

ASSESSMENT OF KNOWLEDGE OF MALARIA PREVENTION STRATEGIES AMONG MOTHERS OF UNDER-FIVE CHILDREN IN NORTH CENTRAL ZONE, NIGERIA

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Abstract

This study was conducted to assess the knowledge of malaria prevention strategies among mothers of under-five children in North Central Zone, Nigeria. To achieve this purpose, an ex-post-facto research design was used. A total sample of 768 mothers of under-five children in the North-central zone, Nigeria from a population of 3,641,445 was selected through multi-stage sampling procedures of simple random sampling and proportionate sampling. The instrument used for the study was the researcher's structured questionnaire which was pilot tested using Cronbach Alpha reliability. Inferential statistics of a one-sample t-test was used to test the formulated hypothesis at a 0.05 level of significance. The result revealed that knowledge of malaria prevention strategies among mothers of under-five children in the north-central zone, Nigeria was significant ($p = 0.001$). Based on the result it was concluded that mothers of under-five children have knowledge of malaria prevention strategies. Based on the conclusion, it was recommended that health educators should carry out awareness campaigns through rendering health talks which would help to further sustain the already existing knowledge of malaria prevention strategies among the mothers of under-five children in North-Central Zone, Nigeria.

Keywords: Knowledge, Children, Malaria, Mothers, Prevention.

Introduction

Malaria has continued to be a leading cause of mortality particularly among under-five years children and pregnant women in tropical African countries. The estimate showed that 3.3 billion people were at risk of contracting the disease worldwide (World Health Organization, WHO, 2015; Ahmed, Haque, Haque & Hoissan, 2009). In Africa, malaria is known to be a disease of the poor and a severe cause of poverty (Roscoe, 2012). This was revealed in a recent economic analysis of 150 countries where 44 countries with intensive malaria transmission grew 1.3 per cent less per year than countries without high levels of malaria. The study further revealed that a 10 per cent reduction in malaria was associated with 0.3 per cent higher economic growth. Thus, malaria reduces a country's productivity through loss of investment and reduced income from tourism (Gallup & Sachs, 2001; Guyatt & Snow, 2014).

In Nigeria, malaria is responsible for around 60% of the out-patient visits to health facilities, 30% of childhood death, 25% of death in children under one year and 11% of maternal deaths (Noland, Graves, Sallau, Eigege, Emukah, Patterson, Ajiji, Okorofor, Oji, Umar & Alphonsus, 2014). Similarly, about 70% of pregnant women suffered from malaria, which contributes to maternal anaemia, low birth weight, stillbirths, abortions and other pregnancy-related complications (Federal Ministry of Health (FMoH), 2015). The financial loss due to malaria is estimated to be about 132 billion Naira annually in form of treatment costs, prevention costs and loss of man-hours (WHO, 2012).

Malaria, a debilitating febrile and life-threatening illness, is caused by a parasite called *Plasmodium*. Its route of transmission remains as bites from infected female anopheles mosquitoes. Environmental factors and behavioural patterns of vectors and human populations combine to provide favourable conditions for malaria transmission (Boutin, Pradines, Pages, Legros, Rogier & Migliani, 2005). Proven effective options to reduce morbidity and mortality include early diagnosis, combined with prompt effective therapy and malaria prevention through reduction of human-vector contact, especially with the use of Insecticide Treated Nets (ITNs) (WHO, 2007). Perceptions about malaria illness, particularly households' perceived susceptibility and beliefs about the seriousness of the disease, are important preceding factors for decision-making concerning prevention and curative actions (Rakhshani, Ansari Moghadam, Alemi & Moradi, 2003). The understanding of the possible causes, modes of transmission, and individual preference and decision-making about the adoption of prevention and control measures vary from community to community and among individual households. There have been a considerable number of reports about knowledge, attitude, and practice relating to malaria and its control from different parts of Africa. These reports concluded that misconceptions concerning malaria still exists (Laver, Wetzels & Behrens, 2001; Obol, David & Christopher, 2011).

According to WHO (2014), there are four types of malaria parasites: *falciparum*, *vivax*, *malariae* and *ovale*. *Plasmodium falciparum* is responsible for most malaria deaths, especially in Africa. The infection can develop suddenly and produce several life-threatening complications, *Plasmodium vivax* is the most geographically widespread of the species, and produces less severe symptoms. *Plasmodium malariae* infections not only produce typical malaria symptoms but also can persist in the blood for very long periods, possibly decades without ever producing symptoms. A person with asymptomatic (no symptoms) *P. malariae*, however, can infect others, either through blood donation or mosquito bites. Relapses, however, can occur for up to 3 years, and chronic disease is debilitating and *Plasmodium ovale* is rare, can cause relapses, and generally occurs in West Africa (WHO, 2015). Distinction based on clinical symptoms is difficult without laboratory examination. *Falciparum* parasite produces the most fatal form of malaria (WHO, 2014).

Malaria is a major cause of child mortality in Nigeria with approximately 100 million episodes in children under five years of age every year (FMOH, 2005). The mortality rate among children under five years is 143 per 1,000 live births in the country (WHO, 2012) and deaths among this category of children often occur within two days of developing symptoms of malaria (Diallo, De Serres, Beayogui, Lapointe & Viens, 2011; Federal Ministry of Health, 2008). Malaria increases susceptibility to other infections and retards growth and development in children. It is associated with a considerable economic burden including the direct loss to government productivity. Malaria kills Nigerian children every 30 seconds, hence, pregnant women and their unborn children are also vulnerable to malaria which serves as a major cause of maternal anaemia and prenatal death (Davidson, 2010). Attempts at different periods by governments and concerned organizations in these regions aimed at control and eradication have not been satisfactory. This perhaps informed the shifts in the campaign from eradication to control. Findings have shown that good knowledge, attitude and practice of any public health disease by individuals and communities seems necessary if effective prevention measures are to be realistic (Ahmed, Haque, Haque & Hoissan, 2009; Iwueze, Ezugbo-Nwobi, Umeaneto, Egbuche & Anaso, 2013).

Malaria prevention strategies refer to the methods used to prevent the spread of disease or to protect individuals in areas where malaria is endemic. These methods are numerous, Oreagba, Onajole, Olayemi and Mabadeje (2014) pointed out among others prophylactic drugs, mosquito eradication and the prevention bites. In support Afolabi (1996) classified malaria prevention into four levels. They are; a) Preventing infection by avoiding bites by parasite-carrying mosquitoes. b) Preventing disease by using anti-malaria drugs prophylactically. c) Prevention and control in endemic areas; through the use of vector control, insecticide-treated nets and mosquito repellent creams. d) Prevention treatment with

anti-malaria drugs of vulnerable groups such as under-five children who receive intermittent treatment. Patel, Gupta, and Oswal (2012) and Okwa (2013) revealed from reviewed current trends in the battle against malaria by use of insecticide-treated nets, vector control, indoor residual spraying (IRS), use of mosquito repellent, electric mosquito zapper and health education on knowledge, attitude and practice.

Knowledge is the ability to recall or recognize something such as a fact concept, principle or custom (Kalua, 2011). It is further stated that knowledge can be acquired through formal or informal settings either with the help of someone or alone. Ashikeni, Envuladu and Zoakah (2013) stated that the mothers of children less than five years in Kuje had poor knowledge of the cause of malaria, its prevention and possible complications, good knowledge of the prevention of malaria among mothers such as the use of ITNs, insecticide sprays, nets on windows and doors or protective clothing, was found to be 5.4% at baseline in the intervention group but this increased to 25% at post-intervention. It showed that adequate and proper health education to women especially in the language they understood increased their knowledge and improved their practice of the treatment of malaria in children.

Malaria presently remains one of the worst menaces of tropical countries of the world. It is a killer and debilitating disease that affects the physical and economic well-being of people living in endemic areas of Africa. The high intensity of the spread of malaria makes it an enormous public health problem. African countries are most hard hit by the disease, where it ravages communities. In most parts of Nigeria, malaria is a preventable and curable disease that is highly endemic, where the vast majority of cases occur in children under the age of five, due to this, mothers of under-five children need to be more empowered concerning Mother related Knowledge, Attitude and Practice (MKAP). The importance of information on KAPs in designing and improving malaria control activities has been emphasised. An understanding of mother's perceptions and practices on malaria is crucial for policymakers to incorporate disease prevention into the socio-cultural dimensions of the affected communities (Afolabi, 2016; Obi, Nwanebu, Okangba & Nwanebu, 2012). KAP studies are also essential in establishing epidemiological and behavioural baselines and may be used to identify indicators for monitoring malaria control programmes. Achieving sustainable control of the disease depend on extensive public health promotion programmes which focus on current and proven methods of malaria prevention and management.

Malaria is a killer and debilitating disease that affects the physical and economic well-being of people living in endemic areas of Africa. The high intensity of the spread of malaria makes it an enormous public health problem. The ever-growing increase in the number of malaria cases observed by the researcher in the North Central zone of Nigeria was among under-five children. This growing number of cases suggested that malaria preventive strategies are either not known or practised by the mothers of these children. The steady increase in the number of infant mortality due to malaria-related cases is worrisome. 157 deaths per 1,000 live births, which translates to one in every six children born in Nigeria dying before their fifth birthday (National Population Commission and Macro, 2010).

This high number of infant mortality in the country continues to be an issue of great concern to public health practitioners. The ultimate goal of the Roll Back Malaria programme is to see that disease transmission and burden is reduced drastically across the country. But that is not the reality in Nigeria today. Despite all efforts, it is observed that insecticide-treated nets shared freely to protect against malaria can be seen used to tend seedling beds and plants around some houses in some communities. These issues among others prompted the researcher to take up this study with the aim to assess knowledge of malaria prevention strategies among mothers of under-five children in the North-central zone, Nigeria.

Material and Methods

To achieve the purpose of this study, an ex-post facto research design was adopted for this study. The population of the study comprised of Three million, six hundred and forty-one thousand, four hundred and forty-five (3,641,445) mothers of under-five children in North-central zone, Nigeria

(National Population Commission (NPC) and ICF Macro, 2016). A sample size of seven hundred and sixty-eight (768) respondents who are mothers of under-five between the ages of 18 – 49 years was used for the purpose of this study. To arrive at the sample size Research Advisor (2016) table for determining sample size was used. They suggested that in a population of 1, 000, 000 and above a sample size of 384 can be used. However, in order to cover for possible attrition, the researcher increased the sample size by 100% which gives a total of 768.

A multi-stage sampling technique that involved simple random sampling, proportionate sampling technique and purposive sampling was used for this study. The first stage involved the use of a simple random sampling technique to select six (6) states in the north-central zone (Kogi, Niger, Benue, Kwara, Plateau and Nasarawa). The researcher wrote the names of all the states on pieces of paper, folded them and placed them in a container. The researcher shuffled it asked one of the research assistants to dip his hand and pick a piece of paper one at a time. The selected state picked was then written down. This procedure continued until a total of six (6) states were selected.

The second stage involved the use of simple random sampling techniques to select two (2) general hospitals from each state. The researcher wrote down all the names of general hospitals from each state on pieces of paper, folded them and dropped them in a container. The researcher shuffled it and the selection was made by one of the research assistants. The procedure continued for each state until a total of twelve (12) general hospitals were selected and used to collect data. At the third stage, the researcher employed the use of purposive sampling to select the respondents (mothers of under-five children) attending each general hospital at the paediatric unit and ante/post-natal clinic in each general hospital selected for the study. Those who had children under the age of five were considered potential respondents for the study.

At the fourth stage, proportionate sampling was used to determine the number of respondents per general hospital. The researcher divided the population of mothers of under-five children at each LGA by the total population from all LGAs selected and multiplied it by the sample size (768).

$$\text{Proportionate sampling technique} = \frac{n}{N} \times 768$$

Where n = population of mothers of under-five in a LGA

N = total population of mothers of under-five children

In the fifth stage, the researcher employed a systematic random sampling procedure to select the respondents at the general hospitals. The researcher and her four (4) research assistants selected every second mother of under-five children that visited the hospital as they visit the facility. This procedure continued until the total sample size required for the study was gotten.

The instrument that was used for data collection was a researcher-structured questionnaire made up of four (4) sections (sections A – D). Thus, to score any response a mean score of 2.5 was used. To establish the face and content validity of the instrument, the questionnaire was vetted by five (5) experts in the Department of Human Kinetics and Health Education, Nursing Sciences and Community Medicine, Ahmadu Bello University, Zaria for comment, observations, corrections and suggestions. After incorporating all the suggestions made by the experts, the final copy of the questionnaire was pilot tested to further validate the instrument. A pilot test was conducted to test the reliability of the instrument; the results revealed a Cronbach Alpha reliability of 0.833 closer to 1 and therefore considered reliable. Descriptive statistics of frequency count and percentages, means and standard deviations were used to describe the demographic characteristics of the respondents, and to answer the structured research questions respectively. While inferential statistics of one-sample t-test was used to test the formulated hypothesis at 0.05 alpha level.

Results and Discussion

Table 1: Demographic Characteristics of the Respondents

S/N	Variable	Option	Frequency	Percentage (%)
1.	Age Range of mothers of under-five children	15 – 24 years	114	14.9
		25 – 34 years	311	40.7
		35 – 44 years	253	33.1
		45 years and above	87	11.4
		Total	765	100.0
2.	Level of Education	No formal Education	134	17.5
		Primary Education	265	34.6
		Secondary Education	299	39.1
		Tertiary Education	67	8.8
		Total	765	100.0
3.	Number of Children per Family	1 – 3 children	414	54.1
		4 – 6 children	285	37.3
		7 children and above	66	8.6
		Total	765	100.0
4.	Occupation	Civil Servant	238	31.1
		Self – Employed	185	24.2
		Full-time housewife	342	44.7
		Total	765	100.0

Table 1 shows that many 311 (40.7%) of the respondents are between the ages 25-34 years, 253 (33.1%) of the respondents are between the ages of 35 – 44 years, 114 (14.9%) are between the ages 15-24 years, while 87 (11.4%) of the respondents were between the age of 45 years and above. Furthermore, Table 4.1 reveals that 114 (17.5%) of the respondents have no formal education, 265 (34.6%) of the respondents have a primary school education, 299 (39.1%) of the respondents have secondary education while 67 (8.8%) of the respondents have tertiary education. The majority of 414 (54.1%) of the respondents have 1 – 3 children, 285 (37.3%) of the respondents have 4 – 6 children while 66 (8.6%) of the respondents have 7 children and above. 238 (31.1%) of the respondents were civil servants, 185 (24.2%) of the respondents were self – employed while 342 (44.7%) of the respondents were full-time housewives.

Research Question: What is the knowledge of malaria prevention strategies among mothers of under-five children in North Central Zone, Nigeria?

Table 2: Mean scores of responses on the knowledge of malaria prevention strategies among mothers of under-five children in North Central Zone, Nigeria

Item	Mean	Std. Dev.
Mosquito coil can prevent the mosquito from biting my child	3.55	1.59
Insect repellent use can prevent the mosquito from biting my child	3.61	0.10
Mosquito net when used can help to prevent mosquitoes from biting my child	3.28	0.59
Window net when fixed properly can help to prevent mosquitoes from biting my child	3.44	1.40
Door nets when fixed can help to prevent mosquitoes from biting my child	3.22	0.98
Cutting bushes around the house can help to prevent mosquitoes from breeding	3.37	1.40
I know that disposing of empty containers harbouring water can help to prevent the breeding of mosquitoes	3.35	1.50
The use of an electric mosquito zapper can help to prevent mosquitoes from biting my child	2.81	0.95
Dressing the children in protective clothing such as long-sleeve shirts can help prevent them from mosquito bites	3.44	1.43
Indoor residual spraying of insecticide can completely prevent mosquitoes from staying in dark corners of the rooms	3.42	0.95
Sleeping inside an insecticide-treated mosquitoes net prevent mosquitoes from biting my child	2.71	1.01
Aggregate Mean	3.29	1.08

Table 2 reveals the mean score of the responses on the knowledge of malaria prevention strategies among mothers of under-five children. The result shows that mothers of under-five children have knowledge of malaria prevention strategies. The respondents knew that mosquito coil can prevent mosquito from biting my child (3.55; SD=1.59), insect repellent use can prevent mosquito from biting my child (3.61; SD=0.10), mosquito net when used can help to prevent mosquitoes from biting my child (3.28; SD=0.59), window net when fixed properly can help to prevent mosquitoes from biting my child (3.44; SD=1.40), door nets when fixed can help to prevent mosquitoes from biting my child (3.22; SD=0.98), cutting bushes around the house can help to prevent mosquitoes breeding (3.37; SD=1.40), know that disposing of empty containers harbouring water can help to prevent breeding of mosquitoes (3.35; SD=1.50), use of electric mosquito zapper can help to prevent mosquitoes from biting my child (2.81; SD=0.95), dressing the children in protective cloths such as long sleeve shirts can help prevent them from mosquito bites (3.44; SD=1.43), indoor residual spraying of insecticide can completely prevent mosquitoes from staying in dark corners of the rooms (3.42; SD=0.95) and sleeping inside insecticide treated mosquitoes net prevent mosquitoes from biting my child (2.71; SD=1.01). The aggregate mean score of the items is 3.29 which was found to be greater than they know about mosquito coil which can prevent mosquito bites (3.55). This implies that mothers of under-five children have knowledge of malaria prevention strategies in the North Central zone, Nigeria.

Hypothesis Testing

Hypothesis: Knowledge of malaria prevention strategies among mothers of under-five children in the north-central zone, Nigeria is not significant.

Table 3: One sample t-test analysis of knowledge of malaria prevention strategies

Variable	Aggregate Mean	Std.	Df	t-value	P-value.
Knowledge	3.29	1.08	764	4.37	0.001

$t(764) = 1.960 < 0.05$

The result in Table 3 shows knowledge of malaria prevention strategies among mothers of under-five children in the north-central zone, Nigeria is significant because the t-value of 4.37 is greater than the t critical 1.960 at 764 degrees of freedom (df) and p-value of 0.001 is less than 0.05 with this observation, the null hypothesis that states knowledge of malaria prevention strategies among mothers of under-five children in the north-central zone, Nigeria is not significant was rejected.

This study was conducted to assess the knowledge of malaria prevention strategies among mothers of under-five children in the north-central zone, Nigeria. With regards to knowledge of malaria prevention strategies among mothers of under-five children. The results of this study revealed that mothers of under-five children in North Central Zone, Nigeria were knowledgeable ($p=0.001$) about malaria prevention strategies. This study disagreed with the study of Ashikeni, Envuladu and Zoakah (2013) which stated that the mothers of under-five children in Kuje area council Abuja had poor knowledge of the cause of malaria, its prevention and possible complications, good knowledge of the prevention of malaria among mothers of under-five children such as the use of ITNs, insecticide sprays, nets on windows and doors or protective clothing, was found to be 5.4% at baseline in the intervention group but this increased to 25% at post-intervention. This was statistically significant ($p=0.0002$). In the control group, good knowledge of prevention of malaria increased marginally from 7.7% to 9.7% but this was not statistically significant ($p=0.369$). The findings of the study revealed that adequate and proper health education to mothers of under-five children especially in the language they understood increased their knowledge and improved their practice of the treatment of malaria. Although prevention of malaria has been globally accepted as a significant aspect of malaria control the majority of mothers of under-five children often do not learn the tenets of prevention (Falade, Ogundiran & Bolaji, 2013; Obrist, Mayumana, & Kessy, 2010).

