals in some cases, overall, it causes a temporary disease in an individual's quality of life and puts some "on a downward trajectory from which they might never fully recover" (Paul, 2000). Divorce damages society, it exhausts social and human capital. it substantially increases the cost of the taxpayer, while reducing the taxpaying portion of the society. It lessens children's future competence in all five of society's major tasks or institution; family, school, religion, marketplace and government. The turn-around of the

cultural and social status of divorce would be nothing less than a cultural revolution. Only a few generations ago, Nigeria culture disapproved divorce and put it as scandalous and immoral. Today law, behaviour and culture embrace, even lionise and celebrate divorce.

According to Liman (2012), adultery, infertility, desertion, negligence, abusive treatment and infidelity are reasons for divorce. The effect of divorce is enormous and the truth of the matter is that the offspring of the union are the chief casualties and victims of divorce (Liman, 2012).

Divorce is not a single event that determines people's lives, but rather as a process. This formulation of divorce proposes that how divorce ultimately affects children involves a constellation of factors and processes that occur early in the divorce, as well as processes occurring after the divorce. Moreover, this line of reasoning portends that many detrimental effects for children in divorced families may be due to exposure to experiences and processes that have nothing to do with divorce as such. That is, children whose parents divorce witness negative family interaction before a divorce and also experience many life transitions, changes and strained familial relationships after divorce. This view of divorce as a process is common in the United Kingdom, New Zealand, and Australia (Rodgers & Pryor 2008).

Marriages that end in divorce typically begin a process of unravelling, alienation, or an emotional separation year before the actual legal divorce is obtained. During the trend of the marriage, one or both of the marital partners begins to feel estranged from the other. Conflicts with each other and with the children escalates, become more prevalent and often go unsettled. Feelings of bitterness, helplessness, and anger steps-up as the spouses weigh the demerits and merits of continuing the marriage against separating. Kitson's (2002) describes a distressing process characterized by emotional distance, dissatisfaction, and frequent thoughts and discussions about whether and how to separate. Many unhappy couples explore marital counselling, extramarital relationships, and trial separations, with marital happiness fluctuating upward and downward from day to day and year to year as the marital relationship and marital roles are renegotiated (Kitson, 2002).

When parents' divorce each other, another kind of divorce happens between the parents and the children. The primary effect of divorce and the parental conflict that precedes the divorce is a decline in the relationship between parent and child (Amanto, 2006). Immediately after a divorce, most parents have two sets of problem: - their adjustment to their intrapsychic conflicts and their role as a divorced parent (Paul, 2006). Children in divorced families receive less emotional support, financial assistance, and practical help from their parents. Divorced homes show a decline in language simulation, pride, affection, stimulation of academic behaviour, encouragement of social maturity, and warmth channelled towards the children.

The presence of fewer toys and games is common, as in an increase in physical punishment. Though some studies show that parental divorce itself may affect parenting, it often leads to worry, exhaustion, and stress for parents (Lisa, 2007).

Divorce and separation result in less caring and more overprotective parenting during the adolescent years (David, 2000). Though the child's ability to trust their parents, close friends, and others "is strongly linked to positive parent-teen relationships regardless of parental divorce" (Valarie, 2002), parental divorce makes it more difficult for children to trust their parents, while a "decline in the closeness of the parent-child relationship mediates much of the association between parental divorce, marital discord, and offspring's psychological well-being in adulthood (Paul & Juliana, 2001). Children of divorced mothers have under-privileged and less stimulating home environments. Furthermore, divorced mothers, regardless of their best intentions, are less able than married mothers to give emotional support to their children. Divorce induces a slight decrease in children's trust for their mothers when parental divorce occurs between birth and age four, however, after controlling the quality of the parent-child relationship, this effect disappears (Valarie, 2002). Compared with continuously married mothers, divorced mothers tend to be less affectionate and communicative with their children, and to discipline them more harshly and more inconsistently, especially during the first year following the divorce (King, 2002).

Divorce frequently impairs the child's capacity to learn. Children from divorced homes are at risk of poor academic performance than their peers from non-divorced families (Elmore, 2003). Divorce and separation corroborate positively with diminished school achievement and performance (Paul, 2001). Daniel (2010), found that elementary school children who experience parental divorce immediately begin performing worse academically than their peers from intact families. The gap persists through elementary school (Daniel, 2010). Children exposed to unilateral divorce are less educated by adulthood (Jonathan, 2004). Children have lower educational aspirations, ambitions etc and test scores during the process of their parent's marital disruption (Youngmin, 2002). Students in intact families have GPAs 11 per cent higher than those from divorced families (Barry, 2003). A study found that children whose parent divorce get about seven-tenths of a year less education than children from intact families (Jonathan & Richard, 2001).

Divorce impacts both the parents and children's physical health and life span. Those who experience divorce are more prone to have health problems often despite remarriages such as a significant increase in injury rates, a doubled risk of asthma, high blood pressure, heart attacks, and increased risk of asthma-related emergencies (Kisten, 2009). Divorce or the death of a spouse severely destroys a man or woman's long-term health even if they remarry. The impact of these life-changing events proceeds to have a 'lingering, detrimental' effect on physical well-being years later. This is even though a person may have moved on emotionally and found stability and happiness in another relationship. Divorced or widowed have 20 per cent more chronic health conditions such as heart disease, diabetes or cancer than married people. They also have 23 per cent more mobility problems including trouble climbing stairs or walking short distances.

Child and adult well-being may ameliorate after the end of an extremely conflicted marriage (Paul, 2000). Child suicide is often triggered by thoughts that his divorced parents reject him or have lost interest in him. The fact that the suicide rate has risen along with the divorce rate is no coincidence (Richard, 2006). A meta-analysis of 72 studies shows that parental divorce has a very strong effect on the possibility of engaging in juvenile delinquent facts (Cynthia, 2003).

Amato (2001) published meta-analyses of studies comparing the well-being of children of divorce with that of children of parents who were married to each other. Results from both studies indicated that children from divorced families scored significantly lower on a variety of outcomes; a) academic achievement, b) conduct, c) psychological adjustment and d) well-being. As Amato (2001) writes, "though some adults and children adjust relatively quickly to divorce while others exhibit long-term deficits in functioning. Children well-being over the long-term is determined by circumstances both prior to and after parents' divorce (Frank & Kathleen, 2001).

Depression is a mood disorder that causes a persistent and continual feeling of sadness and loss of interest. Depressive disorder or clinical depression affects how one feels and behaves, think and behave and can lead to a mixture of emotional and physical problems. You may have trouble doing normal day-to-day activities, and sometimes you may feel as if life isn't worth living. More than just about of the blues, depression isn't a weakness and you can't simply "snap out" of it. Depression may require long-term treatment, but don't get discouraged. Most people with depression get better with medication, psychological counselling or both (Sarah, 2007). Children react in so many negative ways to divorce, but perhaps the most painful is the depression that children sometimes experience in the course or after divorce. Depression in children and teenagers often come side by side with other types of mental illness, with substance abuse, with anxiety, and or with diabetes. For apparent reasons, children and adolescents who suffer from depression are at materially higher risk for suicide (Sarah, 2007).

Frustration is an emotion that happens in situations where a person is restricted from reaching the desired outcome. In general, whenever we reach one of our goals, we feel pleased and whenever we are prevented from reaching our goals, we may yield or give in to frustration and feel irritable, annoyed and angry. Typically, the more significant the goal, the higher the frustration and resultant anger or loss of confidence (Vincent, 2005). Frustration is not necessarily bad since it can be a useful indicator of the problems in a person's life and, as a result, it can act as an inducement to change. However, when it results in anger, irritability, stress, resentment, depression, or a spiral downward where we have a feeling of resignation or giving up in the case of divorce, frustration can be cataclysmal to health and overall well-being. Frustration is experienced whenever the results (goals) you are expecting do not seem to fit the effort and action you are enforcing and implementing. Frustration will occur whenever your actions are producing less and fewer results than you think they should. The frustration we

experience can be seen as the result of two types of goal blockage, that is, internal and external sources of frustration (Vincent, 2005).

In a medical or biological context, stress is a physical, mental, or emotional element that causes bodily or mental tension. Stresses can be external from the environment, psychological, or social situations or internal, illness, or from a medical procedure or operation. Stress can initiate the "fight or flight" response, a complex reaction of neurologic and endocrinologic systems (Lee, 2010). Catecholamine hormones, such as adrenaline or noradrenaline, increase immediate physical reactions associated with a preparation for violent muscular action. These include the following: Acceleration of heart and lung action, Paling or flushing, or alternating between both, inhibition of stomach and upper-intestinal action to the point where digestion slows down or stops, the general effect on the sphincters of the body, constriction of blood vessels in many parts of the body, liberation and release of nutrients particularly fat and glucose for muscular action, dilation of blood vessels for muscles, inhibition of the lacrimal gland responsible for tear production and salivation (Lee, 2010). Stress can make or influence the cause of many medical conditions including psychological conditions such as depression and anxiety. Medical problems can include poor healing, irritable bowel syndrome, high blood pressure, poorly controlled diabetes and many other conditions. Stress management is recognized as an effective treatment modality to include pharmacologic and non-pharmacologic components (Lee, 2010).

Marriage is an ageless contract desired and designed by God for the purpose and intent of unity of man and woman and procreation. This divine institution is losing its glory. The marital instability can be ascribed to various factors such as lack of trust, abuse, lack of communication, parental or friends influence. All these results in divorce. It was observed by the researcher that a child who has been active and responsive in-class activities was now noticed to be a less participant in the class and scored even lower in class works and take-home assignments and the child is finding it difficult to get by or cope. This kind of situation can be attributed to lack of care from the parents due to divorce; all the child will have in mind are questions on “why my parents are separated or where is the fatherly or motherly love. Effects of divorce are many as it has a negative effect on the married couple. Children of divorced parents in some cases display psychological problems and health problems of heart attack, high blood pressure, frustration, depression, anxiety and stress. It may be helpful to realize a little about divorce and the typical effects it has on men, women, and children. The divorce rate in the United States is the highest in the world. Fifty per cent of first marriages terminate in divorce. Also, sixty-seven per cent of all second marriages end in divorce. Divorce is associated with an increase in depression, divorced people experience loss of a partner's hopes, dreams and lifestyle.