The findings of this study are also in consonance with a study that was conducted by Nwana (2011) in Cameroon which assessed the knowledge and utilization of insecticide-treated nets to prevent malaria. The result of the study revealed that caregivers had good knowledge of malaria prevention ($n=78$). The findings of this study is in line with the findings of a study conducted by Houmsou, Amuta, Wama, Bingbeng and Hile (2014) that examined the knowledge, attitudes and perceptions of the children's mothers regarding malaria and prevention measures. The results revealed that 99.50% of children's mothers have good knowledge of malaria prevention. The finding of the study is also in sync with the findings from a study by Amaechi and Ukpai (2013), who assessed knowledge, attitude and practice about malaria among mothers and caregivers in Aba South Local Government Area, Abia State, Nigeria. The knowledge of the symptoms, treatment-seeking behaviours and management of malaria amongst mothers and caregivers in Aba South LGA in South-Eastern Nigeria was assessed. The results of the study revealed that 97.01 % of mothers and caregivers know about malaria, as well as its prevention

Conclusion

Based on the finding, it was concluded that:

1. Mothers of under-five children have knowledge of malaria prevention strategies in the North Central zone of Nigeria.

Recommendation

Based on the conclusion drawn, it was recommended that:

1. Health educators should carry out awareness campaigns through health talks which would help to further sustain the already existing knowledge of malaria prevention strategies among the mothers of under-five children in North-Central Zone, Nigeria.

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EFFECT OF SLEEP DEPRIVATION, STRESS AND BURNOUT ON ACADEMIC PERFORMANCE OF UNDERGRADUATES STUDENTS OF BENUE STATE UNIVERSITY

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Abstract

Sleep deprivation, also known as insufficient sleep or sleeplessness, is the condition of not having enough sleep while stress is an individual's response to change in circumstance or to a threatening situation and Burnout is a prolonged response to chronic emotional and interpersonal stressors. It is defined by the three dimensions of exhaustion, cynicism, and inefficacy. This study, therefore, investigated the effect of sleep deprivation, stress and burnout on the academic performance of undergraduate students of Benue State University, Makurdi. The study employed a cross-sectional research design. The population of the study comprise all 18,729 undergraduate students of Benue State University, Makurdi. A total of 384 participants were sampled for the study. The participants were sampled using the multistage sampling technique. The instruments used for data collection were Chronic Sleep Reduction Questionnaire (CSRQ), Students' Stress Rating Scale (SSRS), and Maslach Burnout Inventory – Student Survey (MBI-SS). The data collected were analysed using descriptive statistics of mean and standard deviation and Regression analysis to test the hypotheses at a 0.05 level of significance. The results of the study revealed that: Sleep deprivation has a significant effect on students' academic performance [$R^2 = .215$, $F = 104.402$, $\beta = .463$, $p < .05$]; The stress level among the students is generally moderate (105.16). Stress had a significant effect on students' academic performance [$R^2 = .185$, $F = 7.083$, $\beta = -.430$, $p < .05$]. The three subscales of burnout, emotional exhaustion, cynicism and academic efficacy all had mean scores of 15.06, 12.03 and 7.93 respectively. There was a high level of burnout among the students. Results available also show that burnout has a significant effect on students' academic performance [$R^2 = .123$, $F = 4.741$, $\beta = -.351$, $P < .05$]. Based on the findings of the study, it was concluded that sleep deprivation has a significant positive effect on students' academic performance while stress and burnout both have negative effects on students' academic performance. The study recommended that stakeholders in education should ensure to provide a good academic environment to minimize academic stress and improve students' academic performance.

Key Words: Sleep Deprivation, Stress, Burnout, Academic Performance, Undergraduates.

Introduction

Sleep is a naturally recurring state of mind and body, characterized by altered consciousness, relatively inhibited sensory activity, reduced muscle activity and inhibition of nearly all voluntary muscles during rapid eye movement (REM) sleep (Ferri, Manconi, Plazzi, Bruni, Vandi, Montagna, & Zucconi, 2008). The reasons for student sleep deprivation are many, including a wide range of social, cultural, environmental, and biological factors. Many daily living conditions can disrupt sleep. In disadvantaged neighbourhoods, for example, local violence causes individuals to fear for their safety. This can lead to hyperarousal, which makes it harder to fall asleep and reduces sleep quantity and quality (Bagley, Tu, Buckhalt &

El-Sheikh, 2016). The many pressures and commitments that teenagers and college students must manage during school are likely strong contributors to sleep deprivation. Whatever their motivation and capabilities, school assignments, schedules, and accountabilities can be highly demanding and lead to making adequate sleep a lower priority. Involvement in extracurricular activities can compound the situation. So can excessive competitive pressures. Students may stay up late to finish an assignment (and be less alert during the school day). And the problem can become cyclical, with students increasing their sleep debt falling more and more behind in school (Dement, 2019).

Sleep deprivation can result in depressive and oppositional behaviour, irritability, poor impulse control and/or overactivity – all of which are some characteristics of common learning disorders. Research has shown that relationships exist between inadequate sleep and developing Sleep Disordered Breathing (SDB), Periodic Limb Movement Disorder (PLMD), and Attention-Deficit/Hyperactivity Disorder (ADHD) (Ivanenko, 2010). These syndromes can make simple tasks involved with learning, difficult for those who suffer from it.

Beyond the effects of sleep on memory consolidation, lack of sleep has been linked to poor attention and cognition. Well-controlled sleep deprivation studies have shown that lack of sleep not only increases fatigue and sleepiness but also worsens cognitive performance (Lim & Dinges, 2010). In fact, according to Dawson and Reid (2017), the cognitive performance of an individual who has been awake for 17 h is equivalent to that exhibited by one who has a blood alcohol concentration of 0.05%. Outside of a laboratory setting, studies examining sleep in the comfort of peoples' own homes via self-report surveys have found that persistently poor sleepers experience significantly more daytime difficulties in regards to fatigue, sleepiness, and poor cognition compared with persistently good sleepers.

Stress is an individual's response to change in circumstance or to a threatening situation. It can be viewed as a personal reaction to an external event/demand like writing an exam or to an internal state of mind like worrying about an exam. In psychological sciences, stress is a feeling of mental press and tension. Stress may be understood as a state of tension experienced by individuals facing extraordinary demands, constraints or opportunities. The pressures of modern life, coupled with the demands of a job, can lead to emotional imbalances that are collectively labelled 'Stress' (Rao, 2015). Among students, stress can be caused by so many factors such as academic pressure, social problem, family stress, financial burden, poor management skills, unconducive school environment, adjustment to a new environment among others (Akunne & Nnadi, 2021). Although an optimal level of stress can enhance ability, too much stress can cause physical and mental health problems, reduce self-esteem and may affect the academic performance of the students (Rafidah, Azizah, Norzaidi, Chong & Salwani, 2019). When a student is stressed and preoccupied, it takes over their ability to focus during lectures or studying. Stress may even cause students to drop out of school or drop classes. American College Health Association (2010) reported more than 25 per cent of students affirmed that stress lowered their grades or ability to finish a course.

Burnout is a prolonged response to chronic emotional and interpersonal stressors. It is defined by the three dimensions of exhaustion, cynicism, and inefficacy. It occurs when you feel overwhelmed, emotionally drained, and unable to meet constant demands. As the stress continues, you begin to lose the interest and motivation that led you to take on a certain role in the first place. People who are facing burnout problems are more likely to engage in absenteeism, have less self-confidence, low satisfaction with their work and turnover intentions (Tsigilis, Zournatzis & Koustelios, 2011). So, burnout syndrome has become a critical issue for students and institutes because it directly affects the well-being of students and then it reduces their academic performance. Among students, burnout can be triggered by a variety of factors, but it's most often caused by overwhelming work demands and prolonged levels of intense stress (Epps, 2021). Epps further stated that there are other lesser-known factors as well such as

having the wrong friends, the wrong level of support, the wrong major, the wrong goals, etc., which will rather quickly lead to burnout, even when another functioning is adequate.

Academic burnout is a significant factor behind students' academic performance and turnover intention. Academic burnout is manifested by emotional exhaustion, cynicism, reduced self-efficacy, reluctance to do homework, depression, anxiety, aggression, physical and psychological burn-out, despair, and frustration (Shih, 2015; Lee, Choi & Chae, 2017). Academic burnout can also result in academic procrastination, poor academic performance, poor learning outcomes, inability to complete academic courses, the tendency toward neglecting academic activities (Balkis, 2013).

Academic performance is the extent to which a student, teacher or institution has attained their short or long-term educational goals. Completion of educational benchmarks such as secondary school, diplomas and bachelor's degrees represent academic achievement. Academic performance is defined by Narad and Abdullah (2016) as the knowledge gained which is assessed by marks, or the educational goals set by students and educational institutions to be achieved over a specific time. Student's academic performance has become an area of concern for education stakeholders and institutions. Investigating the factors that are related to student's academic performance is paramount in the educational sector. Many stakeholders in the educational sector often complain of the deteriorating quality of education in Nigeria's educational system and the attendant effect of poor academic performance of students. Many stakeholders insist that the students are to blame for this apparent decline in quality of education and moral values, the majority lay the blame on the teachers while the teachers shift the blame on the children and parental attitudes to children's education (Arong & Ogbadu, 2010). Others blame the government for the unattractive condition of service and poor physical facilities (Jekayinfa, 2010). Nevertheless, it is essential to note that a wide range of ongoing normative stressors, such as sleep deprivation, stress, and burnout as a result of normal day to day hassles of ongoing academic demands also affect students' academic performance.

Numerous studies have investigated the relationship between sleep and students' academic performance, stress and academic performance and burnout and academic performance, few studies have looked at the combined effect of these normative stressors on academic performance. It is within this purview that this study is timely and needed in Benue State University. While studies outside of Benue State and Nigeria have investigated the effects of these normative stressors on academic performance, these cannot be assumed to apply within the context as the university culture and academic environment are different and as such calls for an investigation of these stressors in the area.

Research Questions

1. What effect does sleep deprivation have on the academic performance of undergraduate students of Benue State University, Makurdi?
2. What effect does stress have on the academic performance of undergraduate students of Benue State University, Makurdi?
3. What effect does burnout have on the academic performance of undergraduate students of Benue State University, Makurdi?

Research Hypotheses

The following hypotheses were postulated to be tested in the study.

H0₁ Sleep deprivation has no significant effect on the academic performance of undergraduate students of Benue State University, Makurdi.

H0₂ Stress has no significant effect on the academic performance of undergraduate students of Benue State University, Makurdi.

H0₃ Burnout has no significant effect on the academic performance of undergraduate students of Benue State University, Makurdi.

Material and Methods

The research design for this study was a cross-sectional survey design. The population of the study comprised all 18,729 undergraduate students of Benue State University, Makurdi. A total of 384 participants were sampled for the study using the multistage sampling technique.

Stage 1: In the initial stage, the study area was stratified based on the number of faculties in the university. This gave a total of 8 clusters representing the 8 faculties in the university.

Stage 2: In the second stage, two (2) departments were selected from each faculty using simple random sampling, giving a total of 16 departments.

Stage 3: In stage three, a proportionate sampling technique was used to select participants from each department based on their population. A total of 384 participants were selected from the 16 departments. To select participants, the formula propounded by Taro Yamane (1967) was used. Applying the Yamane formula;

$$n = \frac{N}{1 + N(e)^2}$$

Where n = sample size

N = total population of the study area

e = margin or error which research is ready to allow

the total population of the study = N = 18,729.

Error allowed = 0.05

$$n = \frac{18,729}{1 + 18,729(0.05)^2}$$

n = 384.468

The sample contained both male and female undergraduate students. The participants were then randomly issued with a questionnaire until the number specified for each department was attained.

The instruments that were used for data collection in the study include the Chronic Sleep Reduction Questionnaire (CSRQ) designed by Meijer (2008) to measure the level of sleep deprivation among students, the Students' Stress Rating Scale (SSRS) designed by Balamurugan and Kumaran (2005) to measure the students' stress level, the Maslach Burnout Inventory – Student Survey (MBI-SS) designed by Maslach, Jackson and Leiter (1996) to measure the level of burnout among students and a self-reported Cumulative Grade Point Average (CGPA) as a measure of their academic performance.

Data for this research was obtained through the administration of the questionnaire on respondents selected from the various departments of Benue State University, Makurdi. The hand delivery method was used for both the distribution and collection of the questionnaires. The researcher moved from one department to another seeking permission of the respondents in participating in the study. The respondents were required to fill the questionnaire and return the completed copies to the researcher or his assistant who in turn passed them to the researcher. This was done to minimise the time to retrieve the questionnaires at a later date.

The data collected through the use of a questionnaire were analysed using mean and standard deviation to answer the research questions. For sleep deprivation, a mean range of 0.00 – 13.30 was set for mild deprivation, 13.31 – 26.6 for moderate deprivation and 26.61 – 40.00 for severe sleep deprivation. For stress, a mean range of 0.00 – 70.00 was set for mild stress, 70.01 – 140.00 for moderate stress and 140.01 – 210.00 for severe stress. Burnout was viewed in terms of Emotional Exhaustion, Cynicism, and Academic Efficacy. High scores on Emotional Exhaustion, Cynicism, and low scores on Academic Efficacy are indicative of burnout. Simple Linear Regression analysis was used to test the hypotheses at a 0.05 level of significance. The Statistical Package for Social Sciences (SPSS) was used in coding and analysing the data to avoid any human errors imminent in manual analysis.

Results and Discussion**Mean Analysis of the Variables****Table 1: Mean Analysis of the Variables**

Variable	Mean	Standard Deviation
CGPA	2.580	0.886
Sleep Hours	2.270(4 – 6 hrs)	1.080
Sleep Deprivation	22.705	7.704
Mild	9.158	
Moderate	24.325	
Severe	34.632	
Stress	105.156	10.167
Mild	42.836	
Moderate	113.991	
Severe	158.641	
Burnout	65.000	7.036
Emotional Exhaustion	25.059	4.156
Cynicism	22.028	3.504
Academic Efficacy	7.927	4.450

n=384

Results available in Table 1 indicate that students had an average sleep duration of 4 – 6 hours per night. The average sleep deprivation score was 22.71 which indicates that the majority of the students have moderate sleep deprivation. The results of the study also revealed that the students had a mean stress score of 105.16. This indicates that the stress level among the students is generally moderate. The study revealed that students had an average burnout score of 35.00. The three subscales of burnout, emotional exhaustion, cynicism and academic efficacy all had mean scores of 15.06, 12.03 and 7.93 respectively. Since there are high scores of emotional exhaustion (15.06) and cynicism (12.03) and low scores of academic efficacy (7.93), this indicates that there is a high level of burnout among the students.

Sleep Deprivation and Academic Performance

Table 2: Regression Results for the Effect of Sleep Deprivation on Academic Performance

Variable	N	Mean	SD	R ²	F	β	t	P
Constant				0.215	104.402	0.463	10.218	.004
Sleep Deprivation								
Mild	81	9.158				0.410	8.784	.101
Moderate	181	24.325				0.528	12.153	.022
Severe	122	34.632				0.467	10.309	.001
Total	384	22.705						

$R^2 = .215$, $F = 104.402$, $\beta = .463$, $p < .05$

Overall, sleep deprivation has a significant effect on students' academic performance [$R^2 = .215$, $F = 104.402$, $\beta = .463$, $p < .05$] (Table 2). This means that sleep deprivation contributes 21.5% of changes in students' academic performance. Since $P < 0.05$, it, therefore, implies that sleep deprivation has a significant effect on the academic performance of undergraduate students of Benue State University. Since ($\beta = .463$) is positive, this means that sleep deprivation has a positive effect on students' academic performance. Students with higher sleep deprivation perform better academically than students with lower scores of sleep deprivation. The results of the regression analysis show that out of the three levels of sleep deprivation, the effect of moderate and severe sleep deprivation were significant ($\beta = 0.528$, $p = 0.022$) and ($\beta = .467$, $p = 0.001$) respectively. The effect of mild sleep deprivation on academic performance was not statistically significant ($\beta = 0.410$, $p = 0.101$).

Stress and Academic Performance

Table 3: Regression Results for the Effect of Stress on Academic Performance

Variable	N	Mean	SD	R ²	F	β	t	P
Constant				0.185	7.083	-0.430	-2.661	.008
Stress								
Mild	75	42.836				0.241	1.461	0.000
Moderate	161	113.991				-0.484	-2.942	0.002
Severe	148	158.641				-0.493	-2.954	0.000
Total	384	105.156						

$R = .430$, $R^2 = .185$, $F = 7.083$, $\beta = -.430$, $p < .05$.

Overall, stress had a significant effect on students' academic performance [$R^2 = .185$, $F = 7.083$, $\beta = -.430$, $p < .05$] (Table 3). This means that stress contributes 18.5% of changes in students' academic performance. Since $P < 0.05$, it, therefore, implies that sleep deprivation has a significant effect on the academic performance of undergraduate students of Benue State University. Since ($\beta = -.430$) is negative, this means that sleep deprivation has a negative effect on students' academic performance. Students with higher stress levels perform poorly academically than students with lower stress levels. The results also revealed that mild stress had a positive effect on students' academic performance ($\beta =$

0.241, $p < 0.05$). However, moderate ($\beta = -0.484$, $p < 0.05$) and severe stress ($\beta = -0.493$, $p < 0.05$) levels had negative effects on students' academic performance.

Burnout and Academic Performance

Table 4: Regression Results for the Effect of Burnout on Academic Performance

Variable	N	Mean	SD	R ²	F	β	t	P
Constant				0.123	4.741	-0.351	-2.177	.0300
Burnout								
Emotional Exhaustion		15.06				-0.552	-1.073	0.000
Cynicism		12.03				-0.283	-1.546	0.000
Academic Efficacy		7.93				-0.105	-2.058	0.040
Total		35.00						

$R = .351$, $R^2 = .123$, $F = 4.741$, $\beta = -.351$, $P < .05$.

Results available also show that burnout has a significant effect on students' academic performance [$R^2 = .123$, $F = 4.741$, $\beta = -.351$, $P < .05$] (Table 4). This means that burnout contributes 12.3% of changes in students' academic performance. Since $P < 0.05$, it, therefore, implies that sleep deprivation has a significant effect on the academic performance of undergraduate students of Benue State University. Since ($\beta = -.351$) is negative, this means that burnout has a negative effect on students' academic performance. Students with higher burnout perform poorly academically than students with lower burnout.

Discussion

This section presents the discussion of the findings. The first finding of the study revealed that sleep deprivation has a significant effect on students' academic performance. Students with higher sleep deprivation perform better academically than students with lower scores of sleep deprivation. This could be because students deprive themselves of sleep to study at night especially during tests and examinations. Students may also deprive themselves of sleep to do assignments and homework as part of their course work. This gives them higher scores in tests and examinations and consequently, a higher academic performance. This finding is in line with that of Ella, Lukpata and Bassey (2019) who carried out a study titled sleep deprivation and academic performance of nursing students in a tertiary institution in Cross River State, Nigeria. They found a significant positive relationship between sleep deprivation and academic performance of nursing students ($r = 0.382$; $p = 0.00$). Students who deprived themselves of sleep by sleeping for 1–3 hours a night, especially during examination had higher examination scores than those that sleep for 4–6 hours and 7–9 hours respectively; implying that the more a student deprived his or herself of sleep to read, the better the academic performance. However, the findings disagree with that of Kim (2019) who investigated the effects of sleep deprivation on the academic performance of college students in North Texas and found that as sleep time increased, there was a general decrease in daytime sleepiness and better sleep quality, showing that there is a correlation between total sleep time, drowsiness during the day, and sleep quality. The results suggest that people who get more sleep per night tended to have a higher GPA, and thus, performed better academically. Hampton (2005) also disagrees with this finding when he investigated the impact of the lack of sleep on academic performance in college students at Rowan University in southern New Jersey. The findings of the study revealed that the more sleep that the student receives, the higher their GPA will be. The difference in

the findings between the studies from Nigeria and the other studies could be due to differences in the population characteristics. Given the social, economic, political and academic environment differences between these populations, it is expected that sleep deprivation would act differently on their academic performance.