Some of the inhabitants who have been active and responsive were observed to be fewer participants in some cases and some may even find it hard to contend with life activities. This

kind of situation is common, among people that have suffered divorce in one way or the other or people that experienced lack of spouse care, all the questions they have in mind is why me that suffered this problem? Or where is the spouse love? It is on this foundation that the study addressed the Health and Psychological Implications of Divorce among residents in Ilorin South Local Government Area, Kwara State.

Research Questions

Will health problems of heart attack and blood pressure be an implication of divorce among residents in Ilorin South Local Government Area?

Will psychological health problems of frustration, depression, anxiety and stress be an implication of divorce among residents in Ilorin South Local Government Area?

Hypotheses

- Health problems of heart attack and blood pressure will not significantly be an implication of divorce among residents in Ilorin South Local Government Area.
- Psychological health problems of frustration, depression, anxiety and stress will not significantly be an implication of divorce among residents in Ilorin South Local Government Area.

Research Methodology

A descriptive research of survey type was used for this study. The population for this study consists of all residents in Ilorin South Local Government Area with 11 wards and a total estimated number of two hundred thousand residents. A multi-stage sampling technique of stratified and simple random techniques was used for the study. Stratified sampling was used to put the wards and respondents into various strata. Simple random sampling was employed to select 5 wards out of 11 wards in Ilorin South Local Government Area, Kwara State. The instrument for data collection for this study was a researcher designed structured questionnaire. The draft questionnaire comprises of two sections. Section A deals with demographic data of the respondents, while section B focused on gathering information on the variables of the study. The instrument was validated by experts in study area.

The reliability of the instrument was executed using test re-test method that was administered to respondents from another area outside the population of the study area with an interval of two weeks. The result of the first administration was compared and equated with the second administration using Pearson's Product Moment Correlation (PPMC) statistical analysis. A correlation coefficient of 0.71 was obtained, which made the instrument reliable for the study.

The data gathered from the questionnaire was statistically analyzed using descriptive statistic of mean and rank order, frequency count and percentage, while inferential statistics of chi-square

(x^2) was used to analyze the formulated hypotheses at 0.05 level of significance.

Results

Table 1: Mean and Rank Order on health and psychological implications of divorce among residents in Ilorin South Local Government Area, Kwara State.

S/N		Mean	Rank
	Health Problems of Divorce		
1.	Victims of divorce experience abnormal heart rhythms that may extend to heart attack	2.76	4th
2.	Divorce predisposes victims to heart attack	2.99	1st
3.	Victims of divorce brood a lot and this may raise the blood pressure level and consequently may lead to heart attack	2.88	2nd
4.	Emotional stress as a result of worry and heartbreak fro m divorce can lead to high blood pressure	2.56	6th
5.	Divorce may lead to problem that may result to heart failure	2.73	5th
6.	Divorce may lead to kidney failure that may result to heart attack.	2.80	3rd
	Psychological problems of divorce		
7.	Victims of divorce may develop anger due to frustration from divorce.	2.66	12th
8.	Divorce may lead to delusions or hallucinations that results into frustration	2.73	8th
9.	Divorce may lead to inability to sleep which may result into frustration	2.71	9th
10.	Victims of divorce may be unhappy that lead to depression	2.90	1st
11.	Inability to sleep is one of the symptoms of divorce	2.67	10th
12.	A mood of disorder that causes a persistent feeling of sadness and loss of interest as a result of divorce.	2.88	2nd
13.	Anxiety may cause Sexual dysfunction in both men and women who are victims of divorce	2.67	10th
14.	Victims of divorce suffer from restlessness	2.78	5th
15.	Victims of divorce may have acute and irrational fears of things that are really not dangerous	2.88	2nd
16.	Stress of physical, mental, or emotional that causes bodily or mental tension is as a result of divorce.	2.77	6th
17.	Stress may influence various medical conditions from divorce.	2.74	7th
18.	Victims of divorce may result to alcohol or d rugs as a coping mechanism of stress from divorce.	2.85	4th

However, from the health and psychological consequences of divorce among residents in Ilorin South Local Government Area, Kwara State, it was revealed that mean value of the items were above 2.50 which is the mid-point of justification for implication. The finding revealed that the high means obtained by the respondents indicated that health and psychological have implications on divorce among residents in Ilorin South Local Government Area, KwaraState,this implies that health and psychological are implications of divorce among residents in Ilorin South Local Government Area, Kwara State.

Hypotheses Testing

Table 2: Chi-square analysis showing health problems of heart attack and high blood pressure as an implication of divorce among residents in Ilorin South Local Government Area, Kwara State.

S/N	ITEMS	SA	A	D	SD	ROW TOTAL	DF	$CAL_{\chi}{}^{2}$. VALUE	TABLE VALUE	REMARK
1	Victims of divorce develop abnormal heart rhythms that may extend to heart attack	30 (15.0%)	161 (80.5%)	6 (6.0%)	3 (1.5%)	200				
2	Divorce exposes victims to heart attack	80 (40.0%)	117 (54.5%)	3 (1.5%)	8 (4.0%)	200				
3	Victims of divorce think a lot and this may raise the blood pressure level and consequently may lead to heart attack	101 (50.5%)	84 (42.0%)	9 (4.5%)	6 (3.0%)	200	15	72.21	24.99	Ho rejected
4	Emotional stress due to worry and heartbreak from divorce can lead to high blood pressure	122 (61%)	75 (37.5%)	3 (1.5%)	0 (0%)	200				
5	Divorce may lead to heart failure that may result to high blood pressure	20 (10%)	159 (79.5%)	21 (10.5 %)	0 (0%)	200				
6	Divorce may lead to kidney failure that may result to heart attack	18 (9%)	157 (78.5%)	24 (12%)	1 (0.5%)	200				
	Column Total					**1200**				

@<0.05alpha level

Table 2 shows the calculated chi-square (x^2) value of 72.21 which is greater than the table value of 24.99 with the degree of freedom of 15 at 0.05 alpha level of significance. Since the calculated x^2 is greater than the critical value, the null hypothesis is thereby rejected, meaning that health problems of heart attack and high blood pressure is a significant implication of divorce among residents in Ilorin South Local Government Area, Kwara State. This means that residents that suffered divorce are faced with health problems of heart attack and high blood pressure.

Table 3: Chi-square analysis of psychological problems of frustration, depression, anxiety and stress as an implication of divorce among residents in Ilorin South Local Government Area, Kwara State.

S/N	SA	A	D	SD	ROW TOTAL	DF	CAL χ^2. VALUE	TABLE VALUE	REMARK
7	48 (24.0%)	142 (71.0%)	8 (4.0%)	2 (1.0%)	200				
8	88 (44.0%)	102 (51.0%)	6 (3.0%)	4 (2.0%)	200				
9	68 (34.0%)	118 (59.0%)	10 (5.0%)	4 (2.0%)	200	33	96.45	55.76	Ho Rejected
10	47 (23.5%)	138 (69%)	13 (6.5%)	2 (1%)	200				
11	48 (24%)	113 (56.5%)	39 (19.5%)	0 (0%)	200				
12	72 (36%)	125 (62.5%)	3 (1.5%)	0 (0%)	200				
13	65 (32.5%)	127 (63.5%)	8 (4%)	0 (0%)	200				
14	86 (42.4%)	110 (54.2%)	2 (1%)	5 (2.5%)	200				
15	65 (32.5%)	127 (63.5%)	8 (4%)	0 (0%)	200				
16	55 (27.5%)	129 (64.5%)	10 (5.0%)	6 (3.0%)	200				
17	111 (55.5%)	75 (37.5%)	9 (4.5%)	5 (2.5%)	200				
18	120 (60.0%)	64 (32.0%)	12 (6.0%)	4 (2.0%)	200				

@ < 0.05 alpha level

Table 3 shows the calculated chi-square (x^2) value of 96.45 which is greater than the table value of 55.76 with the degree of freedom of 33 at 0.05 alpha level of significance. Since the calculated x^2 is greater than the critical value, the null hypothesis is thereby rejected, meaning that

psychological problem is a significant implication of divorce among residents in Ilorin South Local Government Area, Kwara State. This means that people that suffered divorce are faced with psychological problems of frustration, depression, anxiety and stress.

Discussion of Findings

The Hypotheses stated that health problems will not significantly be an implication of divorce among residents in Ilorin South Local Government Area, Kwara State. The hypothesis was rejected because the calculated chi-square value was greater than the critical value. Health problems such as heart attack and high blood pressure will significantly be an implication of divorce among residents. This result is in line with the findings of Debra (2015) which stated that health problems such as heart attack are one of the critical implications and consequence of divorce both on divorced women and other people involved in a divorce. Paul (2005) also stated that victims of divorce think a lot which raises their blood pressure level and consequently may lead to a heart attack.

The Hypotheses stated that psychological problems such as frustration, depression, anxiety and stress will not significantly be an implication of divorce among residents in Ilorin South Local Government Area, Kwara State, the hypothesis was rejected because the calculated chi-square value was greater than the critical value. Therefore, psychological problems such as frustration, depression, anxiety and stress will be an implication of divorce among divorced women. This result is in line with the findings of Vincent (2005) which stated that divorce in the life of an individual can lead to psychological problems of frustration, depression, anxiety and stress can be destructive. Amato (2001) also stated that frustration, depression, anxiety and stress may result from divorce and this may lead to hallucinations, delusions, insomnia.

Conclusion

- Health problems such as heart attack and high blood pressure is an implication of the divorce.
- Psychological health problems such as frustration, depression, anxiety and stress is an implication of the divorce.

Recommendation

Divorce should be avoided to prevent health problems such as heart attack and high blood pressure and psychological problems of frustration depression, anxiety and stress that may arouse from divorce.

1. Couples should avoid divorce to remove them from a feeling of sadness and unhappiness.
2. Victims of divorce are encouraged not to turn to alcohol and drugs uses as coping mechanisms or as a result of stress from divorce.

3. A public education program should be designed to raise awareness about the hazardous implications of divorce on couples, parents, children and the society at large.