The second finding of the study revealed that stress has a significant effect on students' academic performance. This shows that higher levels of stress result in poor academic performance. This could be because students today experience high levels of stress in many areas of life. Study schedules, especially in Nigerian universities, are very challenging. The act of combining a busy life along with academics is stressful. Undergraduate students are prone to episodic stress. This happens when exams are around the corner, students experience a lack of concentration. Stress in college students can affect their ability to concentrate and this has a negative effect on their academic performance. This finding is in congruence with that of Oketch-Oboth (2018) who investigated the relationship between stress level, academic performance and psychosocial adjustment among University of Nairobi students. The study found that students who reported experiencing moderate to high-stress levels scored lower grades than those who had low-stress levels. Ogbogu (2017) also investigated the impact of academic stress on academic performance among university students of Enugu State University of Science and Technology Enugu Nigeria. The study revealed that stress reduces students work rate, reduces the ability to learn in class, and causes a lack of concentration in class. This in turn leads to producing poor quality work and reduces academic performance. The finding also echoes that of Elias, Ping and Abdullah (2011) who carried out a study titled stress and academic achievement among undergraduate students in Universiti Putra Malaysia. The results of the study indicated a significant negative correlation between stress level and academic achievement.

The third finding of the study revealed that burnout has a significant effect on students' academic performance. Students who feel less exhausted perform better academically while students who are more exhausted have the least academic performance. When students are highly stressed from their academic work or other social and environmental factors, they tend to develop ineffective study strategies, worries about their scores, ineffective academic struggles among others. This gives them a feeling of exhaustion because of study demands, a cynical and detached attitude towards schoolwork, and a feeling of incompetence as a student. They lose confidence in their academic capabilities. If this happens often, the students finally may develop a cynical attitude towards school and stop trying to excel in their school life. This in turn negatively affects their academic performance. This finding is in agreement with that of Naderi, Bakhtiari, Momennasab, Abootalebi and Mirzaei (2018) who carried out a study titled prediction of academic burnout and academic performance based on the need for cognition and general self-efficacy. The study found a significant inverse correlation of academic burnout with the need for cognition, general self-efficacy, and academic performance. Duru, Duru and Balkis (2014) also carried out an analysis of relationships among burnout, academic achievement, and self-regulation. The results also confirmed that cynicism fully mediated the effect of emotional exhaustion on academic efficacy and reduce academic achievement. The results of the study also correlated with that of Rana (2016) who investigated the impact of student's burnout on academic performance/achievement. The study revealed a significant and negative relationship of emotional exhaustion and cynicism with student's performance.

Conclusion

The study investigated the effect of sleep deprivation, stress and burnout on the academic performance of undergraduate students of Benue State University, Makurdi. Based on the findings of the study, it was concluded that sleep deprivation has a significant positive effect on students' academic performance. Students deprive themselves of sleep to study at night especially during tests and

examinations, to do assignments and homework as part of their course work which gives them higher scores in tests and examinations and consequently, a higher academic performance. Stress and burnout both have negative effects on students' academic performance; the higher the level of stress and burnout, the poorer the academic performance.

Recommendations

Stakeholders in education should ensure to provide a good academic environment for the students and ensure that measures, such as appropriate course load, appropriate working hours, non-congested lecture halls, conducive lecture halls, proper lighting in lecture halls, and proper lecture schedule, to minimize academic stress are put in place.

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PREVALENCE OF MATERNAL MORBIDITY AND UNINTENDED PREGNANCY AS THE CONSEQUENCES OF INSURGENCY AMONG WOMEN OF CHILD- BEARING AGE IN YOBE

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Abstract

This study examined the prevalence of maternal morbidity and unintended pregnancy among women of child-bearing age in Yobe State, Nigeria. A descriptive research design of survey type was used for the study. The target population of the study were all the women of child-bearing age attending the selected health facilities in Yobe State with a population of 7501. A multi-stage sampling procedure was used to sample 365 respondents from the selected area of the study. A researcher-developed questionnaire validated by three experts was used for data collection. The reliability of the instrument was determined using the test re-test method; a coefficient of 0.68 was obtained. Descriptive statistics of frequency counts and the percentage were used to answer the research questions while inferential statistics of Chi-square was used to analyse the postulated hypotheses at 0.05 alpha level. The findings of the study revealed that maternal morbidity and unintended pregnancy were prevalent among women of child-bearing age in Yobe State with the calculated values of ($\chi^2_c = 1476 > \chi^2_t = 21.026$ and $\chi^2_c = 1151 > \chi^2_t = 21.026$) respectively. The study concluded that maternal morbidity and unintended pregnancy are prevalent health challenges among women of child-bearing age in Yobe State. The study recommended that women of child-bearing age living in crisis-prone areas should be given adequate maternal health care services through home service; this will go a long way in providing adequate maternal health care services thereby preventing maternal morbidity and unintended pregnancies.

Keywords: Consequences, Maternal morbidity, Unintended Pregnancy, Prevalence.

Introduction

Maternal health care services are vital services provided by health care personnel for the promotion of health through education, family planning service, and counselling, and prevention of diseases and conditions such as malaria, high blood pressure among women of child-bearing age. Maternal health is the complete physical well-being of a woman during pregnancy, childbirth, and the postpartum period (World Health Organisation (WHO), 2011), it has been a major concern of several international summits and symposiums since the late 1980s, which climaxed to the Millennium Summit in 2000 (WHO, 2013). Maternal health care has a crucial role to play in the enhancement of reproductive health and women deserve to be well informed and empowered to have unrestricted access to safe, effective, affordable, acceptable and appropriate health care services. Yet more than half a million women die annually due to pregnancy-related complications with ninety-five per cent of these coming from the developing world (United Nations Children's Fund (UNICEF), 2012).

The governmental efforts in healthcare service delivery in crises areas of the northeast have been greatly affected, as well as that of profit-making establishments. Those displaced are now taking shelter in relatively safe refugee camps in the states capitals and few other strategic locations in the affected state (Abdullahi, 2017). As of 2016, there were over 2,000,000 Internally Displaced Persons

(IDPs) in Borno State (Internal Displacement Monitoring Center (IDMC), 2016). The activities of the insurgents have destroyed over \$5.9Billion in the affected areas, over 20,000 were killed. Such destructions affect infrastructure in the areas of education, environment, sanitation, healthcare, energy, businesses, housing, municipal buildings in Yobe and Borno States.

Maternal and child health care services were greatly affected due to the activities of the insurgents as reported by Uche and Ehatior-Mobayode (2019) who revealed that the Boko Haram insurgents reduced the probability of any antenatal care visits, delivery at a health centre, and delivery by a skilled health professional. Over 788 health facilities have been lost to insurgent activities in the northeast. Yobe state alone lost over 40% of its facilities and only a third of those left in the state remain functional. The state is reported to have lost 35% of its doctors to other states (Obi & Eboreime, 2017).

Malnutrition, injury and other infectious diseases are prevalent among those in the camps including pregnant and nursing mothers as revealed by Omale, Welye, and Abimbola (2015) who reported that cases of malaria are more difficult to ascertain because the diagnosis is often recorded as fever, especially if a qualified health worker is not available to examine the patient which worsens the situation. Estimations of the incidence of injuries are uncertain, mainly because only individuals with major injuries are present for treatment. Moreover, about one in five people in the camps are severely malnourished, including children, nursing mothers and pregnant women. Omale, Welye and Abimbola (2015) further reported that no facilities are available for pregnant women; they give birth under risky conditions and all the maternal deaths on record in the camps have been caused by excessive bleeding. Some individuals with HIV and other chronic diseases, such as hypertension and diabetes, have been off medication due to the activities of the insurgents.

A reduction in the ability to access modern contraception may occur in conflict due to several individual, sociocultural, political and health system factors. Health systems in conflict and post-conflict become fragmented when facing challenges such as damaged infrastructure, limited human resources, weak management, and a rise in poorly coordinated non-governmental organizations (Chi, Bulage & Urdal, 2015). Health services are undercut by conflict as many governmental resources are relocated and directed towards military expenses (Elveborg, 2016). Similarly, physical infrastructure such as roads and water systems are negatively affected. Health care facilities are further destroyed and health care staff are lost due to fatalities and migration as reported by Ager et al. (2015) revealed that population migration and transport restrictions have substantially impacted access to maternal health provision. The human resource for health capability of the crises area has been severely diminished through the outward migration of (especially non-indigenous) health workers and the suspension of programmes providing external technical assistance such as family planning. In the same vein, women are less likely to have the economic opportunities that may enable them to make reproductive choices. Factors such as socio-economic deterioration, death and injuries, and limited access to health care including family planning may affect women's access to modern contraceptive utilization negatively (Elveborg, 2016).

Women who have experienced sexual violence are prone to higher levels of unintended pregnancy and lower levels of modern contraceptive use. This relationship can be explained by rape being a disempowering experience especially to young women which is common in crises areas as reported by Basir, Gedam, and Muazu (2019) who reported that violence experienced by women in the affected areas is both physical and psychological. However, the physical violation has been more pronounced, as women are used for suicide bombings and are as well sexually abused. This results in difficulties negotiating contraceptive use and elevated risks of unintended pregnancy, illegal and unsafe abortion, and sexually transmitted infections (STIs) (Gomez, 2011).

Violence incapacitated women in various perspectives as reported by Gomez (2011) who reported that, although contraceptive use is generally high and unmet need is falling among females in war ragged countries, the scourge of violence against women may inhibit further reductions and

contribute to thousands of unintended pregnancies each year. Williams and Istifanus (2017) revealed that the factors responsible for reduced access to education by girl-child are damage to school facilities, emotional disorders, fear and insecurity, stigma, poverty, unintended pregnancy, forced marriage and lack of teachers, therefore, this study investigated the prevalence of maternal morbidity and unintended pregnancy in Yobe State.

Activities of the insurgents have resulted in the destruction of 1098 public buildings and private properties including healthcare facilities in the Yobe State. Imposing curfews, ban on motorcycles and GSM services cut-off for 6 months among others hindered access to healthcare delivery in the state. A total of 90 health workers were attacked, 22 were killed, and over 300 were displaced while 60 facilities were destroyed by the insurgents (Shehu, 2019). These negatively affect access and utilization of health care services among women of child bearing-age in Yobe State. Boko Haram insurgency has ensured that accessibility and affordability of Primary Health Care services have imposed serious effects on the health care system. The majority of deaths are directly caused by a limited number of complications such as haemorrhage, hypertensive disorders, sepsis, obstructed labour (which requires access to emergency obstetric and intensive care), delay in the decision to seek medical care, in reaching the health facility and receiving quality health care on arrival which is common in war zones.

Researchers observed that majority of mothers most especially in zone A Senatorial district of Yobe state, find it difficult to attend maternal and child health care services, in some local governments that are exposed to insurgency like Gujba, Gulani, Yunusari and Gaidem local government, this as results of fear of insurgents. An eye experienced an incidence whereby a woman died in the process of transporting her to the hospital due to distance to the health facility, this is due to the fact that the nearby health facilities were destroyed by the insurgents. It is on this note the researchers investigated the prevalence of maternal morbidity and unwanted pregnancy on the consequences of insurgency among women of child-bearing age in Yobe State.

Research Questions

The following questions were raised to guide the study:

- i. Prevalence of maternal morbidity will not be a consequence of insurgency among women of child-bearing age in Yobe State, Nigeria?
- ii. Prevalence of unwanted pregnancy will not be a consequence of insurgency among women of child-bearing age in Yobe State, Nigeria?

Research Hypotheses

The following hypotheses were formulated and tested in the study:

- i. Maternal morbidity will not significantly be a consequence of insurgency among women of child-bearing age in Yobe State, Nigeria.
- ii. Unintended pregnancy will not significantly be a consequence of insurgency among women of childbearing age in Yobe State, Nigeria.

Material and Methods

A descriptive research design of the survey type was adopted for this study. The population of the study comprised all women of child-bearing age registered and attending maternal and child health care services in seven LGAs with a population of 33,850 as revealed by District Health Information System [DHIS] (2018). The target population for the study include all women of child-bearing age registered and attending maternal and child health service at all health facilities in the four Local Government Areas selected in zone A, senatorial District, Yobe state with a population of 7501.

Multistage sampling procedure of simple random sampling, proportionate sampling and systematic sampling techniques were used to select 365 respondents for the study.

The instrument used for data collection was a researcher-developed questionnaire titled “Prevalence of Maternal Morbidity and Unintended Pregnancy as Consequence of Insurgency among Women of Child-bearing Age in Yobe State (PMMUPCIAWC BAYS)” with the response mode of 4-point Likert scale format of Strongly Agree (SA), Agree (A), Disagree (D), and Strongly Disagree (SD). To ensure the validity of the research instrument, it was validated by three experts in the Department of Health Promotion and Environmental Health Education, Faculty of Education, the University of Ilorin for both face and content validity. Their comments and suggestions were used to improve the quality of the research instrument. The reliability of the instrument was carried out using the test-retest method of the pilot study, the result obtained was subjected to Pearson Product Moment Correlation (PPMC), a correlation coefficient of 0.68 was obtained. The completed copies of the questionnaires were retrieved, collated, coded, entered and analysed. Descriptive statistics of frequency counts and percentage were used to answer the research questions while inferential statistics of chi-square was used to test the postulated hypotheses at 0.05 alpha level.

Results and Discussion

The results of the study were presented and discussed as follows:

Answers to Research Questions

Research Question 1: Will there be a prevalence of maternal morbidity as a consequence of insurgency among women of child-bearing age in Yobe State, Nigeria?

Table 1: Descriptive Statistics of Frequency Counts and Percentage on the Prevalence of Maternal Morbidity and the Consequence of Insurgency among women of Child-bearing Age in Yobe State

S/N	Question Items	SA	A	PR	D	SD	NR
1.	women experienced preeclampsia due to a lack of medical care as a result of insurgency.	262 (71.7%)	94 (25.7%)	356 (97.5%)	8 (2.1%)	1 (.3%)	9 (2.5%)
2.	Women experience vaginal infections (vaginosis) due to insurgency lead to their death	350 (96.0%)	6 (1.6%)	356 (97.5%)	9 (2.4%)	00 (00%)	9 (2.5%)
3.	Malaria which could have been managed kills Mothers due to insurgency.	260 (71.2%)	97 (26.5%)	357 (97.8%)	8 (2.1%)	00 (00%)	8 (2.2%)
4.	Mothers suffers high blood pressure due to lack of proper care as a result of insurgency attack	294 (80.5%)	58 (15.8%)	352 (96.4%)	13 (3.5%)	00 (00%)	13 (3.6%)
Total		355 (97%)				10 (3%)	

Table 1 revealed the frequency counts and percentages for maternal morbidity as a consequence of insurgency among women of child-bearing age in Yobe State. The table further revealed the average score for negative and positive responses on maternal morbidity, the average score for the positive

response was 355(97%) while the negative response was 10(3%). The study revealed that maternal morbidity among women of child-bearing was a consequence of insurgency in Yobe State.

Research Question 2: Will there be a prevalence of unintended pregnancy as a consequence of insurgency among women of child-bearing age in Yobe State, Nigeria?

Table 2: Descriptive Statistics of Frequency Counts and Percentage on the Prevalence Unwanted Pregnancy and the Consequence of Insurgency among women of Child-bearing Age in Yobe State

S/N	Question Items	SA	A	PR	D	SD	NR
5.	There is no access to family planning service due to insurgents activities.	271 (74.2%)	79 (21.6%)	350 (96.9%)	15 (4.1%)	00 (00%)	15 (4.1%)
6.	There is lack of access to family planning services due to insurgency, families could not use the appropriate methods of child spacing.	261 (71.5%)	80 (21.9%)	341 (93.4%)	24 (6.5%)	00 (00%)	24 (6.6%)
7.	Unwanted pregnancy is common because of the lack of utilisation of modern methods of preventing pregnancy as a result of insurgency.	206 (56.4%)	96 (26.3%)	302 (82.7%)	60 (16.4%)	3 (.8%)	63 (17.3%)
8.	Mothers get pregnant without plan and when they are not ready to have pregnancy.	207 (56.7%)	99 (27.1%)	306 (83.8%)	48 (13.1%)	11 (3%)	59 (16.2%)
Total		325(89.1%)				40(10.9%)	

Table 2 shows the frequency counts and percentages for unintended pregnancy as a consequence of insurgency among residents of Yobe State. The table further revealed the average score for negative and positive responses on the unintended pregnancy, the average score for the positive responses was 325(89.1%) while the negative response was 40(10.9%). The study revealed that unintended pregnancy among women of child-bearing was a consequence of insurgency in Yobe State.

Hypotheses Testing

Hypothesis 1: There will be no significant prevalence of maternal morbidity as a consequence of insurgency among women of child-bearing Yobe State

Table 3: Inferential Statistics of Chi-square on Consequences of Insurgency and the Prevalence of Maternal Morbidity among Women of Child-bearing Age in Yobe State

S/N	Question Items	SA	A	D	SD	df	χ^2	Chi-tab	Dec
1.	women experienced preeclampsia due to lack of medical care as a result of insurgency.	262 (71.7%)	94 (25.7%)	262 (71.7%)	94 (25.7%)	12	1476.240	21.026	HO Rejected
2.	Women experience vaginal infections (vaginosis) due to insurgency lead to their death	350 (96.0%)	6 (1.6%)	350 (96.0%)	6 (1.6%)				
3.	Malaria which could have been managed kills Mothers due to insurgency.	260 (71.2%)	97 (26.5%)	260 (71.2%)	97 (26.5%)				
4.	Mothers suffer high blood pressure due to lack of proper care as a result of insurgency attack	294 (80.5%)	58 (15.8%)	294 (80.5%)	58 (15.8%)				

Table 3 revealed the summary of Chi-square on the consequence of insurgency on maternal morbidity among women of child-bearing age Yobe State. The table revealed that the calculated Chi-square of 1476 is greater than the Chi-square table value of 21.026 at df of 12, therefore, the null hypothesis which says that there will be no significant prevalence of maternal morbidity on the consequence of insurgency among women of child-bearing Yobe State was rejected. This implies that insurgency causes maternal morbidity among women of child-bearing age in Yobe State.

Hypothesis 2: There will be no significant prevalence of maternal morbidity as a consequence of insurgency among women of child-bearing Yobe State

Table 4: Inferential Statistics of Chi-square on Consequences of Insurgency and the Prevalence of Maternal Morbidity among Women of Child-bearing Age in Yobe State

S/N	Question Items	SA	A	D	SD	Df	χ^2	Chi-tab	Dec.
5	There is no access to family planning services due to insurgent activities.	271 (74.2%)	79 (21.6%)	15 (4.1%)	00 (00%)	12	1151	21.026	HO Rejected
6	There is lack of access to family planning services due to insurgency, families could not use the appropriate method of child spacing.	261 (71.5%)	80 (21.9%)	24 (6.5%)	00 (00%)				
7	Unwanted pregnancy is common because of the lack of utilisation of modern methods of preventing pregnancy as a result of insurgency.	206 (56.4%)	96 (26.3%)	60 (16.4%)	3 (.8%)				
8	Mothers get pregnant without a plan and when they are not ready to have pregnancy.	207 (56.7%)	99 (27.1%)	48 (13.1%)	11 (3%)				

Table 4 revealed the summary of Chi-square on the consequence of insurgency and unintended pregnancy among residents of Yobe State. The table reveals that the calculated Chi-square of 1151 is greater than the Chi-square table value of 21.026 at df of 12, therefore, the null hypothesis which says that there will be no significant prevalence of maternal morbidity as a consequence of insurgency among women of child-bearing Yobe State was rejected. This implies that the prevalence of unintended pregnancy was due to insurgency in Yobe State.

Discussions

The finding of the tested hypothesis one revealed that there is a significant prevalence of maternal morbidity and the consequence of insurgency women of child-bearing age in Yobe State. The finding is similar to that of Uche and Ehatior-Mobayode (2019) who revealed that the Boko Haram insurgents reduced the probability of any antenatal care visits, delivery at a health centre, and delivery by a skilled health professional thereby result in maternal morbidity. The finding was further supported by that of Obi & Eboreime (2017) who reported that over 788 health facilities have been lost to insurgent activities in the northeast. Yobe state alone lost over 40% of its facilities and only a third of those left in the state remain functional. The state is reported to have lost 35% of its doctors to other states with the concomitant effect of low service delivery and uptake. In the same vein, the finding is in line with that of Omale, Welye, and Abimbola (2015) who reported that cases of malaria are more difficult to ascertain because the diagnosis is often recorded as fever, especially if a qualified health worker is not available to examine the patient which worsens the situation. Moreover, about one in five people in the camps are severely malnourished, including children, nursing mothers and pregnant women. The result of Omale, Welye, and Abimbola (2015) further supported the finding of this study where it was reported

that no facilities are available for pregnant women; they give birth under risky conditions and all the maternal deaths on record in the camps have been caused by excessive bleeding. Similarly, some individuals with HIV and other chronic diseases, such as hypertension and diabetes, have been off medication due to the activities of the insurgents.