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UTILIZATION OF IMMUNIZATION SERVICES AMONG CHILD BEARING MOTHERS IN ZAMFARA STATE NIGERIA

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Abstract

This paper assessed utilization of immunization services among child bearing mothers in Zamfara state. Study answer one research question and tested one hypothesis. To achieve purpose of the study an ex-post facto research design was used, population of the study comprises of all child bearing mothers in Zamfara state. Stratified sampling technique was used to divide the state into three stratum, simple random sampling technique was used in selecting six (6) local government areas while proportionate sampling was used in selecting respondents from each of the local government selected. Total of 400 respondents was used for the study. Researcher developed questionnaire was used for data collection. Descriptive statistics of frequency and percentage was used to analyze demographic characteristics of the respondents, mean and standard deviation was used to answer the research question, one sample t-test was used to test the hypothesis at 0.05level of significance. Finding of the study revealed that child bearing mothers have good utilization of immunization services (p=0.01). It is concluded that utilization of immunization services is high among child bearing mothers. On the basis of research finding and conclusion the researchers recommended; Seminars/workshops and health education programme should be organized by government and non–governmental organization for child bearing mothers on how to maintain and improve on their level of utilization of immunization service. Health education should be provided by the community for the child bearing mothers on how to sustain their level on utilization of immunization services.

Keywords: *Utilization, immunization, childbearing, Mothers*

Introduction

Immunization is how specific immunity to microorganism is acquired. Any foreign substance in the body capable of stimulating immunity is called an antigen. The immunity to produce is specific for the antigens just as a key fit its particular lock. The vaccine applies to all biological preparations, produced from living organisms that enhance immunity against disease and either prevent (prophylactic vaccines) or, in some cases, treat disease (therapeutic vaccines).

Immunization has one of the supreme importance of public health. Their impact on plummeting human transience is second solely to the provision of safe drinking water (Plotkin, 2008). Immunizations are offered to persons to prevent them from diseases, however, they play an even superior function in defending entire populace from contacting infections disease. Diseases that can be prevented through vaccines were once widespread in developed countries have virtually vanished where immunization have abridged the morbidity from immunization preventable disease by as greatly as 89-100%. Andrus and Castillo, (2010) stated that the prevention of disease has had an enormous impact on economic development by limiting the costs of curative care and saving billions of dollars in countries where disease have been well-controlled or eliminated. The two factors contribute to the ability of a vaccine to control or eliminate a disease: (i) effectiveness of the vaccine. (ii) The level of Vaccination Coverage Achieved in a given population.

Effectiveness of immunization is the diminution in the occurrence of a syndrome amongst those who have been immunized relative to the occurrence in the unimmunized. Since biological are naturally variable, individuals do not react identically to immunization, immunization may fail to persuade immunity in a few persons. But the most effective immunization vaccine induces a protective immune response in 95% of individuals. If a higher level of immunization coverage is attained with an effective vaccine, disease spread can be broken up. When disease spread is broken up, even those individuals who were not immunized, or who were immunized and did not build up immunity, will be secluded from infection. This outcome is known as herd protection (Andrus & Castillo, 2010). Smallpox was eliminated by achieving adequate immunization treatment to avert the spread of disease to unvaccinated non-immunes (vulnerable). The level of immunization coverage required to interrupt diseases transmission will depend on the ease with which a disease is passed on; and efficiency of the vaccine at invigorating immunity (United States centre for disease control & WHO, 2012).

The amount of protected individuals in a population that will avert diseases from the flow is known as the herd immunity threshold. Every ailment has its durable immunity threshold. The more simply speeded the disease, the higher the threshold, the greater the immunization coverage and vaccine efficacy required to stop disease transmission. Very simply transmissible ailments, such as measles, can persist to spread in a society even when immunization coverage and vaccine efficiency are very high, Centre for Disease Control and Prevention (CDC, 2013). Plans to disrupt greatly contagious disease, such as measles may mandate mass immunization campaigns or re-immunization approaches to achieve disease eradication goals, and to examine

the impact of vaccination programs and to set practical disease control targets, vaccine guidelines, makers assess how useful vaccines are preventing disease in their districts. The community used measure of impact is vaccine competence (or vaccine efficiency, when measured under real operational circumstances). Vaccine effectiveness test diminishes in the occurrence of a disease in the vaccinated population judge against the incidence of the disease in the unvaccinated population.

In epidemiological provisions, it's defined as the distinctions among the attack rate of the disease in the unimmunized and the immunized relative to the attack rate in the unvaccinated.

Immunization rates in northern Nigeria are some of the bucks in the world. WHO (2015) National Immunization timetable indicated the percentage of fully immunized babies in the targeted state being less than 1% in Jigawa, 1.5% in Yobe, 1.6% in Zamfara and 8.3% of Katsina. As a result, thousands of children are sufferers of vaccine avertable disease.

Ado, (2015) explained that it is pertinent to reiterate that this is a great feat for our dear country as it has taken us 17 years to get to achieve it. It is the result of constant and stable progress in the polio obliteration programme since 2013 when the figure of cases of polio dropped from 122 in 2012 to 53 in 2013. The development continued and by the end of 2014, only six cases of WPV were reported. Since 24th July 2014, there has been no reported case of wild poliovirus (WPV) in any part of the country.

Despite government hard work at all levels including non-governmental organizations released of funds into the health sector in the country, state and local government areas, most communities are still unaware about the need to utilize immunization services. Federal Ministry of Health (2018), reported that with all range of program, social mobilization, community dialogue and operation toward achieving immunization coverage in most of the developing world, especially, Nigeria and Zamfara state, in particular, has remained very low. Thereby contributing to this high level of mortality and morbidity rate among children.

Shofuyi, (2009) explained that among factors identified as important in accepting and utilization to achieving and sustaining high coverage are sufficient to supply of vaccine, accessibility of immunization sites and convenient hours for immunization, small waiting time and little rates of missed opportunities for inoculation. However, even when vaccines are readily on hand and service delivery, high-quality coverage rates may still below. Owing to the problems arising

from utilization regarding vaccine-preventable diseases, these may include, lack of general knowledge about vaccine and its importance and belief towards childhood immunizable diseases not being life-threatening.

Parents' acceptability of vaccination and immunization and their attitudes towards them are likely to influence utilization. However, knowing whether people's utilization is more strongly influenced by the perceived benefits of immunization or by the perceived risks of not being immunized are important factors to consider (Njodi, 2004).

Assessing utilization of immunization services among childbearing mother in Zamfara state has become, necessary and timely, as preventable diseases are still the major causes of death and particularly those that could have been prevented if preventable services are provided on time.

The main purpose of this study is to access the level of utilization of immunization services among childbearing mothers in Zamfara State.

Research Questions

What is the level of utilization of immunization services among child bearing mothers in Zamfara State?

Hypothesis

Utilization of immunization services among child bearing mothers in Zamfara State is not significantly adequate.

Methodology

An ex-post facto research design was used to assess the utilization of immunization services among childbearing mothers in Zamfara state. Ex-post facto (after the fact) research design is a logical observed study in which the researcher does not in any way manage or manoeuvre independent variables because the circumstances for the study already exist or has already taken place.

The population of this study comprised of all childbearing mothers in Zamfara state whose population is 836,228 (united nation projected figure, 2004).

Stratified sampling technique was used to divide the state into three (3) already existing senatorial zones as stratum, in each of the strata two local government areas were randomly

selected, to select the 400 respondents for the study and to give a fair opportunity to each subject to be included in the research, proportionate sampling technique was used.

The instrument for data collection was a researcher-developed questionnaire. The questionnaire consists of two sections. Section A contains Four (4) items on personal information about the respondents. Section B contains ten (10) items on the utilization of the respondents towards immunization services.

Descriptive statistics were used to determine frequency and percentages for the demographics characteristic of the respondents, Mean score and standard deviation (SD) was used to answer the stated research question. One sample t-test was used to test the formulated hypothesis at 0.05level of significance.

Results

Research Question:

What is the level of utilization of immunization services among child bearing mothers in Zamfara State?

The analysis of data to answer the research question is presented in table 1 as follow:

Table 1 Mean Score of Responses of Child bearing Mothers on the Utilization of Immunization Services

S/no	Statement	Mean	Std. Deviation
1	I always go for routine immunization	3.27	0.966
2	The care providers follow me to my house to immunize my children	3.82	0.383
3	My child has missed a few schedule of routine immunization services	1.87	0.792
4	I always remember the days of next round of routine immunization services	3.28	0.787
5	The facilities in my community is always open for routine immunization services	3.38	0.720
6	Vaccines are always available at my community routine immunization services	3.29	0.931
7	The service providers are always available to provide the services	3.30	0.920
8	I do not miss the schedule routine immunization services	3.40	0.657
9	I take my baby for routine immunization services because it reduces the baby's vulnerability to disease	2.75	1.041
10	I always attend routine immunization services because the service providers are punctual during the exercise	3.25	0.883
11	I obtain the advice given by taking my child to routine immunization center	3.23	0.965
12	I obtain routine immunization service for my child to be admitted into Nursary/primary school	3.28	0.942
13	I am sure that obtaining routine immunization services protects my child's health and all the children in my community	3.73	0.497
14	My child is fully immunized against poliomyelitis	3.36	0.881
15	I take my child to routine immunization centers whenever the need arises	3.72	0.480
16	mothers with higher level education utilizes routine immunization services than those with lower education level	3.76	0.428
17	I obtain routine immunization service for my child only during immunization days	3.86	0.351
18	I take my child for measles immunization only	1.71	0.965
19	I take my child for routine immunization services despite the cultural belief	3.53	0.880
20	I missed routine immunization service due to financial pretreatment	3.30	1.728
		3.25	**0.809**

From overall score aggregate of 3.25 for child bearing aged mother; it reveals that the level of utilization of immunization services are practically good, because the score is higher than 2.5.

Hypothesis: Utilization of immunization services among child bearing mothers in Zamfara State is not significantly adequate.

Table 2: One sample t-test analysis of Utilization of immunization services among child bearing mothers in Zamfara State is not significantly adequate.

Variables	Mean	Std. Deviation	t-value	df	P-value
Actual mean	3.571	1.015	60.15	399	0.01
Constant mean	3.0	0.00			

t (399) = 1.972, P value < 0.05

From the above result of analysis presented, it shows that the probability value 0.01 is less than 0.05level of significance. The t-value value 60.15 is greater than the t-critical is 1.972 at degree of freedom 399. The null hypothesis which states that "Utilization of immunization services among child bearing mothers in Zamfara State is not significantly adequate." is therefore rejected.

Discussion

The result revealed that the utilization of immunization services among childbearing mothers in Zamfara state is practically good. This result opposed Mukular, & Philippe (2003), who reported that most mothers have the wrong perception on the vaccinations, that it was usual for children to be infected with measles and vaccine could decrease natural child immune to fight with the diseases.

Mohammed and Abdulkadir (2005) in their research conducted in Katagon, Bauchi State, Nigeria revealed that some childbearing mothers who do not bring their child to get any immunization, might have seen their neighbour child dead, after receiving a vaccination, therefore not ready to allowed their child to be given any vaccination. From the study conducted by Berthoud (2002) also explained that social supports, especially for vaccination without any change, yielded significant effects on the maternal utilization of immunization services. It means that the respondents were poor and therefore the economic interest can still have much influence on maternal decision making to bring the child to get the vaccinations such as the social supports provided for the mother groups for the vaccinations in term of their kindness or

courtesy. This is consistent with some researchers who reported that the Malawi and Ethiopia mothers just refused to bring their child to get an immunization, because of mal-treatment of the vaccination services from the health workers some health workers would play rude behaviours such as shouting to them during the services. (Jacob 2013). In Bangladesh, mothers were informed about the time of the vaccination session and came away for nothing. In India, inadequate timing of sessions, rude staff behaviour and the caste-related limitations to accessibility were some of the reasons that hinder proper utilization of immunization services (Ambe, 2007). Emphasizes was placed on the need for more health education programme to improve utilization of immunization services.

Disu (2009) stated in his paper titled, immunization an under-utilized Battle-Axe in the prevention of childhood infection that clean water and vaccines are two public health inventions that have had the greatest impact on the world's health. The power of vaccines is related to their ability to reduce immunity. Immunization has proven to be a very cost-effective and successful means of preventing infections disease. It has brought about marked reduction of common contagious diseases and millions of deaths have been averted. Immunization is no doubt under-utilized especially where it is most needed. The reasons for the current under-utilization are many, complex and extend beyond lack of funds. Even in the developed world many years elapsed between invention of same current vaccines and their widespread use in immunization programs.

One of the major findings of two separated studies of immunizations in Indonesia also revealed that mothers who do not fully vaccinate their offspring believe that they were healthy and therefore not certainly in need of further vaccinations (Yakubu, 2005). Also, the same mothers may want a few, but not necessarily all vaccines advise by Primary Health Care workers. If a child is healthy after receiving a few vaccinations perceived as similar in content and intent, then this number of vaccinations may be considered sufficient. Some may consciously engage in self-regulation by deciding how many vaccinations their child should receive.

The same parent feared for their sick children gotten danger if the children were immunized they also feared for the side effects of vaccines such as fever, pain and nausea. And these are similar to the study in Kishoreyas district of Bangladesh which said that in the rural areas, the occurrence of side effects such as fever swelling and the pain was a major reason for most of the mothers of a partially immunized child not to complete the vaccination schedule, (Chamroon and Sawasdi, 2008).

Conclusion

Utilization of immunization services is high among childbearing mothers in Zamfara state.

Recommendations

1. Seminars/workshops should be organized by the government, health educators and non–governmental organization for childbearing mothers on how to maintain and improve on their utilization of immunization service.
2. Health education should be provided for the childbearing mothers on how to sustain their level on the utilization of immunization services.

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PREVALENCE, CAUSES AND PERCIEVED EFFECT OF COMMERCIAL SEX AMONGST STUDENTS OF TERTIARY INSTITUTIONS IN KWARA STATE

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Abstract
This study investigates prevalence, causes and the effect of commercial sex amongst students of tertiary institutions in Kwara state. It was guided by four research questions. This study is a descriptive survey design that involves a sample of 50 students from four randomly selected tertiary institutions, making a total of 200 respondents with data collected using a researcher-designed questionnaire. Descriptive and inferential statistics of frequency count, simple percentage, mean and standard deviation were adopted in analyzing the research questions. The result of this finding revealed that the level of prevalence of commercial sex was neither high nor low amongst students of tertiary institutions as they involve in sex work to fund their education; the number of which are thought to have increased with the introduction of top-up tuition fees; negative exposure to sexual contents on TVs and internet; and heart break and loneness. It was concluded that commercial sex promotes the spread of deadly diseases (especially STDs); lead to an increase in the rate of abortion in the society; difficulty in academic concentration among students and school dropout; physical hazards such as infertility, cervical cancer, etc.; degradation of personality; unwanted pregnancy and physical risk. It was recommended amongst others that proper parental care; parent's visitation to student's schools and hostels; sex education should be made compulsory at all educational levels; enactment of law to prohibit commercial sex among students by the government; besides, films stimulating sex interest and pornographic literature should be discouraged; the value of self-control should be taught at the early stage.

Key words: *Commercial sex, Prostitution, Tertiary institutions.*

Introduction

The term "globalization" has brought about rapid social development resulting from technological advancements that have turned the world to a global village. More and more social practices, such as behavioural patterns and cultural ways of life of people gets transmitted and cultivated across the globe and this brought about a significant chain of benefits to the world. Despite its benefits to the life of man, socialization and civilization encourage lots of negative behavioural patterns among men and women in their interpersonal relationship in society.

One of the aspects of negative behavioural patterns and moral perspectives from which some individuals found themselves to express and enjoy their liberty of living which has manifested

and is permeating into the immediate historical existence of human in their social relationships, emotional, educational or social and sexual engagements is the sexual activities of one with the opposite sex in return for some remunerations like money, valuable materials, etc. Among all other forms of social vices; this act is known as the '***commercial sex'*** in actuality.

Commercial sex is sex for money and this is not restricted to any culture, it is a global activity that goes beyond age barriers as evident in the fact that girls as young as the age of eight years are involved. Commercial sex has evolved over the last two decades, (National Behaviour Survey 2004). Commercial sex work has indeed become a very serious issue as there are female sex workers in Nigeria who engage in this to earn money.

The spate of commercial sex has become worrisome and has taken a despicable turn on the continent through human trafficking and violation of the human right and these have become major issues in West Africa. Ikpe (2008) posited that commercial sex has become a lucrative business in Nigeria in recent times especially among the youths. This corroborates by the work of Onah (2000) which exposed, 31% of sex workers are students particularly in Nigeria institutions (Onah, 2000). Onah further exposes that sex workers are of different types, some stay in the brothels, some stand on the roadside, and some operate from home.

Prostitution, otherwise known as commercial sex especially among growing teens and youths is now popular and common in our society today. Those in these categories have taken selling of their bodies as the short-cut to getting income for their keeps. The narrative in the past has been that of women engaging in prostitution. This narrative has changed in recent times as men have also ventured into selling their bodies for different reasons. This is because they are patronized by bosses in offices, politicians and lecturers who enjoy exploiting the lower class by offering mouthwatering opportunities in exchange for sex, (Alufohai, 2007).

Prostitution leads to the spread of STDs (sexually transmitted diseases), AIDS (acquired immune deficiency syndrome), HPV (human papillomavirus), and herpes amongst others. Some women suffer trauma and pelvic pains and are usually subjected to excessive drinking and uncontrolled smoking as temporary pain relief which could cause cancer and this puts their lives in more jeopardy, thereby increasing Nigeria's mortality rate (Alufohai, 2007)

Uzokwe (2008) points to prostitution as one of the oldest professions in the world. This is alluded to in the bible and ancient civilizations, like Rome and Greece, had to contend with it. Despite the penalties stipulated in the laws of most nations to curb this illicit trade, it still flourishes. In Nigeria, section 223, 224, and 225 of the Nigeria criminal code 1990 stipulates some penalties for prostitution. It states that “activities of pimps or madams, underage prostitution and ownership of brothel houses are penalized. It further states that every common prostitute behaving in a disorderly or indecent manner in any public place loitering and

persistently importuning or soliciting persons for prostitution shall be deemed idle and disorderly persons, and shall be liable to imprisonment for one month.

Attempts by the Government at all levels to tackle this menace are faced by several challenges. Among the leading challenges is that some of these sex workers are not educated, they neither attend seminars nor listen to the news on television where they could be enlightened on the risk of their work. This work has then become their lifestyle, therefore, making it difficult for the government to cope with. In countries like Nigeria, prostitution is reputed as deviance and antisocial in society. It also embarrasses and dishonours the families of the youths involved in the act, such a family is disrespected by people in the society not minding their status (Onah, 2000).

In human society today, prostitution is a problem that has grown appallingly. It is, as a matter of fact, a form of violence against women because some women are forced into it. This has become a common occurrence across the country that has contributed to growth in the number of children without parents and an increase in the spread of sexually transmitted diseases. In relation to the reasons why students involve in commercial sex, Flores (2002) opined that economic, family conditions, psychological factors that lack awareness, lack of educational facilities and access, peer pressure, looking better life in the socio-cultural factors and family level of per-income are perceived as the factors that incite students into commercial sex work. Most heartbreaking is that child prostitutes are prone to different forms of abuses.

Most of the existing studies are concerned with the causes and effects of prostitution among women. Those that carried out studies on commercial sex among students of tertiary institutions only examined some of the variables this study intends to consider. None of these studies examined the prevalence of commercial sex among students of tertiary institutions. Also, they differ from this present study in geographical scope. Hence, the gap this study intended to fill by examining the prevalence, causes and effects of commercial sex among students of tertiary institutions in Kwara State, Nigeria.

Research Questions

To guide this study, these questions were raised.

1. What is the level of prevalence of commercial sex amongst students of tertiary institutions in Kwara state?
2. What are the causes of commercial sex amongst students of tertiary institutions in Kwara state?
3. What are the perceived effects of commercial sex amongst students of tertiary institutions in Kwara state?

Methodology

This study used descriptive research design of the survey type. Descriptive research examines with intensive accuracy, the phenomenon of the study and the empirical reports of the situation as it is. The choice of the descriptive is line with Oyinloye, Oluwalola, and Mamman (2013), who posited that descriptive research is concerned with the collection of relevant data to describe and interpret the existing conditions, prevailing practices, opinion, beliefs, attitudes etc.