Tested hypothesis two revealed that there is a significant prevalence of unwanted pregnancy and the consequence of insurgency among women of child-bearing age in Yobe State, the finding is in line with that of Chi, Bulage, and Urdal (2015) who reported that a reduction in the ability to access modern contraception may occur in conflict due to several individual, sociocultural, political and health system factors leading to unwanted pregnancy. The finding was further supported by the finding of the study of Ager et al. (2015) who revealed that population migration and transport restrictions have substantially impacted access to maternal health provision. The human resource for health capability of the crises area has been severely diminished through the outward migration of especially non-indigenous health workers and the suspension of programmes providing external technical assistance such as family planning, this can result in the occurrence of unintended pregnancy. In the same vein, women are less likely to have the economic opportunities that may enable them to make reproductive choices. Factors such as socio-economic deterioration, death and injuries, and limited access to health care including family planning may affect women's access to modern contraceptive utilization negatively (Elveborg, 2016).

Women who have experienced sexual violence are prone to higher levels of unintended pregnancy and lower levels of modern contraceptive use. This relationship can be explained by rape being a disempowering experience especially to young women which is common in crises areas as reported by Basir, Gedam, and Muazu (2019) who revealed that violence experienced by women in the affected areas is both physical and psychological. However, the physical violation has been more pronounced, as women are used for suicide bombings and are as well sexually abused. This results in difficulties negotiating contraceptive use and elevated risks of unintended pregnancy, illegal and unsafe abortion, and sexually transmitted infections (STIs) (Gomez, 2011).

Conclusion

Based on the findings of the study the following conclusions were drawn:

- i. Prevalence of maternal morbidity is the consequence of insurgency among women of child-bearing age in Yobe State as a consequence of insurgency.
- ii. There was prevalence of unintended pregnancy as a consequence of insurgency among women of child-bearing age in Yobe State.

Recommendations

Based on the findings from the study the following recommendations were made:

- i. Women of child-bearing age exposed to insurgency should be given adequate maternal health care services at their doorsteps to avoid conditions that may lead to maternal deaths.
- ii. Abstinence based sex education to teenagers together with adequate supply and sensitisation on the importance of utilising modern contraceptives should be emphasised to those living in war-prone zones, as to prevent unwanted/unintended pregnancy among adult and the adolescent.

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IMPACT OF SELF-EFFICACY COMPONENTS ON ATHLETES' PEAK PERFORMANCE IN NATIONAL SPORTS FESTIVAL IN SOUTH-WEST NIGERIA

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Abstract

Coaches play a significant role in motivating and enhancing the performance of their team athletes. The main goal of this study was to examine the impact of self-efficacy components in athletes' performance in the National Sports Festival (NSF) in South West, Nigeria. A descriptive research design was adopted for this study. The population comprised all athletes from Lagos, Ogun and Oyo State in Southwest Nigeria. The sample size selected for the study were (114 athletes) both in track and field, ball games, combat sports, racket games and swimming using a stratified sampling technique. A standardized and self-developed questionnaire by Bandura (1994) was the instrument used for the study. The questionnaire used in the pre-test were coded and analyzed using the Cronbach-Alpha reliability coefficient to establish the internal consistency of the instrument and the result obtained was 0.84. Simple percentage and frequency counts were used for the demographic data of the respondents while inferential statistics of multiple regression were used to analyzing the data at a 0.05 level of significance. The study concludes that two of the variables tested (vicarious experience and past performance accomplishments) significantly improved the performance of athletes in the National Sports Festival while verbal persuasion was not significant. The study recommends that coaches should focus on utilizing self-efficacy as mental skill techniques to help athletes in their interpretation of past performance accomplishments as facilitative.

Keywords: Self-efficacy components, enhanced performance, Athletes in National Sports Festival.

Introduction

Most professional and amateur athletes are conscious that their psychological state has an influence on their sports performance. Athletes must have the relevant physical skills and capabilities to perform, but some athletes are less confident than others that they can perform skillfully, cope with performance pressure, or sustain the hard work necessary to perfect the skills. Coaches, as well, can influence the team and individual confidence through their expectations, behaviour, and interactions with their athletes. Several factors can influence an athlete's performance in sport. Successful performance in sport is based on recognizing key psychological factors associated with performance in particular sports and ensuring that they are worked upon right from the beginning of training and preparation for competitions. Thus, psychological testing can help identify individuals' psychological strengths and weaknesses, and the coaches can act on that knowledge in implementing an appropriate training programme (Leffingwell, Durand- Bush, Wirzberg & Cada, 2005).

Oftentimes, athletes attribute their unimpressive performance to physical skills and make frantic attempts to correct such through devoting more time to the practice of physical skills. However, they hardly realize that a low level of physical skills is not the major problem, rather lack of mental skills such as loss of concentration and beliefs in oneself. It has been affirmed that mental toughness

has to do with an athlete's ability to cope with pressure, determination to persist in the face of adversity and mental resilience (Bull, Shambrook, James & Brooks 2005; Gucciardi, Gordon & Dimmock, 2008). Mental and emotional components often overshadowed and transcend the purely physical and technical aspects of performance.

A considerable amount of research has also shown that self-efficacy beliefs are related to performance. Self-efficacy is considered to be one of the most influential psychological constructs mediating achievement striving in sport (Feltz, 1984). According to Redmond (2009), there are four sources of information that people base their efficacy judgment on performance outcomes, vicarious experience, verbal persuasion and physiological feedback. These components help individuals decide whether or not they can accomplish certain tasks.

McAnley and Blissmer (2002) studies have indicated that higher levels of self-efficacy are associated with superior performance. Thus, the perception of one's ability to perform a task successfully has a consistent impact on actual performance. Bandura's (1997) theory of self-efficacy has been adapted to explain behaviour within several disciplines of psychology, and it has formed the theoretical basis adopted for the most performance-oriented research in self-confidence and sport. Confidence is a person's general feeling, perception or belief that can be successful in performing skill and meeting task demands. Self-efficacy beliefs reflect a person's feelings not about what he/she can do but rather about what he/she has already done. Self-efficacy is enormously important in an exercise setting and for changing and adhering to desirable, healthy behaviours.

According to Bandura (1992, 1997), the degree of specificity at which self-efficacy is measured could be determined by the nature of the situation at hand and the nature of the situation or task (or both situation and task) to which one wishes to generalize or predict. Self-efficacy beliefs are specific to the district of functioning rather than representing an overall global trait. Self-efficacy determines how much effort people will expend on an activity, how long they will persevere when confronting obstacles, and how resilient they will be in the face of adverse situations. High self-efficacy helps create feelings of peacefulness in approaching difficult tasks and activities.

Conversely, people with low self-efficacy may believe that things are tougher than they are which creates the belief that promotes anxiety, stress, depression and a narrow vision of how best to solve a problem (Bandura, 1997). Self-efficacy belief enhances human accomplishment and well-being in numerous ways. It influences the choices and the courses of action they pursue. They are reflected in an individual's perception about his or her ability to perform a given task or behaviour (efficacy expectation) and his or her belief about the consequences of behaviour performance (outcome expectation). Self-efficacy, the perception of one's ability to perform a task successfully is a situation-specific form of self-confidence.

In a meta-analysis of 114 studies, Stajkovic and Latham (2008) examined the relationship between self-efficacy and sport-related task performance. Their findings revealed there was an average weighted correlation between self-efficacy and sport-related performance. The findings have significant implications for professional sports managers because programmes aimed at developing a resilient sense of efficacy among athletes can breed significant dividends in performance accomplishments and personal well-being. Applying self-efficacy components is one of the many ways that athletes and coaches can find themselves victorious. Research also indicates that the factor most consistently distinguishing highly successful from less successful athletes is confidence (Jones & Hardy, 1990, Vealey, 2005). In addition, Gould, Greenleafs, Lauer and Ching (1999) found that confidence (efficacy) was among the chief factors influencing performance. Scholars have discussed self-efficacy components on athletes peak performance in so many dimensions. However, Nigeria coaches have paid little or no attention to these self-efficacy components and their impact on the performance of athletes. The need to fill the gap in knowledge. Therefore, this study focused on the impact of the self-efficacy component on athletes peak performance in the Nation Sports Festival in South-West Nigeria.

Purpose of the Study

This study was designed to investigate the impact of self-efficacy components on athletes peak performance in the National Sports Festival in South-West Nigeria. The specific objectives of this study are to:

1. Assess the level of knowledge of the respondents about self-efficacy components in their performance.
2. Describe the impact of the component on the attitude of the respondent.
3. Perceived types of components of self-efficacy affecting the respondent.

Hypotheses

1. There is no significant relative contribution of the independent variables (past performance accomplishment, vicarious experience, verbal persuasion) on athletes' peak performance in the National Sports Festival in South-West Nigeria.
2. There is no significant joint contribution of the independent variables (past performance accomplishment, vicarious experiences, verbal persuasion) on athletes' peak performance in the National Sports Festival in South –West

Material and Methods

The sample size for this study comprised 114 athletes (96 male and 18 female) elite athletes who have represented their states in previous sports festivals drawn from three states in the Southwestern part of Nigeria (Lagos, Ogun and Oyo). The athletes were drawn from track and field, ball games, racket games, combat sports and swimming. The sample was selected using a stratified sampling technique. The respondents signified intention to participate based on availability and willingness to partake in the study. A standardized instrument developed by Bandura, 1994 (Self-efficacy Questionnaire, (SEQ)) with 17 items and 4 options from (very true – Not at all true) with reliability co-efficient result of 0.85 obtained. Data were collected with the help of nine trained research assistants. The data were analyzed using frequency count and percentage for the demographic data while inferential statistic of multiple regression was employed to test the hypotheses at 0.05 level of significance.

Results and Discussion

Ho 1: There is no significant joint contribution of the independent variables (past performance accomplishment, vicarious experiences, and verbal persuasion) on athletes' peak performance in the National Sports Festival in South-West Nigeria

Table 1: Multiple regression analysis on the joint contribution of the independent variables (past performance, vicarious experience, and verbal persuasion)

Model	R	R square	Adjusted R square	Std. Error of the estimate		
1	.854	.730	.717	6.30449		
Model	SUM of square	Df	Mean square	F	Sig.	
Regression	11605.894	5	2321.179	58.399	.000	
Residual	4292.632	108	39.747			
	15898.526	113				

- a. Dependent variable self-efficacy
- b. Predictors: (Constant), past performance accomplishment, vicarious experience, and verbal persuasion. The result in table one shows that the joint effects of the independent variables significantly contributed to the dependent variable. The R-value of 0.854 indicates that there is a positive high degree of relationship between the independent variables and the dependent variable. This indicates that improved measure of the independent variables is significant in enhancing the performance of athletes. The R^2

value accounted for 73% of the variance for the equation. The significance of the composite contribution was tested at a < 0.05 alpha level. The table also shows the analysis of variance for the regression yielded an F-ratio of 58.399 which is significant at 0.05 alpha level. This implies that the joint contribution of the independent variables to the dependent variable was significant and that other variables not included in this model may have accounted for the remaining variance.

Ho 2: There is no significant relative contribution of the independent variables (past performance accomplishment, vicarious experience, verbal persuasion) athletes peak performance in the National Sports Festival in South-West Nigeria.

Table 2; Relative contribution of the independent variables (past performance accomplishments, vicarious experience, and verbal persuasion)

Model	Unstandardized Coefficient		Standardized Coefficient	T	Sig.
	B	Std Error	Beta		
(Constant)	5.375	2.764		1.944	.054
Vicarious experience	1.184	.135	.586	8.714	.000
Past performance accomplishment	1.791	.193	.553	8.751	.000
Verbal persuasion	.066	.181	.035	.387	.699

The results in table two revealed that two out of the three independent variables had a significant contribution on the performance of athletes in the National Sports Festivals. The results showed that vicarious experience ($\beta=0.586$, $t=8.714$, $P=0.000 < 0.05$) and past performance accomplishment ($\beta=0.552$, $t=8.751$, $P=0.000 < 0.05$) were found to be significant while verbal persuasion ($\beta=0.035$, $t=0.387$, $P=0.000 < 0.05$) was not be significant.

Based on the findings, the most important and powerful source of self-efficacy for athletes is derived from their past performance accomplishments. Though the positive relationship between past performance accomplishment and self-efficacy beliefs is robust, Bandura (1997) warned successful athletes to be careful not to become complacent because letdowns after easy success and intensifications of effort after failures are events in which exceptional athletes who were supposed to win fell short and the “underdog” emerged with the victory. Compared to the other sources of self-efficacy, verbal persuasion had been the subject of considerably less research, the most popular line of inquiry on verbal persuasion as a source of efficacy beliefs has to do with evaluative feedback. The feedback given to an athlete can either undermine self-efficacy or boost it (Bandura, 1999).

A report by Chase, Feltz and Lirgg (2003) revealed that athletes often perceived a bouncing back or “were due” effect after the previous poor performance as a source of efficacy information. Loune and Colleagues (2002) affirmed that self-efficacy significantly decreased defeat. Similarly, Berger, Pargman, and Weinberg (2007) pointed out that failure was associated with less persistence and that perception of failure provoked perceptions of learned helplessness. The findings further revealed that vicarious experience (feedback) play important role in enhancing the performance of athletes. McCann, S. (2008), indicated the importance of modelling in relation to self-efficacy beliefs by noting that it is apparent that modelling can indeed have a profound effect not only on performance but also on psychological variables that may impact physical skills execution. Modelling and social comparison constitute the sources of efficacy information gained through vicarious experience.

Findings by Chase, Feltz and Lirgg (2003) showed that a modelling condition resulted in better performances (on free-weight signal lifts). The result showed that modelling lead to better acquisition performance and was the preferred intervention for individuals first learning motor skills. Typically,

informing athletes about their success is considered positive feedback whereas conveying failure is negative feedback. This manipulation of self-efficacy beliefs shows that success and failure increase and decrease self-efficacy, respectively. Bandura (1997) noted that altering efficacy beliefs by providing bogus feedback is an effective way to test the theoretical propositions regarding efficacy beliefs. The findings further showed that verbal persuasion is not a significant predictor of managing high-performance athletes. Compared to the other sources of self-efficacy, verbal persuasion had been the subject of considerably less research. The most popular line of imagery on verbal persuasion as a source of efficacy beliefs has to do with evaluative feedback. The feedback given to an athlete can either undermine self-efficacy or boost it (Bandura, 1999).

Conclusion

Based on the findings, this study concludes that vicarious experience and past performance accomplishments had significant relative contributions to athletes' performance while verbal persuasion was not significant. The study further concludes that there was a high positive significant correlation between vicarious experience, past performance accomplishments and verbal persuasion and athletes' performance. This is a pointer to the fact that coaches, team sports psychologists should focus particular attention on these vital variables while preparing athletes for contests

Recommendations

The following are recommended:

1. It should be noted that different sports involve different circumstances and require special mental skills that can interpret self-efficacy as facilitative. Thus coaches can be advised to focus on these mental skill techniques to help athletes in their interpretation of past performance accomplishment as facilitative to achieve peak performance.
2. Although, self-efficacy has been identified as a factor that could facilitate performance competition planning; team managers should direct particular attention to using this psychological construct in performance enhancement.
3. Coaches and team administrators should work with sports psychologists to create a conducive training environment for athletes by ensuring that psychological skills that could facilitate performance are included in the training regimen.

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DETERMINANTS AND UTILISATION OF MATERNAL AND CHILD HEALTH (MCH) CARE SERVICES AMONG WOMEN OF CHILDBEARING AGE

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Abstract

This study examined the determinants and utilisation of maternal and child health (MCH) care services among women of childbearing age. The determinants were maternal age, maternal educational background and residential location in the utilisation of available MCH care services comprising of the blood tests, urine analyses, routine immunisation, personal hygiene and exercise during antenatal visits in pregnancy and postnatal visits after birth. It was concluded that antenatal visits during pregnancy should be encouraged to help detect when pregnancy is at risk. It was also concluded that Health care providers should emphasize the need to take babies for post-natal immunisation, as babies from 0-5 years need to be immunised at regular intervals before reaching their fifth birthday and it is necessary to discourage the use of non-prescribed drugs on children when they are ill, rather they should be taken to the health facility for proper diagnosis. It was recommended among others that women should be enlightened on the care of pregnancy and safety measures that ensure safe delivery.

Keywords: maternal health, child health, determinants, utilization, care services, women of childbearing age

Introduction

The concept of family health encompasses maternal and child health, family planning, nutrition and health education had gained wide acceptance. Family health was considered an ‘approach whereby an effort is made to improve the health of the various individual in the family through multidisciplinary services and thus influence society as a whole’ (WHO, 2014). Maternal and Child Health (MCH) was one of the priority programmes established by the World Health Assembly in its first convention held in 1947. Maternal and Child Health services were almost entirely limited to emergency curative treatment and did not include preventive care. However, Sacksena and Sheldon (2012) observed that MCH should not be considered as a specialized, separately administrative service, but as an integral part of total health. This is especially true where such hazards exist as poor sanitation, malnutrition and communicable diseases. These underline many of the conditions dealt with when individual care is given to a mother or infant.

Abdallah (2010) reiterated the need for appropriate health care services that will enable women to go safely through pregnancy and childbirth and produce a healthy infant. Maternal care includes care during pregnancy and should begin from the early stages of pregnancy. Women can get antenatal care services either by visiting a health centre where such services are available or from health workers during their domiciliary visits. The former gives an idea about the voluntary utilization of the services by women while the latter is related to the quality aspect of the services. One of the most important components of antenatal care is to offer information and advice to Women about pregnancy-related complications and possible curative measures for the early detection and management of complications. Health problems confronting the world today are caused by the actions and inactions of the people. In the developing or less developed countries, communicable diseases, high rate of infant and maternal mortality are largely due to the inactions of people to get themselves good housing, good supply of drinking water, not utilizing available health services, for example, pregnant women not utilizing

antenatal care services, this is an integrated and multidisciplinary service formally adopted as a strategy in 1978 during the Declaration of Alma Ata. The declaration made Primary Health Care the major strategy for achieving Health for All by the year 2000 and beyond (WHO, 2000).

In September 2000, the largest-ever gathering of Heads of States ushered in the new millennium by adopting the Millennium Declaration. The Declaration, endorsed by 189 countries, was then translated into a roadmap, setting out goals to be reached by 2015 thus,

- i. Eradicating extreme poverty and hunger
- ii. Achieve universal primary education
- iii. Promote gender equality and empower women
- iv. Reduce child mortality
- v. Improve maternal health
- vi. Combat HIV/AIDS, malaria and other diseases
- vii. Ensure environmental sustainability
- viii. Develop a Global Partnership for the development

Also, the Alma Ata declaration of Primary Health Care integrated seven (7) Basic components, namely;

- Education on prevailing health problems and the methods of Preventing and controlling them;
- Promotion of food supply and proper nutrition;
- Adequate supply of safe water and basic sanitation;
- Maternal and child care, including family planning;
- Immunisation against the major infectious diseases;
- Appropriate treatment of common diseases and injuries; and
- Provision of essential drugs (WHO 1994).

An attempt by humans to preserve and nurture the human race is as old as the history of human existence. One of such attempts is the provision of mother and child health care following the 1978 Alma-Ata Declaration by the World Health Organization. WHO (1994) identified Maternal and Child Health (MCH) as promotive and preventive health care specifically designed for mothers and children. In most developing countries, mothers and children constitute up to two-thirds of the population of an average district, they also constitute the biological vulnerable groups (WHO, 1994). Hence, mother and child health services constitute an important area of health care. Further services may be added to the concept of MCH activities depending upon local needs. For example, nutrition rehabilitation centres, mothercraft classes and demonstrations, vegetable gardens and adult literacy, especially, female literacy has an important bearing on the health of the family and several countries like Uganda, Kenya, and Malaysia have integrated programmes of adult literacy with MCH services.