The population for this study consists of all students in tertiary institutions in Kwara state. This is so because it is in this level of education that the basis of the finding of this research work is focused. Four (4) tertiary institutions were selected, two universities, one polytechnic and one college of education within the study area. A total of two hundred (200) respondents were chosen from all the selected tertiary Institution to serve as the source of information to carry out this research finding and thus served as the population for this study. To achieve the desired and objective, the researcher used a simple random sampling technique.

To elicit data from the respondents, the researcher designed a closed-ended questionnaire which focused on the prevalence, causes and effects of commercial sex amongst students of tertiary institutions based on the research questions. There were four (4) research questions which were the basis for these research findings and the questionnaires were structured and designed in a multiple-choice format which comprised of two (2) sections, section A, and B.

Section A was designed to elicit the respondents' bio-data such as gender, marital status and qualification etc. Section B of the questionnaire consisted of the research questions in a comprehendible format for the respondents in other to get an unbiased result from the result of the questionnaire for this research finding.

The validity and reliability of this instrument were ascertained by giving it to some experts in the faculty of Education, University of Ilorin and then a split-half method of estimating reliability was employed. The questionnaires were separated into two (2) halves (i.e the odd versus even-numbered items). The two (2) sub-sets were correlated using Pearson product moment correlation formula (Pearson R test).

Both descriptive and inferential statistics were used in analyzing the data that were gathered for this study. Frequency counts and percentage were used to answer research questions while descriptive statistics such as mean and standard deviation were used to analyze the hypotheses formulated for this study.

Results

Research Questions One: What is the level of prevalence of commercial sex amongst students of tertiary institutions in Kwara state?

Table 1: PrevalentLevel of Commercial Sex amongst Students of Tertiary Institutions in Kwara State

Prevalent Level	Score Range	Frequency	Percentage
High	28 – 36	23	11.5
Moderate	19 – 27	98	49.0
Low	9 – 18	79	39.5
Total		**200**	**100.0**

Table 1 revealed that 23 (11.5%) of the participants attested that the level of prevalent of commercial sex was high amongst students of tertiary institution; 98 (49.0%) affirmed that it was moderate while 79 (39.5%) of the respondents submitted that the prevalence of commercial sex was low. Thus, the level of prevalence of commercial sex was neither high nor low amongst students of tertiary institutions in Kwara State.

Research Questions Two: What are the causes of commercial sex amongst students of tertiary institutions in Kwara State?

Table 2: Causes of Commercial Sex amongst Students of Tertiary Institutions in Kwara State

N	Causes of Commercial Sex	Mean	S.D.	Remark
1	Many students are secretly turning to commercial sex worker to sustain the cost of living.	3.41	1.39	Affirmed
2	To gain more grades from lecturers.	2.77	1.43	Affirmed
3	Lack of proper parental care.	2.98	1.61	Affirmed
4	unemployment status of parent and some adult students.	2.62	2.17	Affirmed
5	Laziness and thirst for quick wealth.	2.87	2.11	Affirmed
6	Being victims of rape, sex slavery, child labour and trafficking.	3.08	1.63	Affirmed
7	Low academic performances of students	3.19	1.82	Affirmed
8	Personal desire to engage in commercial sex.	2.81	0.99	Affirmed
9	Negative exposure to sexual contents on TVs and internet	2.59	2.17	Affirmed
10	Heartbreak and loneliness push students to commercial sex.	2.53	1.64	Affirmed

As revealed in Table 2, all the items were affirmed as causes of commercial sex among students of tertiary institutions in Kwara State. Thus, students are secretly turning to commercial sex worker to sustain the cost of living and gain more grades from lecturers; engage in commercial sex due to unemployment status of parent and some adult students; laziness and thirst for quick wealth; being victims of rape, sex slavery, child labour and trafficking; Low academic performances; negative exposure to sexual contents on TVs and internet; and heart break and loneness.

Research Questions Three: What are the effects of commercial sex amongst students of tertiary institutions in Kwara State?

Table 3: Effects of Commercial Sex amongst Students of Tertiary Institutions in Kwara State

N	Effects of Commercial Sex	Mean	S.D.	Remark
3	Promotes the spread of deadly diseases (especially STDs)	3.06	.98	Affirmed
4	Lead to an increase in the rate of abortion in the society.	3.01	.93	Affirmed
2	Students find it difficult to concentrate in class	2.98	1.05	Affirmed
1	Students usually drop out from school.	2.75	1.12	Affirmed
6	Lead to physical hazards such as infertility, cervical cancer, etc.	2.75	.99	Affirmed
8	Commercial sex leads to degradation of personality.	2.74	1.47	Affirmed
7	Unwanted pregnancy and child are also a physical risk.	2.74	1.06	Affirmed
10	Exposure of students to drug -related problems which include dental problems, hepatitis B and C, and serious liver and kidney problems.	2.68	1.14	Affirmed
5	Students involving in commercial sex are exposed to physical torturing, virginal tearing.	2.63	1.01	Affirmed
9	Students face some psychological effects such as anger, insomnia, sexual and personality confusion.	2.58	1.18	Affirmed

As indicated in Table, all the items were affirmed as causes of commercial sex among students of tertiary institutions in Kwara State. Thus, commercial sex promotes the spread of deadly diseases (especially STDs); lead to an increase in the rate of abortion in the society; difficulty in academic concentration among students and school dropout; physical hazards such as infertility, cervical cancer, etc; degradation of personality; unwanted pregnancy and physical risk; exposure of students to drug-related problems which include dental problems, hepatitis b and c, and serious liver and kidney problems; physical torturing and virginal tearing as well as psychological effects such as anger, insomnia, sexual and personality confusion

Discussion of the Findings

Findings from this study revealed that the level of prevalence of commercial sex was neither high nor low among students of tertiary institutions in Kwara State. This result corroborates Roberts (2010) who submitted that students engage in sex work to help fund their studies; the number of which are thought to have increased with the introduction of top-up tuition fees. This

goes against the study of Scambler (2007) which states that, general assumption that sex workers originate from lower social economic backgrounds; however, it is unlikely that this small group face high levels of social exclusion and will likely stop selling sex once they have finished studying. The most common form of sex work within Nigeria according to Amadiume (2000) is found within brothels or residences of sex workers. According to him, steady rise in young students and unemployed graduates who use sex to earn income and acting as part-time prostitutes or call girls or sometimes called Aristo girls are changing the strategies used by sex workers. These young graduates and students use the services of pimps and call-ups as modus of operation, while some frequent bars and restaurants.

The second finding of this study showed that students are secretly turning to a commercial sex worker to sustain the cost of living and gain more grades from lecturers; engage in commercial sex due to unemployment status of parent and some adult students; laziness and thirst for quick wealth; being victims of rape, sex slavery, child labour and trafficking; low academic performances; negative exposure to sexual contents on TVs and internet; and heartbreak and loneness. (pulse ng, 2016), below are few of the causes and reasons why students and girls engage in prostitution; poverty, have been the first excuse that is given for the proliferation of prostitution has to be poverty, especially if the lady comes from a poverty-stricken background. This result substantiates the study of Bagley and King (2014) which revealed that young ladies whose parents are incapable of taking care of them and their siblings, ladies who are in school with no parental support or any other means of funds to fend for themselves see prostitution as a means of survival and continuity of their education, tend to go into prostitution to make ends meet and take care of their families. Bagley and King (2014) also maintain that prostitution has economic causes but rejects any attempt to abolish prostitution by eliminating only the economic factor.

The third finding of this study indicated that commercial sex promotes the spread of deadly diseases (especially STDs); lead to an increase in the rate of abortion in the society; difficulty in academic concentration among students and school dropout; physical hazards such as infertility, cervical cancer, etc.; degradation of personality; unwanted pregnancy and physical risk; exposure of students to drug-related problems which include dental problems, hepatitis b and c, and serious liver and kidney problems; physical torturing and virginal tearing as well as psychological effects such as anger, insomnia, sexual and personality confusion. These outcomes are in line with Conteh (2011) who submitted that commercial sex workers are exposed to physical torturing, psychological and social problems. Besides the problems above children prostitution are highly vulnerable to STDs and HIV/AIDs, victimization, sexual abuse, and social isolation,

Conclusion

With respect to the findings of this study, it could be concluded that the level of prevalence of commercial sex was neither high nor low among students of tertiary institutions as they engage in sex work to help fund their studies; the number of which are thought to have increased with the introduction of top-up tuition fees; negative exposure to sexual contents on TVs and internet; and heartbreak and loneness. It could also be concluded that that commercial sex promotes the spread of deadly diseases (especially STDs); lead to an increase in the rate of abortion in the society; difficulty in academic concentration among students and school dropout; physical hazards such as infertility, cervical cancer, etc.; degradation of personality; unwanted pregnancy and physical risk.

Recommendations

In light of the findings of this study, the following recommendations are proffered;

1. There should be proper parental care and constant visitation to student's schools and hostels to monitor their activities within and outside schools.
2. Sex education should be made compulsory at all educational levels to discourage students from engaging in any form of commercial sex working.
3. There should be an enactment of a law to prohibit commercial sex among students by the government;
4. All kinds of films stimulating sex interest and pornographic literature should be discouraged to prevent students from engaging in any form of commercial sex working.
5. Students should avoid keeping bad company that is prone to introducing them to any kind of commercial sex activities.

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COHABITIVE MARRIAGE AMONG UNIVERSITY UNDERGRADUATES IN KWARA STATE, NIGERIA: STUDENTS' PERCEIVED CAUSES AND CONSEQUENCES

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Abstract
The environment of tertiary institutions allows for free interaction between male and female students throughout the days and nights which may have led them to be cohabiting. This study therefore examines the perceived causes and consequences of cohabitation among university undergraduates in Kwara State, Nigeria. The research design used for the study is the descriptive survey type. 220 students were accidentally selected from three universities in Kwara State. Researcher designed questionnaire was used for data collection. The reliability coefficient of the questionnaire is 0.71. Research questions were answered using mean rating while Research hypotheses were tested using t-test and ANOVA at 0.05 level of significance. Findings revealed the cause of 'lack of accommodation in the school hostel' with a mean of 3.65 was ranked first as the major cause of cohabitation and the consequences of 'high risk of abortion' with a mean of 3.50 was ranked first indicating the most perceived consequences of cohabitation among university undergraduates in Kwara State. Another finding shows that the there is significant difference in the view of male and female students on the causes of cohabitive marriage which t value yielded 4.513 with P value .000 < 0.05. This shows a significant result. It was therefore recommended that, the school administrators in collaboration with private investors should make adequate provision for both male and female hostels. Also, there should be regular sensitization workshop organized for the students on possible causes and consequences of cohabiting in relation to their education by Educational psychologists, counsellors, school and society specialists.

KeyWords: *Causes, Consequences, Cohabiting, Kwara, Undergraduates*

Introduction
The environment of the tertiary institution is opened to all qualified candidate who wishes to further his/her education. The tertiary institution faces different challenges as a result of total social autonomy students enjoy. The parents/guardians are to some level just watches their wards, since they are not at home but in their various institutions of learning. Parents watch their wards in slack policies of the environment of the school in the name of social developments. This

is because the environment of tertiary institutions permits free interaction between the male and female students at places were lectures are received, hostels, dining halls, gardens, and recreation centres throughout the days and even at nights. The entire privacy of both the male and female student is never checked and this is likely to engage such students in immoral acts such as pre-marital sex, drug addiction, and living together. This has brought about what some student call 'campus marriage' while others refer to it as 'cohabitation'.

Cohabitation is a lifestyle that is mostly practised in this day modern society. It was observed by Walton (2012), that many students see tertiary institutions as a place where they choose their marriage partner. Cohabitation can be seen as an act of a man and woman who live together and having a sexual relationship without being married. Similarly, unmarried people live together like man and wife to test their compatibility before they proceed for the actual marriage (Ogunsola, 2004). Seltzer (2000) estimated the number of students in tertiary institutions who live with a dating partner to be above 25%. This has led to the emergence of what some call campus marriage while others refer to it as cohabitation.

Youth in Nigerian tertiary institutions can live their lives the way they choose and they can express their freedom by living independently with a student of the opposite sex. The major purpose of students coming to the tertiary institution to acquire knowledge now has to combine married life with academics. However, accepting this new way of life poses a threat to them. Many factors contribute to the crisis young people face during this stage of their lives. In the study of Mashau (2011), the most identified cause of cohabitation among students include the media focuses on social networking sites which focus is mainly on sexual related article and films. Also, Muraba and Naidoo (2005) conducted a study and found out that the majority of young people get involved in cohabitation and pre-marital sex due to pressure from their peers. The fact remains that, because their peers are involved they then give in to temptation. Any students who refused to do what other peers are doing, they are been mocked so this as made many students become copycat and receive affirmation from their peers. Cohabitation and pre-marital sex have become a gateway to be accepted into any age group.

According to Chitanum and Finschilesan (2003), the consequences of cohabitation include unwanted and unexpected pregnancy which may energize the students to seek illegal abortions, shotgun weddings which allow the couple to forcefully go into the legalized union because of the expected baby or out of sympathy. Smock (2000) also identify the major consequences of cohabitation has been having an emotional breakdown which can lead to separation of the couple. It has been identified that females are the most frequent victims in this case than the males. Batalova and Cohen (2002), observe that gender roles are less structured in cohabiting relationships. Individuals who intend to go into cohabitive marriage do not usually take time to understand their partner before moving in. According to Goodwin, Mosher, and Chandra (2012),

males who go into cohabitive marriage do not work for longer hours than those who are legally married. Also, the unmarried males are likely to be unemployed with a ratio of 15%: 8%. Many of the females who go into cohabitive marriage are likely to marry at age 25.

However, when the age of 25 is past and still in cohabitation, there is every likelihood to marry after the age of 35 compared to those who did not go into cohabitive marriage. Cohabitation before marriage is likely linked to poor marital satisfaction, dedication, and confidence as well as increased negative communication between the individuals involved. Couples who cohabitate before marriage are more prone to violence and a higher rate of divorce.

Based on the discussion above, it has been observed that tertiary institutions have long served as a meeting place in the mate selection process for a significant number of young adults or students and it starts mostly through cohabitation (Walton, 2012). Several studies have been conducted but studies available to the researchers have not examined the perceived causes and consequences of cohabitation among university undergraduates. The researcher, therefore, examined the perceived causes and consequences of cohabitation among university undergraduates in Kwara State.

Research Questions

The following research questions were answered;

1. What is the students' perceived causes of cohabitation among university undergraduates in Kwara State?
2. What is the students' perceived consequences of cohabitation among university undergraduates in Kwara State?

Research Hypotheses

The following hypotheses were tested in this study;

Ho_1: There is no significant difference in the view of male and female university undergraduates on the causes of cohabitation in Kwara State.

Ho_2: There is no significant difference in the view of male and female university undergraduates on the consequences of cohabitation in Kwara State.

Ho_3: There is no significant difference in the view of university undergraduates on the causes of cohabitation in Kwara State based on religion.

Ho_4: There is no significant difference in the view of university undergraduates on the consequences of cohabitation in Kwara State based on religion.

Methodology

The research type used for this study is the descriptive survey type. The sample comprised 220 university undergraduates selected from three universities in Kwara State using multistage sampling techniques. At stage one, purposive sampling was used to select students from three

faculties from each institution (Education, Science and Social Sciences). This is because the faculties have the largest population of students. At stage two, the accidental sampling technique was used to select 96 students from University of Ilorin, 81 students from Kwara State University, Malete and 43 students from Al-Hikmah University, Ilorin. Accidental sampling technique was used because many of the students had travelled home due to the outbreak of the pandemic at the point of this research. The instrument used for this study was a researcher design questionnaire and was tagged "Causes and Consequences of Cohabitation among University Undergraduates" (CCCMUG).

The questionnaire comprises of three (3) sections: A, B and C. Section A focus on the demographic data of the respondents which include information on gender, institution, course of study and level. Section B contains ten (10) items on causes of cohabitation and section C contains ten (10) items on consequences of cohabitation. In section B and C, the respondents responded to the items using the four Likert-scale of: Strongly Agree (4 points), Agree ((3 points), Disagree (2 points) and Strongly Disagree (1 point).

The items on the questionnaire were subjected to face and content validity by experts in the field of research, measurement and evaluation, educational counsellors and educational psychologists. The instrument was adjudged to be valid when it measures truly and accurately the quality it is meant to measure. The reliability of the questionnaire was ascertained by using the test re-test reliability method. The questionnaire was administered to a group of twenty (20) university students, who were not part of the respondents and after an interval of three weeks; the same instrument was administered to the same group of people. The two sets of scores were correlated using the Pearson Product Moment Correlation Co-efficient and the coefficient of 0.71 was obtained. Based on the reliability coefficient, the instrument was adjudged reliable for the study.

The participants were informed of the purpose of the study and their consents were sought before the administration of the questionnaire. The data collected were answered and tested with descriptive and inferential statistics respectively. Research question one and two were answered using mean ranking while research hypothesis one and two were tested with t-test. Analysis of covariance was used to test research hypothesis three and four at 0.05 level of significance.

Result

Research Question One:*What is the students' perceived causes of cohabitation among university undergraduates in Kwara State?*

Table 1: Mean Rating on the Perceived Causes of Cohabitation among University Undergraduates in Kwara State

S/N	Items	Mean	Rank
1	Lack of accommodation in the school hostel	3.65	1st
2	Having financial problem	2.90	6th
3	Lack of love	3.15	3rd
4	Peer pressure	2.85	8th
5	Afraid of losing the relationship to others around	2.35	10th
6	Sexual gratification	3.15	3rd
7	Lack of companion	3.30	2nd
8	Academic reasons	2.85	8th
9	In search of future partner	2.90	6th
10	Frustration	3.05	5th

Table 1 shows the response on the causes of cohabitation among university undergraduates in Kwara State. With a benchmark mean of 2.5, any item that is less than the benchmark mean is considered not to be one of the causes and any variable that is greater than the benchmark mean is considered to be one of the causes. However, from the table, it can be seen that all the items except for item 5 were noted by the respondents as the causes of cohabitation among university undergraduates in Kwara State. Also, the cause of 'lack of accommodation in the school hostel' with a mean of 3.65 was ranked first while the cause of ' afraid of losing the relationship to others around' with a mean of 2.85 was ranked last. This shows that, all items listed are causes of cohabitation among universities undergraduates in Kwara State.

Research Question Two: *What is the students' perceived consequences of cohabitation among university undergraduates in Kwara State?*

Table 2: Mean Rating on the Perceived Consequences of Cohabitation among University Undergraduates in Kwara State

S/N	Items	Mean	Rank
1	Lack of privacy.	2.85	8th
2	Poor grades	2.95	5th
3	Misapplication	2.85	8th
4	Exploitation	2.70	10th
5	Stable love affair	3.05	3rd
6	High risk of abortion.	3.50	1st
7	Sexually Transmitted Diseases	3.05	3rd
8	Adequate preparation for future.	2.90	7th
9	Losing focus in school.	2.95	5th
10	Early marriage.	3.40	2nd

Table 2 shows the response on the consequences of cohabitation among university undergraduates in Kwara State. However, from the table, it can be seen that the consequences of 'high risk of abortion' with a mean of 3.50 was ranked first while the consequences of exploitation' with a mean of 2.70 was ranked last. This shows that all the items were noted by the respondents as the consequences of cohabitation among university undergraduates in Kwara State.

Hypotheses Testing

Research Hypothesis One: *There is no significant difference in the view of male and female* university *undergraduates on the causes of cohabitation*

Table 3: t-test Analysis on the Difference in the View of Male and Female University Undergraduates on the Causes of Cohabitation

Variables	N	Mean	SD	t	Df	Sig (2 tailed)	Decision
Male	121	28.9	4.50				
				4.513	218	.000	**Reject**
Female	99	31.7	4.52				
P<0.05							

Result from table 3 shows the t value yielded 4.513 which is significant with P value .000 < 0.05. This shows a significant result.

Hence, the null hypothesis is rejected. This means that there is a significant difference in the view of male and female university undergraduates on the causes of cohabitation in Kwara State. The difference can be seen in the mean of the female respondents; 31.7 which is greater than the mean of the male respondents; 28.9 (i.e. 31.7 > 28.9).