Maternal and Child Health services according to WHO (2000) are aspects of modern health care specifically designed for the health promotion of the mother and child. These services involve promotive, preventive, curative and rehabilitative health care for mothers and children. The benefits of these services to the nation, community and individuals are enormous. According to Loudon (2000),

Women were most commonly in their mid-twenties when they married, and could expect the birth of their first child twelve to thirteen months later. Motherhood was considered the highest calling for a married woman, but the unmarried mother was subject to moral, economic, and social censure. Poor, unmarried mothers were on occasion driven to commit infanticide, but the harsh penalties for such a crime were not always invoked. Howell, Egorova, Janevic, Balbierz, Zeitlin and Hebert (2017) in addition to this stated that MCH services are the channel of taking health care to a greater proportion of the population. According to Howel et al (2017), women and children constitute 68 per cent of the population in any developing country including Nigeria. Maternal Child Health services thus guarantee healthy citizens. Chandra, Copen and Stephen (2013) also claim that MCH services help to reduce Ante-natal deaths and disabilities which add to the global burden of pregnancy and pregnancy-related diseases. According to him, infants do not die for most parts from diseases of childhood that are preventable but in most cases because of conditions arising while they were still in their mother's womb. This can be prevented by simple intervention during pregnancy, delivery and immediately after birth.

For benefits of MCH services to accrue to the nation and community and individuals, it requires that the services must be utilised in full.

Available MCH Care Services

Antenatal

1. Pregnancy examination
2. Blood test
3. Urine analyses
4. Routine immunization
5. Antenatal medication
6. Nutritional advice
7. Dressing codes
8. Personal hygiene
9. Exercises

Postnatal

1. Routine immunization at birth
2. Routine immunization at 6 weeks
3. Routine immunization at 10 weeks
4. Routine immunization at 14 weeks
5. Routine immunization at 9 months

Many people are reluctant to make use of medical services, largely due to ignorance or cultural beliefs, but other factors play a part too. For example, health centres and sub-centres stand out as different from other constructions and dwellings in rural areas. Their style of construction, roofing and finish is different and most are fenced in. The health workers inside them are in uniforms and usually are people who were born in some other parts of the country. They have a different lifestyle and rarely participate in the social and cultural life of the village. Naturally, the villagers are reluctant to interact with them,

this and many other factors have for long militated against the utilization of MCH in many localities (Howel et al, 2017).

The National Health Policy has as its goal to provide a level of health care that will enable Nigerians to achieve socially and economically productive lives through the system of care — Federal Ministry of Health has PHC as parts of its components — Maternal and Child Health (MCH) care and family planning. The policy pointed out that since health development contributes to and result from socio-economic development, it should be seen as an essential component of the total package of social and economic development and as an instrument of social justice and national security (Chandra et al 2013). Only recently has this policy been linked to mother and child health status and behaviour. The health status of mother and child and the behaviour of mother have been acclaimed to be directly related to societal progress (WHO, 2000).

Healthy Families America (2013) observed that relatively little is known, however, about the concept of MCH as the key to progress in reproductive health. The concept addresses the mother's ability to manage the many competing demands on her as she appreciates the value accrues in using health care services during pregnancy, understands the virtue of safe motherhood and prepare the stage for safe delivery. Several studies outside Nigeria including WHO (2000) in studies conducted on Trends in Reproductive and Family Health in the Western Pacific have shown how MCH services utilisation pattern can influence evaluation in health care provision and utilisation; and how socio-demographic factors such as age, education, residential location and so on, can influence utilisation of MCH services. Even though several studies have been conducted on reproductive health, there is a paucity of data on MCH care services as influenced by socio-demographic factors as the basis for decision-making guiding health policies in Nigeria. Little attention has been given to the practices of women in the community as they prepare to bear children and provide care for the child.

Maternal Age

Womens' health literature is filled with observations about “adolescents” and “young adults”. Their vulnerability caused by their young age and their lack of access to health services put young adults at higher risk. The WHO (2000) defined adolescents as the period from 10-15 years, and complement that broad category with the term that extends the age range “youth” 15-20 years, “young people,” 10-20 years, and children,” 0-18 years “young adults” has recently emerged as the preferred term but adolescents remain widely used. In practice, these terms are often used with considerable variability and overlap. Harrison and Kobilnsky (2003) remarked in a study conducted in Bangladesh on the factor of age in reproductive health that in 1994 young people (10-24 years) were estimated at almost 1.5 billion or approximately one-third of the world's population. The global teenage population (15-19 years) was estimated at 513 million, out of which 23 per cent or 118 million are women. Over half the world's population is under age 25 and more than 80 per cent of the world's youth live in developing countries.

Harrison and Kobilnsky (2003) reported further that, in poorer countries, more women bear children during their teenage years. For example, in Bangladesh, nearly two-thirds of women bear children by age 18 and one-fifth before age 15. While having a child immediately following marriage is a tradition in many societies meaning teen marriage and pregnancy may not only be highly desirable but even a societal necessity, the high number of teenage pregnancies-wanted or unwanted is a major issue for all regions.

Several pre-1997 studies in the USA concluded that the adverse health consequences associated with childbearing were greater for younger women than for older women. However, Gerd, Ophelia, and Margareta (2000) observed that these studies did not control for socioeconomic status and other related factors. He pointed out that studies, which find age differences, tend to find them in measures that are sensitive to socio-economic factors, rather than in biological constrained outcomes of labour and delivery.

Gerd, et al (2000) reported that the risk associated with pregnancy and childbirth among the 15-19 years age group was contrasted with those among the older women. Teenagers had a higher incidence of anaemia but had a higher incidence of hypertension, disorder or hospital admissions, and they were as likely as older women to have had a formal delivery. On the issue of healthcare use, studies reported by

Gerd, et al (2000) showed that adolescents with adequate prenatal care have outcomes as good or better than their older counterparts. But many adolescent women do not get adequate prenatal care. In the United State, 45, per cent of young pregnant women do not consult their doctors until they are more than 3 months pregnant. In Britain, the figure is 27 per cent. The study in the United States of America revealed that 5.6 per cent of pregnant women under the age of 15 received no antenatal care compared with 1.5 per cent of women age 20-24 years. Nearly half of the under group began prenatal care in the 4-6 month period. The study showed that younger mothers in the United States are much less likely to receive prenatal care in the first trimester and much more likely to receive little or no care.

It is, however, discernible that a minimum of data is available on maternal age in association with - obstetrical complications and maternal death from - developing countries. The reason for the paucity of data is obvious. According to Gabrysch (2009), with over 60 per cent of pregnant women in developing countries delivering in their home, most complications including death related to childbirth go unreported.

United Nations (1994) reported that in Africa, marriage and first births occur in the teenage years in much of sub-Saharan Africa, and the relative risk of death before age five is about 46 per cent higher for children with mothers under 18 years. In urban areas, particularly, teenage pregnancy rates are likely to rise in the near future due to the weakening of traditional society due to rural-urban drift. This position was re-echoed by Gabrysch (2009) who asserted that in the urban areas, the development will bring about falling ages at menarche, rising women's age at marriage and a progressing emergence of adolescence.

Gabrysch (2009), also reported that young maternal age was found to have a strong negative effect on birth. However, the authors stressed that the entire effect of maternal age cannot be attributed to these mechanisms, because prenatal health care and perhaps other behavioural differences also play a role. It can be reasoned that distinguishing between the alternative explanations for the link between maternal age and MCH is crucial for the design of effective health intervention.

Maternal Education

Formal education is of great importance for the development of people (Child Health Dialogue, 1997). Education gives people skills and confidence and makes them aware of the choices they can make in their lives. According to Octavio and Jose (2001) educated women are more likely to marry later, have their first pregnancy later and have fewer children. In addition, they are more likely to know about contraception, start to use it earlier and rely on modern rather than traditional methods. Educated women are more likely to attend antenatal care during pregnancy. It has been generally acclaimed that the condition of a woman's life affects her health and that of her children. Conversely, lack of access to education has been identified as a key barrier to women's advancement in society (Octavio and Jose

2001). He revealed that an overview of demographic data across Africa revealed that female illiteracy rates were over 60 per cent in 1996, compared to 40 per cent for men. Certain countries have extremely high rates. Burkina Faso at 91.1 per cent, Sierra Leone at 88.7 per cent, Chad at 82.1 per cent and Guinea at 86.6 per cent.

Despite this, parents in these regions seem to still prefer to send boys to school, seeing little need for the education of girls. Takyiwaa (1998) further lamented that the few girls that ever made it to school hardly go beyond primary education. This trend has serious implications for the health of the woman in her daily home business. Again, Takyiwaa (1998) reported that womens' education beyond primary education is a reliable route to economic empowerment and long-term change in the status quo, as well as a determinant of family's health and nutrition. Takyiwa (1998) further stressed that education beyond ten or more years of school is a reliable predictor of lower fertility, improved infant survival, reduced maternal mortality, and enhanced levels of infant and child development and educational attainment. In the same vein, Stuart, LeVine, and Rowe (2009) posited that maternal literacy and schooling have been associated with more efficient management of limited household resources, greater utilisation of available health care services, better MCH, lower fertility, and more child-centred caring behaviour. They maintained that maternal education raises awareness of the means to overcome problems and generates effective political demand.

In general, education has both a direct and indirect effect on health. The indirect effect is because increased education and literacy has a multiplying effect on development and income, which in turn contributes to improved health. The direct effect relates to the common observation that maternal education and literacy is associated with better utilisation of household resources and improved nutrition and health of children and other household members (Stuart, Howitz and John, 1999). Horwiz (2002) reported that those countries that have promoted education generally have a relatively better nutrition and health situation. He noted that primary and secondary education, especially for women, were found to be important factors contributing significantly to the effectiveness and efficiency of the health care system in Chile, Costa Rica, and Cuba.

Residential Location

Rural and urban residencies are also known for their varying characteristics and a corresponding impact on the health and living conditions of people. People living in the same place tend to experience similar problems. In a related development Gerd, et al (2000) conducted a study on the accessibility to healthcare delivery in Indonesia and noted that the potentialities for women to manage or overcome these problems might vary according to location.

These differences do not only concern their access to resources, education and employment, but also access to a social network, which is important with respect to achieving health and self-reliance. Many of these differences reflect the variations in the living situation between the poor, mostly rural and uneducated, and the well to do, mostly urban and educated women. Milwood and Gezelius (2001) expressed that most rural settings are characterized by a lack of infrastructure and services such as schools, electricity, health care facilities, water, markets, environmental sanitation, road and transport services.

These conditions have implications for the living condition of the people. Lack of access to appropriate health care services caused by difficulties involving distance, transportation problems, cost, and poor quality of available care will exert a strong impact on MCH relating to choice of treatment avenue (USAID, 2015). The effects of circumstances causing available care are especially striking, USAID (2015) established that inadequate health care facilities, lack of essential resources, unskilled personnel,

absence of an effective referral system, and insensitive of health care providers are some of the many difficulties women in rural areas face when they look for institutional care. If health actions will need to be strongly supported, it would be logical to reason and understand that, where the resources are not available, the individual's perceived health behaviour patterns, whether good or bad are upheld and adopted to suit the prevailing circumstances. Reflecting an African setting, Takyiwaa (1998) pointed out that many African rural households usually impose individual responsibilities on women to meet their personal and often collective family needs. In such situations, women are expected to actively generate the means to meet the daily needs of themselves and their children. This has increased household pressure on rural women, raising the numbers of households in the poorest health categories.

The Way Forward

1. Regular antenatal visits during pregnancy should be encouraged as much as possible. This will help to detect when pregnancy is at risk so that necessary measures can be taken before any complications.
2. Pregnant women should also be enlightened on the care of pregnancy safety measures that ensure safe delivery.
3. Pregnant women should be encouraged to go to the clinic when unusual signs and symptoms are felt or seen as the case may be.
4. Health care providers should emphasize the need to take babies for post-natal immunisation, as babies from 0-5 years need to be immunised at regular intervals before reaching their fifth birthday.
5. It is also necessary to discourage the use of non-prescribed drugs on children when they are ill, rather than for proper diagnosis.

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ASSESSMENT OF ACADEMIC STAFF'S SATISFACTION ON COMPENSATION IN KWARA STATE COLLEGES OF EDUCATION, NIGERIA

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Abstract

Lecturers in Kwara State Colleges of Education have been bitterly complaining about the way they are being compensated by their employers in recent times. Hence, this study assessed academic staff's satisfaction on compensation in Kwara State Colleges of Education, Nigeria. The study adopted a descriptive research design of survey type. The population of the study comprised 399 academic staff in Kwara State Colleges of Education, Ilorin, Lafiagi and Oro. The purposive sampling technique was used to select all three Colleges of Education. Proportionate sampling technique was used to select 56 lecturers out of the 115 in Kwara State College of Education, Oro; 52 lecturers out of the 106 in Kwara State College of Education, Lafiagi; and 87 lecturers out of the 178 in Kwara State College of Education, Ilorin; to make a total of 195 respondents. Assessment of Academic Staff Satisfaction on Compensation Questionnaire (AASSCQ) was used to collect data. The questionnaire was validated by some experts, tested for reliability and found a coefficient of 0.75. Mean and standard deviation was used to answer the research questions while a t-test was used to test the hypothesis. The finding of the study revealed that academic staff's satisfaction on salary in Kwara State Colleges of Education, Nigeria was fair with a mean score of 2.44; academic staff's satisfaction on promotion in Kwara State Colleges of Education, Nigeria was fair with a mean score of 2.66; academic staff's satisfaction on training opportunities in Kwara State Colleges of Education, Nigeria was fair with a mean score of 2.29; and there was no significant difference between male and female academic staff's perception on compensation in Kwara State Colleges of Education, Nigeria (calculated t-value = .741, $p > .05$). The study concluded that the level of academic staff's satisfaction on salary, promotion and training opportunities in Kwara State Colleges of Education, Nigeria was fair. It was, therefore, recommended that the Kwara State government should change its attitudes towards salary, promotion and training opportunities for academic staff in Kwara State Colleges of Education, Nigeria to facilitate effective services delivery which would aid the actualisation of the stated goals.

Keywords: Compensation; Salary, Promotion, Training opportunities

Introduction

The role which employees play in the realisation of an organization cannot be over-emphasised. In Colleges of Education, the role which lecturers play in the actualisation of the stated goals cannot be underestimated. Lecturers are the ones who impart knowledge, skills and techniques which students need, to become competent and effective teachers at the basic schools after graduation. Lecturers need to be well taken care of, to passionately assist the institutions to achieve the desired goals. One of the

ways of properly taking care of lecturers is by adequately and timely compensating them for the services rendered towards the success of the institutions. According to Osibanjo, Pavithra and Adeniji (2014), compensation refers to the benefits which employees get in exchange for services rendered for an organisation. Compensation includes salaries, promotion, allowances, bonuses or commission, medical benefits, vehicle loan benefits, housing incentive bonus, meal allowances, annual leave allowances and car basic allowances. Sulyman (2020) stated that the components of compensation in tertiary institutions in Nigeria include promotion, salary, health services and training opportunities. An institution with poor compensation packages for the lecturers could find it difficult to compare with its counterpart with good compensation packages, in the aspects of lecturers' job performance and overall productivity. Bright (2008) maintained that there is a high probability that lecturers would be happy to identify with an institution when adequate compensation is given to them for the services rendered. When lecturers are well taken care of with good compensation, they would be able to cater for their needs, their job satisfaction is likely to be high and results could be effective job performance which would consequently lead to institutional goal achievement. Musa (2016) argued that inadequate compensation of the academic staff has been very prevalent in the State Colleges of Education in Nigeria. This has caused intermittent strikes of different forms which could hinder the actualisation of the stated goals. Osibajo, Adeniji and Falola (2014) believed that compensation covers financial and non-financial benefits which attract, motivate and satisfy the needs of human resources in an organisation. Effective compensation helps in triggering lecturers' job commitment and reducing the turnover rate in an institution. Not only that, it assists in achieving effective lecturers' job performance and exhibition of positive behaviour towards enhancing institutional goals. In this study, the aspects of compensation focused upon were salary, promotion and fringe benefits. Salary refers to the fixed amount of money paid to the lecturers monthly by their employer. Tetey (2008) opined that delay in the payment of salaries is one of the factors hindering job commitment of the lecturers in State Colleges of Education, Nigeria; and this has made many qualified and highly experienced lecturers quit the job for other greener pasture. Timely payment of salaries could boost the lecturers' morale thereby enhancing their organisational commitment. Okpara (2014) stressed that irregular payment of salaries could hinder the job commitment and satisfaction of the workers and consequently affect the smooth running of the organisation negatively. Maduabum (2006) stated that employees whose salaries are being paid timely and adequately are likely to be highly stimulated to effectively perform their job. To support this, the finding of the study conducted by Kee, Ahmad and Abdullahi (2016) revealed that salaries significantly contributed to organisational commitment among the workers in the organisation.

Gupta (2011) viewed promotion as the movement of a worker to a higher post accompanied with greater tasks, better salary and higher status. Naveed, Usman, and Bushra (2011) believed that promotion is expected to lead to upward movement in the salary as well as the jurisdiction of authority and control of an employee. Promotion accords more sense of recognition to employees within an organisation and happiness derived from it could make them more productive. When employees are timely promoted, they are likely to feel happy to effectively contribute to the organizational goal achievement. Adair (2009) elucidated that in an organisation, promotion serves as a veritable tool that can be used to boost employees' morale for more effective services delivery. In an educational institution, the promotion makes lecturers more recognized; and this could facilitate an increase in their job effectiveness. To buttress this, the finding of Sulyman (2020) revealed that there was a significant relationship between salary and lecturers' job commitment in State Colleges of Education, North-central Nigeria.

Devi and Shaik (2012) opined that training could be seen as the key to unlock the potential growth and development opportunities of the employees. Ezeani and Oladele (2013) elucidated that training opportunities are an important aspect of compensation that employers need to provide for their employees. Training refers to a course of action or any exercise meant for developing affective,

cognitive and psychomotor skills which employees need to help the organisation achieve its goals. Armstrong (2006) argued that training opportunities create enabling environment for the lecturers to progress from a current state of understanding and capability to a future state in which more knowledge, skills and competencies are needed. It widens the horizon of lecturers' understanding of how the job is carried out and prepares them to exercise wider or increased responsibilities. Elnaga and Imran (2013) maintained that employees who are given adequate training opportunities are likely to perform their job better than those who are not. McDowall and Saunders (2010) stated that for lecturers to be effective on the job, they need to possess adequate knowledge and skills which could be derived by subjecting them to various periodic training opportunities.

In recent times, the compensation of academic staff in Kwara State Colleges of Education, Nigeria seems not encouraging. This is based on the information gathered from some academic staff in these institutions that, since a few years back, the State government has not been paying adequate attention to their compensation, especially in the aspects of salary, promotion and training opportunities. To support this, Oladejo (2017) stated that academic staff in many State Colleges of Education in Nigeria are not well compensated. Among other factors, they are owed salaries and their promotion is not timely implemented. This could lead to poor satisfaction and consequently affect the goal achievement of the institutions. The three State Colleges of Education in Kwara State had embarked on industrial action at various times in the past due to ineffective compensation. Kwara State College of Education, Oro in May 2016; Kwara State College of Education, Ilorin in October 2017 (National Pilot, 2017; The Punch, 2016). The three Kwara State Colleges of Education (Ilorin, Lafiagi and Oro) in the year 2013 (Daily Post, 2018). All these scenarios prompted the researcher to carry out this study.

Some researchers had carried out studies related to this present study. For instance, Nathaniel (2016) assessed lecturers' satisfaction on job motivation in Kogi State Colleges of Education, Nigeria. Kolapo (2018) conducted a study perception of lecturers on the satisfaction derived from compensation in Benue State Colleges of Education, Nigeria. All these studies are relevant to this study, but none of the assessed academic staff's satisfaction on compensation in Kwara State Colleges of Education, Nigeria. This is the gap which this study filled.

The main purpose of the study was to assess academic staff's satisfaction on compensation in Kwara State Colleges of Education, Nigeria. Specifically, the study:

- i. investigated academic staff's satisfaction on salary in Kwara State Colleges of Education, Nigeria;
- ii. examined academic staff's satisfaction on promotion in Kwara State Colleges of Education, Nigeria;
- iii. assessed academic staff's satisfaction on training opportunities in Kwara State Colleges of Education, Nigeria;
- iv. determined the difference between male and female academic staff's satisfaction on compensation in Kwara State Colleges of Education, Nigeria.

The following research questions were raised in the study.

- i. What is the academic staff's satisfaction on salary in Kwara State Colleges of Education, Nigeria?
- ii. What is the academic staff's satisfaction on promotion in Kwara State Colleges of Education, Nigeria?
- iii. What is the academic staff's satisfaction on training opportunities in Kwara State Colleges of Education, Nigeria?

The following hypothesis was formulated to guide the study.

- H₀₁:** There is no significant difference between male and female academic staff's satisfaction on compensation in Kwara State Colleges of Education, Nigeria.

Material and Methods

This study assessed academic staff's perception on compensation in Kwara State Colleges of Education, Nigeria. The descriptive research design of the survey type was adopted. The study population comprised all the 178, 106 and 115 academic staff in the Kwara State Colleges of Education, Ilorin, Lafiagi and Oro respectively as of January 2019. The purposive sampling technique was used to select all the three Colleges of Education owned by Kwara State. Proportionate sampling technique was used to select 56 lecturers out of the 115 in Kwara State College of Education, Oro; 52 lecturers out of the 106 in Kwara State College of Education, Lafiagi; and 87 lecturers out of the 178 in Kwara State College of Education, Ilorin; to make total respondents of 195, using Krejcie and Morgan Table (1970) for sample size determination. Data was collected for the study through the use of a researcher-designed instrument entitled Academic Staff's Perception on Compensation Questionnaire (ASPCQ). The ASPCQ had three sub-sections (salary, promotion and training opportunities) with five items under each; while rating scale of Strongly Agree (SA) = 4 points, Agree (A) = 3 points, Disagree (D) = 2 points, Strongly Disagree (SD) = 1 point was used for scoring. Validity of the instrument was ensured by presenting its draft to three experts in the Department of Educational Management, Faculty of Education, University of Ilorin, Ilorin, Nigeria to make their inputs. All the comments made were effected before the final draft of the instrument was produced for administration. To determine the reliability of the instrument, 20 copies of ASPCQ were administered to some academic staff in Kwara State College of Education, Ilorin, who were not part of the study participants. The data gathered were analysed using Cronbach's Alpha at 0.05 level of significance and a reliability coefficient of 0.75 was realised. This showed that the questionnaire was reliable to be used for this study. Two research assistants assisted the researcher in collecting data. The research assistants were properly enlightened to help the researcher in the administration and retrieval of the filled questionnaires from the participants. Questionnaires were given to the participants and collected back upon completion of filling after two days. Descriptive statistics of Mean and Standard Deviation were used to answer the three research questions raised in the study, while inferential statistic of T-test was used to test the hypothesis at 0.05 level of significance. The benchmark (mean scores) for determining the academic staff's perception on compensation was 0.00-0.99, Very Poor; 1.00-1.99, Poor; 2.00-2.99, Fair; 3.00-3.99, Good; and 4.00-5.00, Very Good.

Results and Discussions

Descriptive statistics of mean and standard deviation were used to answer the research questions while a t-test was used to test the hypothesis. Out of the 195 copies of the questionnaire distributed, only 187 copies were retrieved and used for analysis.

Research Question 1: *What is academic staff's satisfaction on salary in Kwara State Colleges of Education, Nigeria?*

Table 1

Academic Staff's Satisfaction on Salary in Kwara State Colleges of Education, Nigeria

S/N	ITEMS	N	\bar{X}	SD	Decision
1.	My salary is paid regularly.	187	2.58	0.81	Fair
2.	My employer does not owe me backlogs of salaries	187	1.41	0.65	Poor
3.	My salary commensurates with the work I do.	187	2.63	1.08	Fair
4.	My salary is similar to what my contemporaries earn from similar institutions.	187	2.82	1.39	Fair
5.	My salary conforms with the approved salary package.	187	2.78	1.26	Fair
Average mean			2.44		Fair

Key: 0.00-0.99, Very Poor; 1.00-1.99, Poor; 2.00-2.99, Fair; 3.00-3.99, Good; and 4.00-5.00, Very Good.

As shown in Table 1, items 1, 3, 4 and 5 (my salary is regularly paid, my salary commensurates with the work I do, my salary is similar to what my contemporaries earn from similar institutions and my salary conforms with the approved salary package) had mean scores of 2.58, 2.63, 2.82 and 2.78 respectively and were declared fair. Item 2 (my employer does not owe me backlogs of salaries) had a mean score of 1.41 and was regarded as poor. Therefore, with the average mean score of 2.24, it shows that the academic staff's satisfaction on salary in Kwara State Colleges of Education, Nigeria was fair.

Research Question 2: *What is academic staff's satisfaction on promotion in Kwara State Colleges of Education, Nigeria?*

Table 2

Academic Staff's Satisfaction on Promotion in Kwara State Colleges of Education, Nigeria

S/N	ITEMS	N	\bar{X}	SD	Decision
1.	I got promoted as and when due	187	3.38	1.45	Good
2.	I have to publish a prescribed number of articles before I can be promoted	187	3.24	1.13	Good
3.	Promotion is promptly followed by salary increment	187	1.52	0.48	Poor
4.	There is no prejudice in the promotion exercise	187	2.13	0.85	Fair
5.	Additional responsibilities often accompany my promotion	187	3.04	1.01	Good
Average Mean			2.66		Fair

Key: 0.00-0.99, Very Poor; 1.00-1.99, Poor; 2.00-2.99, Fair; 3.00-3.99, Good; and 4.00-5.00, Very Good.

As shown in Table 2, items 1, 2 and 5 (I am promoted as and when due, I have to publish a certain number of articles before I can be promoted and additional responsibilities often accompany my promotion) had mean scores of 3.38, 3.24 and 3.04 respectively thereby categorized as good. Item 3 (promotion is promptly followed by salary increment) had a mean score of 1.52 and was considered poor, while item 4 (there is no prejudice in the promotion exercise) had a mean score of 2.13 and was declared fair. Therefore, with the average mean score of 2.66, it shows that the academic staff's satisfaction on promotion in Kwara State Colleges of Education, Nigeria was fair.

Research Question 3: *What is academic staff's perception on training opportunities in Kwara State Colleges of Education, Nigeria*

Table 3

Academic Staff's Perception on Training Opportunities in Kwara State Colleges of Education, Nigeria

S/N	ITEMS	N	\bar{X}	SD	Decision
1.	Lecturers are sponsored to attend international conferences regularly	187	1.83	0.79	Poor
2.	Lecturers have the opportunity of attending workshops regularly outside the institution	187	4.16	1.44	Very good
3.	Lecturers are usually supported for further studies	187	2.36	1.02	Fair
4.	Seminars are regularly organised for lecturers to acquire more knowledge	187	1.27	0.65	Poor
5.	Workshops are regularly organised for lecturers to acquire more skills	187	1.84	0.93	Poor
Average Mean		187	2.29		Fair

Key: 0.00-0.99, Very Poor; 1.00-1.99, Poor; 2.00-2.99, Fair; 3.00-3.99, Good; and 4.00-5.00, Very Good.

As shown in Table 3, items 1, 4 and 5 (lecturers are sponsored to attend international conferences, seminars are regularly organised for lecturers to acquire more knowledge and workshops are regularly organised for lecturers to acquire more skills) had mean scores of 1.83, 1.27 and 1.84 respectively thereby categorised as poor. Item 2 (lecturers have the opportunity of attending workshops regularly outside the institution) had a mean score of 4.16 and was considered very good, while item 3 (lecturers are usually supported for further studies) had a mean score of 2.36 and was declared fair. Therefore, with the average mean score of 2.29, it shows that the academic staff's satisfaction on training opportunities in Kwara State Colleges of Education, Nigeria was fair.

Ho₁: *There is no significant difference between male and female academic staff's perception on compensation in Kwara State Colleges of Education, Nigeria.*

Table 4

T-test Showing the difference between Male and Female Academic Staff's Perception on Compensation Kwara State Colleges of Education, Nigeria

Gender	N	\bar{X}	SD	Cal. t-value	p-value	Decision
Male Academic Staff	108	3.60	1.41			
				0.741	0.069	Ho ₁ Accepted
Female Academic Staff	79	3.79	1.58			

Not Significant @ $p > .05$

Table 4 shows the calculated t-value (.741) while the p-value (0.069) is greater than the significance level (0.05). Therefore, hypothesis one (Ho₁) is accepted. This implies that there was no significant difference between male and female academic staff's satisfaction on compensation in Kwara State Colleges of Education, Nigeria.

Discussions of Findings

The finding of the study shows that academic staff's satisfaction on salary in Kwara State Colleges of Education, Nigeria was fair with an average mean score of 2.44. This depicts that that level of satisfaction which academic staff derived from salary was average and there is a need to improve it to enhance actualisation of the institutional goals. This finding agrees with the finding of Nathaniel (2016) that academic staff satisfaction with salary in Kogi State Colleges of Education was average. This finding also supports the view of Umaru and Ombugus (2017) that as at present, lecturers in the State Colleges of Education in Nigeria do not derive encouraging satisfaction from the compensation given to them, due to the challenge of irregular salary payment which they are facing.

The finding of this study shows that academic staff's satisfaction on promotion in Kwara State Colleges of Education, Nigeria was fair with an average mean score of 2.66. This means that there is room for improvement in the satisfaction which academic staff derived from promotion to facilitate their effective job performance and consequently lead to the actualisation of the institutional goals. This finding agrees with the finding of Kolapo (2018) that the level of lecturers' satisfaction on promotion in Benue State Colleges of Education was fair. He further added that it is discouraging that some lecturers in these institutions had been promoted since two years back, up till now, financial benefits have yet to be given to them.

The finding of this study shows that academic staff's satisfaction on training opportunities in Kwara State Colleges of Education, Nigeria was fair with an average mean score of 2.29. This signifies that the satisfaction which academic staff in Kwara State Colleges of Education, Nigeria got from training opportunities was not good enough. This finding agrees with the finding of Nathaniel (2016) that, the level of training opportunities that Kogi State Colleges of Education had was average. Hence, the government needs to afford them various training opportunities both locally and internationally to continually update their knowledge and skills and consequently lead to effective job performance.

The finding of the study reveals that there was no significant difference between male and female academic staff's satisfaction on compensation in Kwara State Colleges of Education, Nigeria. This finding is in tandem with the finding of Kolapo (2018) that there was no significant difference between male and female lecturers' satisfaction on compensation in Benue State Colleges of Education, Nigeria. This reveals that both male and female lecturers in the state were not different in their opinions about satisfaction on job motivation. This finding agrees with the finding of Kolapo (2018) that there was no significant difference between the opinions of male and female lecturers on compensation in Benue State Colleges of Education, Nigeria.

Conclusion

The study concluded that:

- i. the level of academic staff's satisfaction on salary in Kwara State Colleges of Education, Nigeria was fair;
- ii. the level of academic staff's satisfaction on promotion in Kwara State Colleges of Education, Nigeria was fair;
- iii. the level of academic staff's satisfaction on training opportunities in Kwara State Colleges of Education, Nigeria was fair; and
- iv. there was no significant difference between male and female academic staff's satisfaction on compensation in Kwara State Colleges of Education, Nigeria.

Recommendations

The following recommendations were made:

- i. Kwara State government should change its attitudes towards the issues surrounding salary of academic staff in Kwara State Colleges of Education, Nigeria by paying it regularly, ensuring its conformity to the approved salary scale and the likes, to facilitate effective services delivery which would aid actualization of the stated goals;
- ii. Government should always ensure that academic staff in the institutions are promoted at the right time, financial benefits attached to it are implemented in due course to motivate them towards effective job performance which would help realise the institutional goals
- iii. Government should intensify its efforts in training opportunities by regularly sponsoring academic staff to attend workshops, seminars and conferences locally, nationally and internally to help update their knowledge and facilitate effective job performance.

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AWARENESS OF SEXUALLY TRANSMITTED DISEASES AMONG SECONDARY SCHOOL STUDENTS IN ILORIN-EAST LGA, KWARA STATE

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Abstract

Adolescents, especially those in secondary schools are likely to engage in risky sexual practices and this increases their chances of contracting sexually transmitted diseases or infections. This study investigated the awareness of sexually transmitted diseases among secondary school students in Ilorin-East LGA, Kwara State. It also examined the influence of gender, school type and access to information on social media on the respondents' views. A descriptive survey method was adopted for the study. Data were gathered from a sample of 200 randomly selected secondary school students in Ilorin metropolis using a researcher-designed questionnaire entitled "Awareness of Sexually Transmitted Diseases Questionnaire". The t-test was employed for analysis at 0.05 alpha level. The level of awareness of respondents about sexually transmitted diseases was high. There were significant differences in the awareness of sexually transmitted diseases among respondents based on gender and access to information on social media but no significant difference was found based on school type. Since the majority of the secondary school students are aware of sexually transmitted diseases in Ilorin-East LGA, Kwara State, therefore counsellors should organize school-wide health talk to further educate secondary school students on challenges associated with STDs and their prevention.

Keywords: Awareness, Secondary School Students, Sexually Transmitted Diseases.

Introduction

Sexually Transmitted Diseases (STDs) have been a common health problem affecting mostly young people, not only in developing countries but also in the developed countries. For instance, diagnoses of STDs, especially syphilis, gonorrhoea and Chlamydia have been reported in several western countries especially among teenagers of 16-19 years old (Samkange-Zeeb, Spallek, & Zeeb, 2011). According to World Health Organization (WHO, 2011) STDs are infections that are spread primarily from person to person through unprotected sexual contact with an infected person (WHO, 2011). This sexual contact goes beyond vaginal intercourse it also includes anal genital and oral-genital contact as well. Sexually transmitted diseases (STDs) are a group of communicable diseases that are predominantly transmitted by sexual contact and caused by a wide range of bacterial, viral, protozoa, fungal agents, and ectoparasites (World Health Organization, 2013). Achalu (2003) defined sexually transmitted diseases as a group of infectious diseases in which the main form of spread is by sexual activity or contact. Sexually transmitted diseases can thus be defined as diseases that can be contracted through unprotected sexual activities. Nwankwo (2003) further averred that sexually transmitted diseases are those diseases caused by a variety of organisms that are capable of being transmitted sexually. They include curable ones like gonorrhoea, syphilis, and Chlamydia infection as well as incurable but modifiable ones like HIV, herpes simplex, human papillomavirus (HPV), and hepatitis B infections

STDs and their complications rank in the top five disease categories for which adults seek health care (WHO, 2011). The problem with most STDs is that they are asymptomatic (WHO, 2011). About 70% of women with gonococci and Chlamydia infections experience no symptoms at all and therefore STIs can thus be passed on unawares during unprotected sexual intercourse (WHO, 2011). The consequences of untreated STDs have adverse implications for reproductive and maternal health such as ectopic pregnancy, infertility, pelvic inflammatory disease and cervical cancer (WHO, 2011). According to estimates of WHO, 448 new cases of curable STDs (syphilis, gonorrhoea, Chlamydia & trichomoniasis) occur annually throughout the world mostly in people aged 15-49 years. This does not include HIV and other STDs which continue to adversely affect the lives of individuals and communities worldwide. The majority of these infections occur in low and middle-income countries in Latin America, Sub-Saharan Africa and Southeast Asia.

It is estimated that in Sub-Sahara Africa 69 million new cases of STDs are recorded annually and these infections play a major role in contributing to poor reproductive health, especially in women (WHO, 2007). The disturbing feature seen in most developing countries is that since the emergence of HIV/AIDS so much attention has been placed on it leading to a situation where knowledge of HIV/AIDS within the population is high due to increased information and education through several media including mass communication media (Adler, Cowan, French, Mitchell, & Richers, 2004). It, however, appears that not much effort has been extended to other traditional STIs of which there is still a great deal of ignorance.

STIs (excluding HIV) were estimated to be the second commonest cause of loss of healthy life after maternal morbidity, other studies have estimated that 5% of the total healthy life years lost in Sub-Saharan Africa are caused by STIs excluding HIV and that HIV alone accounts for 10% of healthy life years lost (Adler, et al, 2004). The lack of proper awareness and knowledge regarding other STDs may leave a large population of men and women vulnerable to contract infections. Awareness and knowledge regarding STIs are a general prerequisite for the prevention of STI infections, although knowledge and awareness have been reported to have a limit. It has now been recognized that there is a synergy between most STIs and HIV infection, particularly ulcerative and inflammatory conditions such as genital ulcer and syphilis (Adler, et al, 2004).

According to Adebawale, Musibau, Adeniyi and Odunayo (2013), Nigeria has a fast-growing population and is confronted with numerous health challenges. With the growing rate of the country's population, it appears that the future of the country rests to a greater extent, on how successful her youth have a transition to healthy and productive adulthood. STDs remain a major public health challenge because of their health consequences, several complications especially among women who excessively bear long term consequences (Adebawale, et al, 2013). The prevalence of STDs among Nigerian female youths is 17 per cent, and that STDs causes infertility in women and increases the risk of transmission of HIV/AIDS (Nwankwo, 2003).

In Nigeria, it is a serious problem because it affects an estimated one-quarter of sexually active teenagers in the country. The prevalence is high in various locations due to the poor knowledge of the diseases and the beliefs attached to it as a result of insufficient and inadequate information available to the teeming population from various quarters, especially sexually active adolescents (Oluyemi, Yunusa, Abdullateef, Sunday & Kehinde. 2015). More so, a report on the reproductive health of adolescents in Nigeria indicates that many adolescents initiate sexual intercourse at an early age and engage in high-risk sexual behaviours such as unprotected sex and multiple sexual partners which expose them to sexually transmitted diseases, unwanted pregnancy and illegal abortion among others (UNAIDS, 2006).

The commonest STDs include HIV&AIDS, non-specific genital infection (NSGI), Candidiasis, Gonorrhoea, Trichomoniasis, Genital Warts, Syphilis, Herpes, Genitalia Tines (Crurus), Scabies and Gardenerella Vaginalis. Others are Hymphogramutoma, Varecem, Choncroid and Vereophobia among others (Ugwu, 2012). The tragedy of premarital sex among adolescents is that they engage in

frequent sexual activities without proper knowledge of what is involved (Okeke, 2006). In another opinion, Achalu (2003) emphasizes that those who engage in high-risk behaviours such as indiscriminate sex with many partners or those who pick partners from the streets have an increased chance of being infected. Furthermore, Ijezie (2007) opined that sexual practices such as anal intercourse, oral intercourse, homosexuality, heterosexuality and deep kissing are associated with a high risk of contracting these diseases especially the virus that causes AIDS. Also, Owolabi, (1995) described some of the prevalence of STDs in Nigeria is due to sexual promiscuity, and homosexuality, lack of sex education, self-medication and drug abuse among secondary school students.

Empirical reports showed that adolescents and young adults, aged 15–24 years, are more at risk for STIs than older adults. For instance, the WHO estimates that 20% of persons living with HIV/AIDS are in their 20s and one out of twenty adolescent's contract an STI each year (Olasode, 2007). Youths are more likely to practice unprotected sex, have multiple sexual partners, and have trans-generational and transactional sex. The cervical lining in female adolescents and young women makes them more predisposed to STIs. In addition, they may have problems getting the required information, services, and supplies they need to avoid STIs. They may also experience difficulties in accessing STI prevention services because they do not know where to find them, do not have transportation to get there, or cannot pay for the services. Even if they can obtain STI prevention services, they may not feel comfortable in places that are not youth-friendly (Tilson, Sanchez & Ford, 2004).