Research Hypothesis Two: *There is no significant difference in the view of male and female* universities *undergraduates on the consequences of cohabitation*

Table 4: t-test Analysis on the difference in the view of Male and Female University Undergraduates on the Consequences of Cohabitive Marriage in Kwara State

Variables	N	Mean	SD	t	Df	Sig (2 tailed)	Decision
Male	121	29.7	4.50				
				1.505	218	.134	**Hypothesis Retained**
Female	99	30.8	4.52				

P>0.05

Result from table 4 shows the t value yielded 1.505 which is not significant with P value .134 > 0.05. This shows a non-significant result. Hence, the null hypothesis is not rejected. This means that there is no significant difference in the view of male and female universities undergraduates on the effects of cohabitation in Kwara State.

Research Hypothesis Three: *There is no significant difference in the view of* university *undergraduates on the causes of cohabitation in based on religion*

Table 5: ANOVA analysis on the difference in the view of University Undergraduates on the Causes of Cohabitation based on Religion

	Sum of Squares	Df	Mean Square	F	Sig.	Decision
Between Groups	33.905	2	16.953			
Within Groups	4812.145	217	22.176	.764	.467	**Hypothesis Retained**
Total	**4846.050**	**219**				

P>0.05

From table 5, result shows the df (2, 219) and F value yielded .764 which is not significant at 0.05 alpha level. Hence, the null hypothesis is not rejected since the P-value .467 is greater than 0.05 (.467 > 0.05).

This means that there is no significant difference in the view of universities undergraduates on the causes of cohabitation based on religion.

Research Hypothesis Four: *There is no significant difference in the view of* university *undergraduates on the Consequences of cohabitation based on religion*

Table 6: ANOVA analysis on the difference in the view of Universities Undergraduates on the Consequences of Cohabitation based on Religion

	Sum of Squares	**Df**	**Mean Square**	**F**	**Sig.**	**Decision**
Between Groups	68.410	2	34.205			
Within Groups	5774.790	217	26.612	1.285	.279	**Hypothesis Retained**
Total	**5843.200**	**219**				

P>0.05

From table 6, result shows the df (2, 219) and F value yielded 1.285 which is not significant at 0.05 alpha level. Hence, the null hypothesis is not rejected since the P-value .279 is greater than 0.05 (.279 > 0.05). This means that there is no significant difference in the view of universities undergr2q3qaaaduates on the effects of cohabitation based on religion.

Discussion

One of the findings of this study showed that lack of accommodation in the school hostel and lack of companion is the most students' perceived causes of cohabitation among university undergraduates in Kwara State. This finding support that of Muraba and Naidoo, (2005) who stated that students engage in cohabitive marriage as a result of peer pressure and wanting to belong. Students go into temptation because their peers do the same. Many of the students go into cohabitive marriage so that they will not be mocked by their peers and also receive affirmation for doing it. The similarities in the two findings show that cohabitation has been seen as a gate pass to be accepted into any age group. However, this finding does not align with that of Mashau (2011) who found out that, causes of cohabiting among students can be traced to social networking which exposed them to sex and related matters.

The second finding shows that the most perceived consequences of cohabitation among university undergraduates are high risk of abortion. This finding agrees with the finding of Manning and Cohen (2012) whose finding showed that the negative effect of cohabitation among students is an unwanted and unexpected pregnancy. Also, Chitanum and Finschilesan,

(2003) also found out that exploiting, high risk of abortion and losing focus in school are some of the perceived consequences of cohabitation among the students.

Another finding of this study showed that the view of a male is significantly different from the view of female university undergraduates on the perceived causes of cohabitation in Kwara State. The difference can be seen in the mean of the female respondents; 31.7 which is greater than the mean of the male respondents; 28.9 (i.e. 31.7 > 28.9). The finding agrees with that of Smock (2000) whose study also revealed that the perception of females towards cohabitation is quite different from that of males. Also, Sassler (2004) shares a similar view when he argued that men were the most complacent of cohabitation.

Another finding of this study showed that a significant difference does not exist in the male and female undergraduates on the consequences of cohabitation in Kwara State. This finding does not corroborate the finding of Smock (2000), who found that gender play a significant role in determining what students have perceived as the consequences of cohabitation. Also, the study identified that females are the greatest victims in this case than the males.

The last finding of this study showed that a significant difference does not exist in the view of university undergraduates on the perceived causes of cohabitation in Kwara State based on religion. This finding supports the findings of Abma, Martinez and Copen, (2010) who found out that both Christian and Muslim respondents have the same view as to some of the causes of cohabitation and so does not support any act of such religiously.

Conclusion

It was concluded from the findings of this study that cohabitation is on the increase among University undergraduates due to a small number of hostels available in the Nigerian tertiary institutions. Also, the consequences of cohabitation go a long way in affecting the individuals.

Recommendations

The following were recommended;

1. The school administrators in collaboration with private investors should make adequate provision for both male and female hostels.
2. The students' affairs unit and parents should encourage students to be disposed to living in the school hostels. Also, there should be unannounced visitations/inspections to the students' hostels.
3. Educational psychologists, School and society specialists including Educational counsellors should organize regular sensitizations for the students on possible causes and consequences of cohabiting in relation to their education.
4. Lectures on future implications of cohabitive marriage should be organized and discussed in places of worship among the youths.
5. Religious institutions and parents should have discussions with their youths and teach them so they can know about the risks that come with cohabitive marriage. They should be made to understand keeping the pre-marital sex for marriage which will likely bring physical, emotional, and mental benefits to a couple.

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RELATIONSHIP BETWEEN POSTTRAUMATIC STRESS DISORDER AND PSYCHOLOGICAL ADJUSTMENT OF INTERNALLY DISPLACED PERSONS IN DURUMI-1 CAMP, ABUJA, NIGERIA

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Abstract

This study investigated the Relationship between Posttraumatic Stress Disorder on Psychological Adjustment of Internally Displaced Persons in Durumi Camp Abuja Nigeria. Ex-post Facto research design was used for the study. Population of the study comprises of male and female late adolescent and adult IDPs. 380 IDPs were sampled out of 1,260 IDPs in Durumi Camp using simple random sampling technique. The two Instruments used for the study are Harvard Trauma questionnaire (HTQ) for Posttraumatic Stress Disorder with focus on depressive symptoms and Psychological Adjustment Scale (PAS) with emotional and social adjustment as sub scales. Two research questions were formulated with their corresponding null hypotheses. Pearson Product Moment Correlation was used to test the hypotheses at 0.05 level of significant. The results shows that depression has a significant negative relationship on emotional adjustment of IDPs (r = - 0.791, p = 0.006). Depression has a significant negative relationship on social adjustment of IDPs (r = - 0.657, p = 0.024). Based on the findings of this study, it was recommended that psychologists should be trained and employed for psychological intervention of the PTSD victims since depression was found to have significant negative relationship on emotional and social adjustment of the IDPs.

Key Word: *Depression, Emotional Adjustment, Social Adjustment*

Introduction

The plight of Internal Displacement (IDP) has become a global phenomenon. Different factors, which include violent conflicts and natural disasters are responsible for the plight are responsible for internal displacement. The problem has emerged as one of the greatest human tragedies of the 21st century. As of July 2015, an estimate of 55,440,648 Internally Displaced Persons were found across the countries of the world. (International Displacement Monitoring Centre's Global Overview, 2015). According to the United Nation Guiding Principles on Internal Displacement (1998), Internally Displaced Person are persons or group of persons who have been forced or obliged to flee or to leave their homes or places of habitual residence, in

particular, as a result of or to avoid the effects of armed conflicts, situations of generalised violence, violation of human rights or natural or human-made disasters and who have not crossed an internationally recognised border.

The various factors, which have brought the case of the IDPs to the limelight, had also helped to generate the statistics of the IDPs. According to the Displacement Tracking Matrix (DTM) report by the International Organization for Migration (IOM) there are 1,948,349 displaced persons in Nigeria as of 20th January 2019. This report covered only the most affected states: Adamawa, Bauchi, Borno, Gombe, Taraba and Yobe. (Displacement Tracking Matrix report by the International Organisation for Migration 2019)

The increase in the number of IDPs was due to the ongoing violence in the North-Eastern part of Nigeria by Boko Haram terrorism, inter-communal clashes and natural hazard are, therefore, considered as the reasons for the present predicament of the IDPs in Nigeria. The biggest rise in the number of IDPs was registered in Borno state, one of the North-eastern states mostly affected by Boko Haram violence, followed by Adamawa and Yobe (DTM report by IOM 2019).

Whatever pattern it takes to displace people, the tragic thing is the dire consequences the condition imposes on the displaced persons. The violence attack of Boko Haram in Nigeria in form of killings and bombing of houses has forced victims to flee or leave places where they are born, bred, lived, worked and socialized to flee literally to no man's land or to a temporally available shelter established by Government to house the IDPs. Durumi 1 IDP Camp, Abuja is one of such temporally established camp to house the victims of Gwoza and Boma IDPs from the Borno state of Nigeria. One can only imagine the ordeal of the IDPs. The Durumi IDPs are not only internally displaced but psychological traumatised persons whose fault is just that they happened to be located in a war-torn conflict area in Borno state. Victims of this violent attack by Boko Haram are likely to result in Posttraumatic Stress Disorder (PTSD) focusing on Depressive symptoms.

Posttraumatic Stress Disorder (PTSD) is a disorder arising as a result of delayed and protracted response after experiencing or witnessing a traumatic event involving actual or threatened death or serious injury of self or others (Colman, 2003). It is characterised by depression, anxiety, helplessness, or horror lasting at least for more than four weeks. The traumatic event is persistently re-experienced in the form of distressing recollections, recurrent dreams, and sensations of reliving the experience, hallucinations, or flashbacks all form part of the experience of the victims of PTSD. The common symptom considered in this study is depression.

Depression is defined as a mood or emotional state that is marked by feelings of low self-worth or guilt and a reduced ability to enjoy life. A person who is depressed usually experiences several forms of symptoms such as feelings of sadness, hopelessness, or pessimism; lowered self-esteem and heightened self-depreciation; a decrease or loss of ability to take pleasure in ordinary

activities; reduced energy and vitality; slowness of thought or action; loss of appetite; and disturbed sleep or insomnia (Rogers, 2020) .