Untreated or poorly treated STIs are associated with a lot of complications. In males, gonorrhoea, as well as Chlamydia trachomatis infection, causes epididymitis which can result in infertility in the future. In addition, inflammatory urethral stricture may arise from poorly treated gonococcal urethritis in the future (Tilson, Sanchez & Ford, 2004). This may lead to urinary retention and possibly chronic renal failure if not properly managed. For the females, pelvic inflammatory disease, dyspareunia, infertility, chronic pelvic pain, increased risk of ectopic pregnancies, abortions, stillbirths, and perinatal and neonatal morbidities can occur, jeopardizing their future reproductive competencies (Adegun, Solomon, Adegoke, Ade-Ojo, & Fape, 2013).

Knowledge of STIs and their complications is important for adequate prevention and treatment, as people who do not know the symptoms may fail to recognize the need to seek help. Adolescents, especially those in secondary schools are likely to engage in risky sexual practices and this increases their chances of contracting sexually transmitted diseases or infections. The focus of this study is to investigate: (i) the level of awareness of sexually transmitted diseases and (ii) influence of moderating variables of gender, school type, and access to information on social media on awareness of sexually transmitted diseases among secondary school students in Ilorin-East LGA, Kwara State.

To achieve the study objective, the following null hypothetical statement was formulated:

There is no significant difference in the awareness of sexually transmitted diseases among secondary school students in Ilorin-East LGA, Kwara State based on gender School type and access to information on social media.

Material and Methods

The descriptive design of the survey method was used in this study. The descriptive survey method enables a researcher to obtain the opinions of a representative sample of a target population to generalize it to the entire population (Daramola, 2006). In view of this, a descriptive survey was considered appropriate for this study as the researcher is interested in gathering information on the awareness of sexually transmitted diseases among secondary school students in Ilorin-East LGA, Kwara State.

The population for the study comprised all secondary school students in Ilorin-East LGA, Kwara State, while the target population consists of selected secondary school students from Ilorin-East LGA. Ten (10) secondary schools were randomly selected from Ilorin-East LGA, Kwara State using

the dip-hat sampling method. A simple random sampling technique was further used to select 20 students from each of the secondary schools earlier selected making a total number of two hundred (200) respondents.

A self-designed instrument titled “Awareness of Sexually Transmitted Diseases Questionnaire” (ASTDQ) was used for the study. The questionnaire was divided into two sections (i.e. A and B). The first section comprises the demographic data of the respondents including gender, school type and access to social media while section B consisting of 20 items on the awareness of sexually transmitted diseases, which the respondents filled based on their perception using the following scoring format: Strongly Agree (SA) = 4 points, Agree (A) = 3 points, Disagree (D) = 2 points and Strongly Disagree (SD) 1 point. The highest possible score for the items is 80 (20x4) and the lowest score is 20 (20x1) the range is 60 (80-20) thus the midpoint is 30 (60/2). The cut-off point will be 80 and 30 i.e. maximum score minus the mid-point of the range $20 + 30 = 50$. This means that respondents who scored 50 to 80 are aware of sexually transmitted diseases and respondents who scored 49 and below are not aware of sexually transmitted diseases. The instrument was validated by experts in the Department of Counsellor Education and was also subjected to reliability through a coefficient of stability using a Pearson moment correlation coefficient formula and a coefficient of 0.67 was obtained.

The respondents are expected to tick each statement according to their level of agreement or disagreement and the items were scored on 4 points Likert – type rating scale. The percentage was used to analyze the demographic variables of the respondents and to answer major research questions. All hypotheses were tested using a t-test at a 0.05 level of significance.

The researcher sought the consent of the selected participants and established rapport with them; provide appropriate instructions and clarification on how to respond to the items to encourage respondents’ accurate and prompt response to the instrument. Participants are allowed to participate willingly in the study and were assured of the confidentiality of their responses as they will be used for research purposes. Thus, they were not asked to write their names or addresses to ensure anonymity. The participants were also assured that they will not be exposed to any risk during and after the research.

The researcher employed percentages to analyse the demographic data and to answer the research question while t-test statistics was used to test the research hypotheses formulated. All hypotheses were tested at a 0.05 level of significance

Results and Discussion

Demographic Description of Respondents

Table 1: Demographic Characteristics of the Respondents based on Gender, School Type and access to Social Media

Variable	Frequency	Percentage (%)
Gender		
Male	83	41.5
Female	117	58.5
Total	200	100.0
School type		
Private	60	30.0
Public	140	70.0
Total	200	100.0
Information		
Yes	180	90.0
No	20	10.0
Total	200	100.0

Table 1 shows the distribution of respondents based on gender, school type, parent's educational status and access to social media. The result on the table indicates that 83 (41.5%) were males while 117(58.5%) were female. Also, 60 (30.0%) of the respondents were from private schools while 140 (70.0%) of the respondents were from public schools. Lastly, 90.0% (180) of the respondents have access to information on social media, while 10.0% (20) of the respondents do not have access to information on social media.

Research Question 1: What are the levels of awareness of sexually transmitted diseases among secondary school students in Ilorin-East LGA, Kwara State?

Table 2: Mean and Rank Order on the Respondents' Awareness of Sexually Transmitted Diseases

Item no	I am aware that:	Agreed (%)	Disagreed (%)
1	genital herpes is caused by the same virus as HIV	196 (98.0%)	4 (2.0%)
2	frequent urinary infections can cause Chlamydia	196 (98.0%)	4 (2.0%)
3	gonorrhoea is a sexually transmitted disease	196 (98.0%)	4 (2.0%)
4	it is easier to get HIV if a person has another sexually transmitted disease	196 (98.0%)	4 (2.0%)
5	Human papillomavirus (HPV) is caused by the same virus that causes HIV	195 (97.5%)	5 (2.5%)
6	having anal sex increases a person's risk of getting STDs	187 (93.5%)	13 (6.5%)
7	sometimes after infection with HIV a person develops open sores on his or her genitals (penis or vagina)	184 (92.0%)	16 (8.0%)
8	all STDs are mostly transmitted through sexual intercourse	188 (94.0%)	12 (6.0%)
9	a person can tell by the way his/her body feels if she has a STD	180 (90.0%)	20 (10.0%)
10	there is vaccine available to a person from getting STDs	188 (94.0%)	12 (6.0%)
11	if a person had gonorrhoea in the past he/she is not immune (protected) from getting it again	187 (93.5%)	13 (6.5%)
12	STDs symptoms manifest earlier in men than women	187 (93.5%)	13 (6.5%)
13	condom can protect someone from contracting STDs	196 (98.0%)	4 (2.0%)
14	STDs can lead to health problems that are usually more serious for men than women	168 (84.0%)	32 (16.0%)
15	a woman who has genital herpes can pass the infection to her baby during childbirth	161 (80.5%)	39 (19.5%)
16	a man can protect himself from getting genital warts (soft growths that appear on the genitals) by washing his genitals after sex.	179 (89.5%)	21 (10.5%)
17	syphilis is a sexually transmitted disease caused by bacteria	192 (96.0%)	8 (4.0%)
18	symptoms of gonorrhoea include pain, difficulty in urination and blood stain	187 (93.5%)	13 (6.5%)
19	sexually transmitted diseases cannot be transmitted through deep kissing	180 (90.0%)	20 (10.0%)
20	sexually transmitted diseases can be transmitted through blood transfusion	175 (87.5%)	25 (12.5%)

Table 2 presents respondents' awareness of sexually transmitted diseases. The table indicates that items 1, 2, 3, 4 and 13 which states that respondents are aware that genital herpes is caused by the same virus as HIV, frequent urinary infections can cause Chlamydia, gonorrhoea is a sexually transmitted disease, it is easier to get HIV if a person has another sexually transmitted diseases and condom can protect someone from contracting STDs respectively have the highest percentage scores of 98.0% while the item 15 which states that "a woman who has genital herpes can pass the infection to her baby during childbirth" has the lowest percentage score 80.5%. Since all the items have above 50% score, then it can be concluded that respondents are aware of sexually transmitted diseases.

Hypotheses Testing

Three null hypotheses were postulated and tested in this study using t-test statistical methods at a 0.05 level of significance.

Hypothesis One: There is no significant difference in the awareness of sexually transmitted diseases among secondary school students in Ilorin East LGA, Kwara State based on gender

Table 3: Mean, Standard Deviation and t-value on the Respondents' Awareness of Sexually Transmitted Diseases Based on Gender

Gender	N	Mean	SD	Df	Cal. t-value	Crit. t-value	p-value
Male	83	64.78	3.75	198	2.37*	1.96	.019
Female	117	63.43	4.13				

Table 3 shows that the calculated t-value of 2.37 is greater than the critical t-value of 1.96 with a corresponding p-value of .019 which is less than 0.05 alpha level of significance. Since the p-value is less than the alpha level, the hypothesis which states that there is no significant difference in the awareness of sexually transmitted diseases among secondary school students in Ilorin-East LGA, Kwara State based on gender is therefore rejected.

Hypothesis Two: There is no significant difference in the awareness of sexually transmitted diseases among secondary school students in Ilorin-East LGA, Kwara State based on school type

Table 4: Mean, Standard Deviation and t-value on the Respondents' Awareness of Sexually Transmitted Diseases Based on School Type

School	N	Mean	SD	Df	Cal. t-value	Crit. t-value	P-value
Private	60	63.93	3.94	198	0.13	1.96	.90
Public	140	64.01	4.07				

Table 4 shows that the calculated t-value of 0.13 is less than the critical t-value of 1.96 with a corresponding p-value of .90 which is greater than the 0.05 alpha level of significance. Since the p-value is greater than the alpha level, the null hypothesis is accepted, therefore there is no significant difference in the awareness of sexually transmitted diseases among secondary school students in Ilorin-East LGA, Kwara State based on school type.

Hypothesis Three: There is no significant difference in the awareness of sexually transmitted diseases among secondary school students in Ilorin-East LGA, Kwara State based on access to information on social media

Table 5: Mean, Standard Deviation and t-value on the Respondents' Awareness of Sexually Transmitted Diseases Based on Access to Information on Social Media

Access	N	Mean	SD	Df	Cal. t-value	Crit. t-value	p-value
Yes	180	63.80	4.14	198	2.01*	1.96	.05
No	20	65.70	2.08				

Table 5 shows that the calculated t-value of 2.01 is greater than the critical t-value of 1.96 with a corresponding p-value of .05 which is less than 0.05 alpha level of significance. The null hypothesis is rejected since the p-value is less than the alpha level, therefore there is a significant difference in the awareness of sexually transmitted diseases among secondary school students in Ilorin-East LGA, Kwara State based on access to information on social media.

Discussion of findings

The study revealed that respondents are aware of sexually transmitted diseases. The majority of the respondents (98.0%) are aware that genital herpes is caused by the same virus as HIV; frequent urinary infections can cause Chlamydia, and gonorrhoea is a sexually transmitted disease. The finding of the study corresponds with the finding of Ray and McMillan (2008) who found that knowledge of genital herpes among patients attending an outpatient genitourinary clinic in Scotland is reasonable. Similarly, Narouz, Allan and Wade (2003) found that 67% of the respondents were aware that an active herpes virus may cause HIV. The finding of the study is not in line with the submission of Macmillan, Walker, Oloto, Fitzmaurice and Templeton (1999) who found poor awareness and knowledge of Chlamydia genito-urinary infection among sexually active women in the UK. It was reported that half of the study population had never heard of Chlamydia. The findings of the study support the study of Nsuam, Sanders and Taylor (2010) who found that 70.4% of the total group mentioned gonorrhoea as a sexually transmitted disease. Also, Amu and Adegun (2005) found that eighty per cent of the respondents knew only one STI and the two most commonly mentioned ones were HIV/AIDS and gonorrhoea.

The study revealed a significant difference in the awareness of sexually transmitted diseases among secondary school students in Ilorin-East LGA, Kwara State based on gender. This implies that male and female respondents were different in their level of awareness of sexually transmitted diseases. The difference could be as a result of the fact females are exposed to reproductive health and hygiene by their mother, female relatives or friends compare to males. This finding corroborates with the findings of Samkange-Zeeb, Mikolajczyk and Zeeb (2011) who found that girls knew different types of STIs than boys. Likewise, Racquel (2015) also found a significant difference in the STDs knowledge of females which was slightly higher than males.

Based on school type, there was no significant difference in the awareness of sexually transmitted diseases among secondary school students in Ilorin-East LGA, Kwara State. This implies that no difference was found in the respondents' awareness on based school type. This might be because students in public and private schools are taught about STIs in subjects like Basic Science, Biology, and Home Economics. The finding is in line with the finding of Amu and Adegun (2015) who found that school type did not significantly influence the awareness and knowledge of sexually transmitted infections among secondary school adolescents in Ado-Ekiti.

Hypothesis three revealed that there was a significant difference in the awareness of sexually transmitted diseases among secondary school students in Ilorin-East LGA, Kwara State based on access to information on social media. This implies that a difference was found in the respondents' awareness on based access to information on social media. This might be because not everybody has access to social media or use it for educative purpose. This submission is in line with the finding of Svensson and Waern (2013) who noted that accessing social media did not significantly contribute to adolescents' knowledge of and attitudes to sexually transmitted diseases.

Conclusion

Based on the findings of this study it can be concluded that secondary school students in Ilorin-East LGA are aware of sexually transmitted diseases. The majority of the respondents (98.0%) are aware that genital herpes is caused by the same virus as HIV; frequent urinary infections can cause Chlamydia; gonorrhoea is a sexually transmitted disease; it is easier to get HIV if a person has another sexually transmitted disease; condom can protect someone from contracting STDs among others. Also, there was a significant difference in the awareness of sexually transmitted diseases among secondary school students in Ilorin-East LGA, Kwara State based on gender and access to information on social media but no significant difference was found based on school type.

Recommendations

Based on the findings of this study, it is recommended that:

1. School counsellors in collaboration with mental health nursing experts should sensitize adolescents about sexuality education to prevent them from contracting STDs.
2. Ministry of Education should inculcate reproductive health as a subject to different levels of education to continue to create awareness of sexually transmitted diseases and prevention among adolescents.
3. The counsellors should encourage students who have access to information on social media to use it for educative purposes especially on health education.
4. Guidance counsellors should cooperatively work together with other socialization agents such as health care personnel, parents, guardians, peer groups and society at large in waging war against the prevalence of risky sexual behaviour among adolescents from which they can contract STDs.

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ASSESSMENT OF ATTITUDE TOWARDS PREMARITAL GENOTYPE SCREENING FOR SICKLE CELL DISEASE AMONG UNIVERSITY STUDENTS IN NORTH WEST ZONE OF NIGERIA

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Abstract

This study assessed the attitude towards premarital genotype screening for sickle cell disease among university students in the North-West zone of Nigeria. A descriptive survey research design was adopted. The population comprised 70,530 undergraduate students in the ten Federal universities in the North-West zone of Nigeria. The researcher sampled 572 students through multi-stage sampling techniques, which comprised of cluster, simple random and proportionate sampling techniques. A researcher-developed close-ended questionnaire was used for data collection. Out of the 572 copies of the questionnaire administered, 534 (93%) were used for data analysis; the remaining 38(7%) were considered invalid as they were not duly filled by the respondents. Descriptive statistics of frequencies and percentages were used to describe the demographic characteristics of the respondents and answer to the research question was provided using means and standard deviations. Inferential statistics of a one-sample t-test was used to analyze the hypothesis at a 0.05 level of significance. The findings of the study revealed that the respondents have an insignificantly positive attitude towards premarital genotype screening for sickle cell disease (mean = 2.53 and p-value = 0.164). Based on the findings of the study, the researcher concluded that university students in the North-West zone of Nigeria have a positive attitude towards premarital genotype screening for sickle cell disease. The researcher recommended that university curriculum planners should include the importance of premarital genotype screening in the school curriculum and the need for religious societies in the universities such as the Muslim Student Society (MSS) and Fellowship Christian Society (FCS) to periodically organize programs aimed at sensitizing their followers about the importance of premarital genotype screening for sickle cell diseases to correct wrong attitudes.

Keywords: Attitude, Premarital Genotype Screening, Sickle Cell Disease.

Introduction

Sickle cell disease is the most common killer genetic disorder worldwide with the highest occurrence in sub-Saharan Africa, Spanish-speaking regions (South America, Central America and the Caribbean), Saudi Arabia, India, Mediterranean countries such as Turkey, Greece and Italy. (Centres for disease control, 2017). About 5-7 % of the world global population have an abnormal haemoglobin gene and sickle cell disease is the most predominant (World Health Organization, 2006). Sickle disease results from the inheritance of abnormally structured haemoglobin called sickle haemoglobin. Inheritance of 2 copies of the abnormal haemoglobin will result in sickle cell disease while the inheritance of one copy of the abnormal haemoglobin and one copy of the normal haemoglobin will result in sickle cell trait. The most common types of sickle cell disease are Sickle Cell Anemia (HbSS), Sickle Hemoglobin- C Disease (HBSC), Sickle Beta-Plus Thalassemia (HbSBthal), Sickle Beta Zero-Thalassemia (HbSB0) (Centres for Disease Control, 2016).

Globally, about 300,000 babies are born with sickle cell disease annually and the figure has been projected to rise to 400,000 by 2050 (Piel, Hay, Gupta, Weatherall, Williams, 2013). In Nigeria, sickle cell trait prevalence is 24% of the 160 million population while the disease occurs in 20 per 1000 births; about 150,000 babies are born with the disease annually in the country, that is, 50% of the global

sickle cell disease births occur in Nigeria (World Health Organization, 2006). This estimate is challenging because many babies are born outside the hospital and may die before they are being diagnosed with the disease, however, in a regional newborn screening program, it was discovered that approximately 700,000 babies are born annually in the country and about 3 per cent of the newborn have sickle cell disease (Debaun & Galadanci 2018). A large retrospective study conducted in Benin City, South-South Nigeria by Nwogoh, Adewoyin, Iheanacho, and Bazuaye (2012) revealed that sickle cell disease prevalence was 2.39% while the carrier prevalence was about 23% of the population.

Sickle cell disease reduces the quality of life of its victims. The disease makes life difficult for those affected and their family members. Most patients die in childhood, while those that live long actually live a hard life because the management of the disease is a long-life, tiring and costly procedure. The disease leads to serious complications like anaemia, stroke, hypertension, acute chest syndrome, multi-organ failure syndrome among others, and if untreated, they may lead to death (Ademola, 2015). The patients often experience sudden attacks characterized by extreme pain in the arms, the back, the knees, the legs, the chest, and the stomach. The attack is termed ‘sickle cell crisis’ and may last for several hours to days. These complications are a result of the occlusion of blood vessels by the sickled cells. Sickle cell disease leads to serious social, financial and psychological problems in families. The study of Adegoke and Kuteyi (2012) revealed that 73.3% of the respondents (parents of children with sickle cell disease) reported that the time spent in caring for the child makes them lose income or financial benefits, 32.1% reported that they always feel angry with themselves or the child, 84.4% always feel angry and depressed. In most cases, the mothers do not receive support from other family members in caring for the child, this results in a family crisis, frequent quarrels, disharmony and eventually divorce. The fathers marry new wives to give them healthy children. On the part of the victims, they are often stigmatized, and as such, they are always having negative thoughts which eventually make them depressed, sickle cell disease also disrupts their academic pursuit, making them less productive and thus, slows economic growth. All these could be avoided through premarital genotype screening for sickle cell disease and avoiding risk marriages. Management of sickle cell disease is not adequate in the countries where the disease is prevalent. According to MedlinePlus (2011), the goals of treating sickle cell disease are to manage the disease complications which include pain, infections, anaemia, stroke, and organ damage.