Posttraumatic stress disorder affected victims are caused by the violent attack of Boko Haram insurgency, the middle belt communal clashes and floods which lead to loss of loved ones, home, properties, means of livelihood which are likely to have an impact on the psychological adjustment of the IDPs, especially when the thought of the plight in the family members come to mind. How the situation affected the psychological adjustment of the IDPs is very relevant in this study.

Emotional adjustment is a dimension of psychological adjustment. It involves the maintenance of emotional equilibrium in the face of internal and external stressors. This is facilitated by the cognitive processes of acceptance and adaptation. An example would be maintaining emotional control and coping behaviour in the face of a distressing situation (Psychology Wiki, 2020) Accordingly, social adjustment is an innate psychological disposition to cope with standard, values and needs of a society to be acceptable. It refers to coping with new standards of an individual's value. It also refers to coping with social challenges confronting one in any given situation or environment and the innate strength to accommodate any possible outcome or change.

The assessment of this psychological adjustment faced by the IDPs in the ordeal is a major source of concern to the researchers. This situation has therefore become important for the investigation to identify the relationship between posttraumatic stress disorder and psychological adjustment of the IDPs in Durumi Camp, Abuja, Nigeria.

From the view of empirical studies, Paredes, Canavarro and Simões (2010) carried out a study to examine the prevalence and levels of depression among Sarcoma trauma victims' emotional adjustment. They reported in their findings that majority of Sarcoma trauma victims; experience a significant level of depression and also, a significant minority, the emotional distress was clinically relevant. In general, depression scores were below the cut-off "caseness" threshold of 11 and, except for depression levels for trauma victims in the treatment phase, no differences were found between groups on the outcome measures. Age, gender, presenting status and time since the termination of treatments were found to be significant determinants of depression. They concluded that in the different phases of the disease an important number of patients may show significant psychological distress.

Similarly, Patricia and Timothy (2004) investigated to determine the relationship between depressions and social adjustment among displaced persons after a traumatic experience in Adamawa. It was a Survey research and depression Inventory (DI) and social adjustment scale (SAS) were used to collect data. The result showed a significant negative relationship between Depression and Social Adjustment ($r = -0.754$, $p = 0.034$).

From the theoretical perspective, Emotional processing theory by Ehlers and Hackmann proposed that individual with a more rigid pre-trauma view would be more vulnerable to PTSD. Behaviourist theory of depression by B.F Skinner the profounder of operant conditioning states that depression is caused by the removal of positive reinforcement from the environment. Certain events, such as losing your job, home or community or means of livelihood causes depression because they reduce positive reinforcement. deRidder, Greener, Kuijer, and van Middendorp identified five elements of successful social adjustment which includes the successful performance of an adaptive task, work efficiently, presence of low negative affects and high positive affects, adequate function status (e.g. Going to work) and Social acceptance.

It was therefore on this note that the researchers deem it fit to carry out this study with a view of proffering solution to the existing problem of PTSD on the psychological adjustment of IDPs in Durumi Camp Abuja Nigeria.

Statement of the Problem

The Boko Haram terrorism operating mostly in the Northeast of Nigeria, communal clashes and naturally induced disasters, which have become almost a daily occurrence and plagued Nigeria for over a decade. This is responsible for the displacement of over a million people in Nigeria.

These IDPs have lost home, properties, means of livelihood, loved ones and the communities. These tragedies have dashed all hopes for those affected returning to normal life. Even if they eventually returned, life may not be normal as it were. This traumatic experience is likely to lead to depression and anxiety. The traumatic experienced by the brutal death of their loved ones and fleeing for one's dear life is likely to have a psychological effect on the psychological adjustment of the IDPs, especially those in Borno IDP who now reside in Durumi-1 IDPs Camp. These experiences are likely to have a long-lasting traumatic effect on the IDPs.

These stressful and pathetic ordeals faced by the IDPs is a major source of concern to the researcher. The situation becomes important for investigation to seek to establish the relationship between;

1. depression and emotional adjustment of internally displaced persons suffering from PTSD.

2. depression and social adjustment of internally displaced persons suffering from PTSD

Research Questions

This research work answered the following questions:

1. What is the relationship between Depression and Emotional Adjustment of Internally Displaced Persons suffering from PTSD?

2. What is the relationship between Depression and Social Adjustment of Internally Displaced Persons suffering from PTSD?

Research Hypotheses

The following null hypotheses given were tested.

1. There is no significant relationship between depression and emotional adjustment of IDP.

2. There is no significant relationship between depression and social adjustment of IDP.

Methodology

The research adapted for this study is the Ex-post factor. It is a design which the researchers do not have directs control of independent variables because their manifestation has already occurred and that they are not inherently manipulated (Kerlinger, 1986:279). In the content of this study, the independent variable is the depression which is a symptom of posttraumatic stress disorder, which has already occurred, and the researcher can only observe the dependent variable that is a psychological adjustment as the outcome. Because of this, ex-post-facto is deemed the most appropriate design for the study.

The population of the study consists of late adolescents and adults displaced persons from the Durum-1IDP camp, Abuja. The target population consists of 1,260 Internally Displaced persons from Bama and Gwoza communities of Borno state. Durumi IDPs comprises of male and female, Muslims and Christians, farmers, traders, teachers, civil servants and students. Majority of them are self-employed. They have been found to exhibit manifestation of PTSD in the form of depression. They were identified through PTSD check-list and were thus considered as the target group for the study.

Simple random sampling technique was employed to select a total of three hundred and eighty (380) respondents made up of male and female respondents from the given target population in the Durumi IDP camp. The selection of three hundred and eighty respondents was based on the recommendation of Krejie and Morgan (1970), who believe that the sample size is considered adequate and can serve as a true representative of the target population.

The researcher collected a letter of introduction from the department and presented it to the coordinator of Durumi-1 IDP Camp before administering the instrument. This was to seek permission from the Officials of the IDPs Camp to avoid any hitch during data collection. Brief orientation was conducted to the IDPs and camp officials on the nature of the research and the instruments. The researcher administered the questionnaire personally with the help some Camp Officials who have been with IDPs for some time and guided the IDPs on the method of responses. The youths and some older adults who could read and write responded to the

questions by themselves and clarification was made where necessary. The older adults who could not read and write responded verbally to the questions as the researcher and the one camp official translated the questions in the Hausa language while some IDPs youths helped to tick the instruments for them where appropriates. The presentation of the instruments to those who could not read and write was presented in groups of three, five or ten, while those who could read and write were presented individually.

In testing the hypotheses raised for the study, Pearson Product Moment Correlation (r) was used to find out the relationship between depression and emotional a and social adjustment at 0.05 level of significance.

Results

Hypothesis One: There is no significant relationship between Depression and Emotional Adjustment of IDPs in Durumi camp, Abuja

Table one: PPMC statistics on relationship between Depression and Emotional Adjustment of IDPs in Durumi camp, Abuja.

Variables	*N*	*Mean*	*SD*	*Correlation index r*	*Df*	*P*
Depression	380	53.2553	10.32075	-0.791	378	0.006
Emotional Adjustment	380	13.4105	1.17129			

P ≤0.05 level of significance

The result of the correlation statistics in table one showed a negative correlation between Depression and Emotional Adjustment ($p = 0.006$, $r = -0.791$). This means that there is a negative relationship between depression and emotional adjustment of the IDPs. This implies an inverse relationship between the two variables; this implies that the higher the IDP's level of depression the lower the emotional adjustment of the IDPs. Therefore, the Null Hypothesis which stated that there is no significant relationship between depression and emotional adjustment is hereby rejected.

Hypothesis Two: There is no significant relationship between Depression and Social Adjustment of the IDPs in Durumi Camp Abuja.

Table two: PPMC statistics on relationship between Depression and Social Adjustment of IDPs in Durumi Camp Abuja.

Variables	*N*	*Mean*	*SD*	*Correlation index r*	*Df*	*P*
Depression	380	53.2553	10.32075	-0.657	378	0.024
Social Adjustment	380	9.2684	.80667			

P ≤0.05 level of significance

The result of the correlation statistics in table two above showed a negative correlation between depression and social adjustment variables (p = 0.024, r = -0.657). This means that there is a negative relationship between depression and social adjustment of the IDPs in Durumi Camp. This implies an inverse relationship between depression and social adjustment, that is, the higher the IDP's level of depression the lower their social adjustment. Therefore, the null Hypothesis which states that there is no significant relationship between depression and social adjustment is hereby rejected.

Discussion

The present study aimed to find out the influence of posttraumatic stress disorder on psychological adjustment of Internally Displaced Person in Durumi Camp, Abuja with emphasis on Depressive symptoms against Emotional and Social Adjustment of the IDPs in that Camp. The tragedy, which became the cause of displacement of thousands of people eventually, left most of the IDPs in posttraumatic stress disorder which led to the IDPs experiencing Depression. The present study focused on IDPs in Durumi Camp regarding their emotional and social adjustment to depression.

The result also revealed that there is a negative but significant relationship between depression and emotional adjustment of IDPs in Durumi Camp, Abuja (r = - 0.791). The finding of this study which revealed an inverse relationship between depression and emotional adjustment of IDPs, agreed with the finding of Paredes, Canavarro and Simões (2010), who carried out a study to examine the prevalence and levels of depression among Sarcoma trauma victims' emotional adjustment. The findings reported that majority of Sarcoma trauma victims; experience a significant level of depression and also a significant minority, the emotional distress was clinically relevant.

The finding of this study also revealed that depression has a significant negative influence on social adjustment of IDPs Durumi Camp, Abuja. This finding agreed with the study of Patricia

and Timothy (2004) who investigated to find out the relationship between depressions and social adjustment among displaced persons after traumatic experience in Adamawa. Their study revealed a level of significance at a correlation index of r = -0.754.

Both finding implies that the more people are exposed to traumatic events, the more they are negatively affected emotionally and socially. The circumstances they found themselves are likely to affect their mental health if not given early attention. This will eventually affect the manpower development of the North-Eastern region and Nigeria in general.

Conclusion

In conclusion, depression which is one of the symptoms of PTSD has negative effect on the emotional adjustment of internally displaced persons (p = 0.006, r - 0.791). Depression was also found to have negative effect social adjustment of the IDPs in Durumi Camp Abuja (p = 0.024, r - 0.657).

Recommendation

Based on the findings of the study, it was recommended that the affected IDPs should be given immediate attention in form of psychological treatment or intervention to live a meaningful life.

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