To reduce the prevalence of sickle cell disease, the World Health Organization (2008) identified some appropriate ways of preventing its occurrence especially in countries with the highest prevalence. These are carrier identification through premarital genotype screening, prenatal diagnosis, preconception genetic diagnosis and in-utero transplantation. However, prevention of the disease through premarital genotype screening to avoid risk marriage is the most reliable method. Premarital genotype screening is a blood test done especially by prospective couples to know the possible genotype of their unborn children (Oyedele, Emmanuel, Gaji & Ahure, 2015). Hence, if couples have plans of procreation, then it is a must to worry about the health condition of their unborn children. Premarital genotype screening for sickle cell disease and other haemoglobinopathies has since been mandated in several countries in the Middle East and North Africa (Al-Allawi, Jalal, Faraj, Shalli & Hamamy, 2013). The researcher observed that some religious organizations in Nigeria have also recently mandated premarital genotype screening for sickle cell disease, but most times it is done only a few days before the wedding when the prospective couples might find it hard to accept the negative results.

As observed by the researcher, there is a high level of ignorance within the area of the study, as a result, the residents believe that all blood tests done before marriage are to check Human Immunodeficiency Virus (HIV) status and other Sexually Transmitted Diseases (STDs) which are meant for the promiscuous and couples who do not trust each other. Another challenge is the religious belief of the residents, that is, belief in destiny and readiness to accept a diseased child as one's fate. The emotional feeling of love or fear of losing a loved one due to negative results is also a major

challenge. Because of love, some people could go to an extent of deceiving their intending partners by lying about their results, the truth eventually gets revealed but mostly after the damage has been done. It is in view of this that the researcher deemed it fit to conduct the study.

Material and Methods

A descriptive survey research design was used for the study. The population of the study comprised of seventy thousand, five hundred and thirty (70,530) undergraduate students admitted in the year 2017 and 2018 in the ten (10) Federal universities in the North-West zone of Nigeria (Joint Admissions and Matriculation Board, 2018). The rationale behind choosing these set of students as the population of the study is that at the time of the study, they were expected to be graduating soon, and as such, were presumed to enter wedlock, a stage where important decisions such as premarital genotype screening for sickle cell disease are made. The instrument for the study was a researcher-developed close-ended questionnaire. The sample of the study comprised 572 students drawn through multi-stage sampling techniques as follows:

Stage one: The seven States in the North-West zone of Nigeria were clustered into 2 based on proximity.

Stage two: Two States were selected each from the two clusters using a simple random sampling technique. The names of the States in the first cluster were written on pieces of paper, folded and then put in a container. The researcher randomly picked two folded pieces of paper one after the other from the container, unfolded them and recorded the names of the selected States. The same procedure was followed to select the States from the second cluster.

Stage three: The same simple random sampling technique used in stage two was used to select two universities from the selected States in each cluster.

Stage Four: Proportionate sampling technique was used to calculate the number of respondents from each of the selected universities who were administered copies of the questionnaire.

Stage five: Respondents in the selected universities were selected by "Yes" or "No" simple random sampling technique. Students that met the criteria for the study (that is, those admitted in the year 2017 and 2018) found within the areas chosen for data collection (eateries, hostels, lecture halls, gymnasias and gardens) were allowed to pick "Yes" or "No" written on pieces of paper and folded. Those who picked "Yes" and were willing to fill a copy of the questionnaire and submit it on the spot were given a copy of the questionnaire, while those who picked "No" or those not willing to fill a copy of the questionnaire and submit on the spot were not given the questionnaire. The researcher waited for them to fill the questionnaires and retrieved them. Five hundred and seventy-two (572) copies of the questionnaire were administered and all were retrieved.

Results and Discussion

All the 572 (100%) copies of the administered questionnaire were retrieved, however, 534 (93%) were used for data analysis because 38 (7%) were not duly filled by the respondents, and as such, they were considered invalid. The data was analyzed using Statistical Package for Social Science (SPSS) IBM version 26 and presented in the tables below:

Table 1: Demographic Characteristics of the Respondents

Variable	Option	Frequency	Per cent
Age range (years)	< 22years	280	52.4
	22-26years	161	30.2
	27 – 31years	82	15.4
	32 – 36years	5	0.9
	>36years	6	1.1
	Total	534	100.0
Gender	Male	279	52.2
	Female	255	47.8
	Total	534	100.0
Religion	Islam	364	68.2
	Christianity	167	31.3
	Traditional	3	0.5
	Total	534	100.0

Table 1 reveals that most of the respondents (280; 52.4%) were below 22years of age. This skewness is generally expected since most students are generally young. Students between 22-26 years were 161 (30.2%) and 27-31 years were 82 (15.4%). The remaining respondents were ages 32-36 (5; 0.9%) and >36years (6; 1.1%) respectively. Concerning the gender of the respondents, the majority (279; 52.2%) of the respondents were males, while the remaining (255; 47.8%) were females. The representation could be said to be proportionate in ratio to the male/female in the universities within the zone. In terms of religious affiliation, most (364, 68.2%) respondents were of the Islamic faith. Those of the Christian faith were (167; 31.3%), while 3 (0.5%) of respondents belonged to the Traditional religion. The dominance of the Islamic faith among the respondents could be attributed to the location where the study was conducted.

Research Question: What is the attitude of university students in the North-West Zone of Nigeria towards premarital genotype screening for sickle cell disease?

Table 2: Mean of Responses on Attitude towards Premarital Genotype Screening for Sickle Cell Disease Among University Students in North-West Zone of Nigeria.

S/N	Attitude	Mean	Std dev.
1	I think premarital genotype screening for sickle cell disease is necessary	2.11	0.764
2	I think the screening will help reduce the burden of sickle cell disease in families	3.28	0.876
3	I feel the screening will reduce the prevalence of sickle cell disease in the country	3.29	0.865
4	I feel the screening will reduce regular pains experienced by individuals	3.19	0.837
5	I think the screening will help reduce worries about giving birth to a child with sickle cell disease	2.55	0.847
6	I feel the screening reveals a lack of trust among intending couples	3.02	1.037
7	I believe the screening is against my religious belief	2.13	0.842
8	I feel the screening increases one's chance of getting married	1.58	0.784
9	I think the screening causes conflict among intending couples	1.83	0.882
10	I prefer not exposing my genotype status to the public	2.35	0.892
	Aggregate mean	2.53	0.572

(Fixed mean = 2.5)

Table 3 shows that the respondent's attitude towards premarital genotype screening for sickle cell disease was positive with an aggregate mean of 2.53. The mean score is within the range of the midpoint average of 2.5 or slightly higher. Most (3.28) of the students believed that the screening will help reduce the burden of sickle cell disease in families, reduce the prevalence of sickle cell disease in the country (3.29), will reduce regular pains experienced by individuals (3.19) and will help reduce worries about giving birth to a child with sickle cell disease (2.55). The aggregate mean score of 2.53 and a standard deviation of 0.572 for the table implies a positive attitude towards premarital genotype screening for sickle cell disease among university students in the North-West zone of Nigeria.

Hypothesis: University students in the North-West zone of Nigeria do not have a significant attitude towards premarital genotype screening for sickle cell disease.

Table 3: Analysis of One-Sample t-test on Attitude towards Premarital Genotype Screening for Sickle Cell Disease among University Students in North-West Zone of Nigeria

Variable	N	Mean	Std. Dev.	Std. Error	t-value	DF	p-value
Attitude	534	2.53	0.572	0.025	1.392	533	0.164
Test mean	534	2.50	0.000	0.000			

(t-critical = 1.96, $p > 0.05$)

Table 3 reveals that the attitude of the university students towards premarital genotype screening for sickle cell disease in the zone was not statistically significant. The observed t-value obtained at 533 degree of freedom was lower than the critical value (1.96). The p-value for the test was 0.164 ($p > 0.05$). This means that the university students in the North-West zone of Nigeria have an insignificant attitude towards premarital genotype screening for sickle cell disease.

Discussion

The findings of the study showed that the respondent's attitude towards premarital genotype screening for sickle cell disease was positive (2.53) but not adequate. This is because even though most of the students believed that the screening will help reduce the burden of sickle cell disease in families (3.28), reduce the prevalence of sickle cell disease in the country (3.29), reduce regular pains experienced by individuals (3.19), reduce worries about giving birth to a child with sickle cell disease (2.55), they did not agree that premarital genotype screening for sickle cell disease is necessary (2.11) or that the screening increases one's chance of getting married to the right partner (1.58). They also believed that the screening reveals a lack of trust among intending couples (3.02). In the test of the related null hypothesis, the expressed attitude towards premarital genotype screening for sickle cell disease was found to be not significant ($p > 0.05$). This finding contradicted the result of Saidu (2018) in his study on attitude and perception towards premarital counselling and screening among youths of Dala local government area, Kano, Nigeria, where he revealed that the majority (86.3%) of the respondents had a negative attitude. However, the study of Faremi, Olatubi and Lawal (2018) titled "Knowledge of sickle cell diseases and premarital genotype screening among students of a tertiary educational institution in South-Western, Nigeria" supported the finding of this study because the majority (74.4%) of their respondents also had a positive attitude toward premarital genotype screening.

Conclusion

Based on the findings of the study, the researcher concluded that university students in the North-West zone of Nigeria have a positive attitude towards premarital genotype screening for sickle cell disease.

Recommendations

1. University curriculum planners should include the importance of premarital genotype screening in the school curriculum.
2. Religious societies in the universities such as the Muslim Student Society (MSS) and Fellowship Christian Society (FCS) periodically organize programs aimed at sensitizing their followers about the importance of premarital genotype screening for sickle cell diseases to correct wrong attitudes.

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ASSESSMENT OF ATTITUDE OF SAFETY MEASURES AMONG WASTE COLLECTORS IN KATSINA STATE, NIGERIA

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Abstract

This study titled Attitude of Safety Measures among Waste Collectors in Katsina State, Nigeria employed ex-post facto research design to assess the attitude of safety measures among waste collectors in Katsina State, Nigeria. The availability and appropriate use of Personal Protective Equipment (PPE) by waste collectors go a long way in ensuring safety while at work. Several pieces of evidences have shown how waste collectors are at a greater risk of contracting diseases and sustaining injuries. About 85% of waste collectors in developing countries including Nigeria do not have occupational health, safety and welfare which are aimed at protecting the collectors. A Multi-stage Sampling Technique that involves Stratified Sampling, Simple Random Sampling, Proportionate Sampling and Systemic Sampling Technique was used for this study. The instrument for data collection was a close-ended structured questionnaire containing sections A, B, C and D with a modified four-point Likert scale. The sample size for the study was 400 out of which 390 copies were valid and used for the analyses. Data collected was analyzed by Mean and Standard Deviations (SD) to answer the stated research questions. One sample t-test was used to test the hypothesis at a 0.05 alpha level of significance. Hence, the mean score of any response was considered positive, if it is 2.5 and above and the mean score of any response less than 2.5 is regarded as a negative score. The result obtained revealed that waste collectors in Katsina State have a positive attitude toward safety measures. Based on the findings of the study, it was concluded that waste collectors have a good attitude toward safety measures in Katsina State. It was recommended that Waste Collectors in Katsina State should be encouraged by government and health agencies on how to maintain a positive attitude towards the practice of safety measures of waste collection through training, seminars and workshops.

Keywords: Attitude, Waste Collectors, Personal Protective Equipment

Introduction

Occupational health risks are attached with the Municipal Solid Waste (MSW) management process, specifically during handling, processing, and disposal stages. The waste collectors who are regularly involved in handling waste are highly exposed to organic dust and bioaerosols which make them vulnerable to pulmonary infections such as asthma. Public waste in Nigeria is a major responsibility of State and Local government environmental agencies. The agencies are charged with the responsibility of handling, employing and disposing of waste generated. The state agencies generate funds from subvention from state governments and internally generated revenue through public waste levies, but despite all the efforts and initiatives, the management of waste continues to pose different challenges (Ogwueleka, 2014).

In Nigeria, the waste discharged for collection is seldom stored in closed containers and is dumped directly on the ground, requiring it to be shovelled by hand or left in an open carton or basket to be picked up by hand. Waste Collectors, therefore, have significantly more direct contact with solid waste than their counterparts in developed countries, which predominantly handle sealed plastic bags and covered dustbins. Managing waste in Nigeria is a problem due to many factors, including lack of adequate funding and increase population, lack of trained/ professional waste managers and lack of effective monitoring and control. Up till now, the activities of state environmental agencies have been hampered by poor funding, inadequate facilities and human resources, inappropriate resources and an inequitable taxation system. (Cointreau-Levine, 2016).

The availability and appropriate use of Personal Protective Equipment (PPE) by waste collectors go a long way in ensuring safety while at work. Several pieces of evidences have shown how waste collectors are at a greater risk of contracting diseases and sustaining injuries. About 85% of waste collectors in developing countries including Nigeria do not have occupational health, safety and welfare which are aimed at protecting the collectors. Generally, there are potential risks to human health from improper handling of wastes. These health risks can be broadly subdivided into direct and indirect effects (Harrison, 2013).

The direct health implication of indiscriminate waste disposal includes:

- i. Accidental cuts, burns and occupational dermatitis (contact dermatitis) are common disorders to collectors in the field.
- ii. High incidence of intestinal parasites among waste collectors. For example, the larva of hookworm (ankylostoma) enters the body through the skin of the feet resulting in the disease ankylostomiasis characterized by anaemia, fever, weakness and abdominal pain.
- iii. Cut and un-bandaged wounds get infected easily if exposed to the rubbish infested areas with spores of *Clostridium tetani* and this could cause tetanus infection.

In Nigeria, the solid waste problem started with urban growth, resulting from the national increase in population and more importantly from immigration. As such, waste management becomes as important as water and electricity or the provision of other infrastructural facilities within the society (Ogadimma, 2012).

Katsina State is the third-largest state in Nigeria with a population of over 7 million people. Out of this number, the majority of the populace resides within the three senatorial zones namely Katsina north, Katsina south and Katsina central senatorial zones (Katsina State Ministry of Health, 2014). With the increase in satellite towns and the influx of people into the state on daily basis, one major problem

confronting the metropolis is the issue of poor waste management. The fast-tracking development of Katsina state is beginning to show evidence especially in the area of quantity and quality of different types of wastes. In 2016, about 377,126 tons of solid wastes were generated in Katsina state. Most of these wastes go to roadsides, ditches, water bodies, empty plots of land, farms and uncompleted buildings. This public waste and indiscriminate indulgence of the public has been attributed to the ineffectiveness of waste management by the Government (Adamu, 2016). The Katsina State Ministry of Environment has mapped out over 111 designated dumpsites for refuse disposal (Katsina State Environmental Protection Agency, 2015).

The main purpose of the study is to assess the attitude of safety measures among waste collectors in Katsina State, Nigeria with a research question that says do waste collectors have the attitude of safety measures in Katsina State, Nigeria? While the hypothesis of the research is the attitude of safety measures among waste collectors in Katsina State is not significantly adequate.

Material and Methods

For this research, an ex –post facto research design was used. The population of the study consisted of waste collectors in Katsina State. The total number of waste collectors in the State when data for this study was collected (2020) was one thousand and fifty-nine (1,059) distributed across the three senatorial zones namely Katsina North, Katsina Central and Katsina South senatorial zones, (Katsina State Environmental Protection Agency, 2018).

The sample size for this study was 400 in line with Research Advisor (2016) that for a population of 1059, a sample size of 400 suffices at a 5% margin of error and 95% confidence interval. A Multi-stage Sampling Technique that involves Stratified Sampling, Simple Random Sampling, Proportionate Sampling and Systemic Sampling Technique was used for this study. The first stage involved the use of a stratified random sampling technique to divide the State into three (3), already existing senatorial zones, as strata namely Katsina North, Katsina Central and Katsina South. In the second stage, a simple random sampling technique was used to select five (5) local government areas each from the senatorial zone by writing all the names of the local government areas in each senatorial district on the pieces of paper, folded and dropped them inside a container and shuffled, one research assistant was asked to pick one folded piece of paper containing the name of a particular local government area (LGA). The name of the LGA on the piece of paper was written down. This process was used until the required number of local governments was recorded. The third stage involved the use of a proportionate sampling technique to obtain the number of respondents in each of the local government areas. In the fourth stage, a systematic sampling technique was used to select the respondents per local government by writing “Yes” or “No” on pieces of paper, folded and put them inside a container. A Waste Collector that picked “Yes” was used as a respondent for the study while any Waste Collector that picked “No” was not used for the study.

A close-ended questionnaire was used to collect data for this study. The instrument was based on a modified 4-point Likert Scale for the respondents to tick on every statement that suits them. To ensure the face and contents validity of the research instrument, the copies of the researcher-structured questionnaire were submitted to four (4) professional experts in the field of Health Education for vetting to ascertain its appropriateness, relevance and clarity. Their suggestions and corrections were incorporated and the final copy of the questionnaire was used for data collection. A letter of introduction was collected from the Department of Human Kinetics and Health Education, Faculty of Education, Ahmadu Bello University, Zaria by the researcher. The researcher instructed three (3) research assistants on how to distribute and retrieve the questionnaires. The researcher and the assistants visited the respective local government areas to meet the respondents and administer the questionnaires to

them. The respondents were met at their various places of work and explained the purpose of the study and the nature of the questionnaire. Upon completion, the researcher and his three (3) research assistants retrieved the copies of the questionnaires on the spot. Descriptive statistics of mean and standard deviation (SD) was used to answer the stated research question. One sample t-test was used for testing the hypothesis at a 0.05 alpha level of significance.

Results and Discussion

Research Question: Do waste collectors have an attitude toward safety measures in Katsina State of Nigeria?

Table 1: Mean score of responses on the attitude towards safety measures among waste collectors in Katsina State of Nigeria?

S/N	Statement	Mean	Std. Dev.
1	I prefer wearing safety hand gloves when working than using my bare hands	3.82	.835
2	I prefer to wear safety boots when working	2.91	.880
3	I prefer washing my hands with soap and water after work	3.30	.765
4	I like to remove all jewellery (watches, bracelets, rings and earrings) before putting on safety equipment	3.05	.942
5	I like to use a face shield whenever am at work	2.97	.850
6	I like to use examination gloves when working	2.42	.657
7	I like to use a safety plastic apron whenever am at work	2.49	.974
8	I prefer to read labels on containers of a chemical than listening to suggestions from a co-worker	3.33	.744
9	I like to use a face mask to cover my nose whenever am at work	3.17	.834
10	I prefer wearing waste safety long-sleeved shirt than using my house wears	2.28	.675
		2.974	0.815

(Decision mean =2.50)

Table 1 above showed the mean score of responses on the attitude towards safety measures among waste collectors in the Katsina State of Nigeria. The aggregate mean score for the table indicated the respondents have a positive attitude towards safety measures. The benchmark mean set to determine the level of such attitude is 2.50 as indicated at the bottom of the table. The aggregate mean score of the attitude towards the safety measures was 2.974 which is higher than the midpoint on the four-point scale. This observation implies that waste collectors in Katsina State prefer wearing Personal Protective Equipment when working than using bare hands. Also, they like to remove all jewellery (watches, bracelets, rings and earrings) before putting on safety equipment. However, their attitude is bad towards the use of examination gloves, the use of safety plastic aprons and the use of safety long sleeve shirts.

Hypothesis: Attitude towards safety measures among waste collectors in Katsina State is not significantly positive

Table 2: One-Sample t-test on Attitude towards safety measures among waste collectors

	Mean	Std. Deviation	t-value	Df	P-value
Aggregate mean	2.97	0.815	2.013	416	0.001
Constant mean	2.50				

$t = 1.972, P < 0.05$

Table 2 revealed that the Attitude towards safety measures among waste collectors is significant. This is because the one-sample t-test calculated value is 2.013 is greater than the t-critical of 1.972 at the degree of freedom 416 with a probability value of 0.001 which is less than 0.05 level of significance. Thus, this result shows that the sub-hypothesis (null) which states that “Attitude towards safety measures among waste collectors in Katsina State is not significantly positive” is therefore rejected.

Discussion

The attitude towards safety measures among waste collectors in Katsina State of Nigeria is that the respondents have a positive attitude towards safety measures. This is because the one-sample t-test calculated value is 2.013 is greater than the t-critical of 1.972 at the degree of freedom 416 with a probability value of 0.001 which is less than 0.05 level of significance. This result showed that the waste collectors like to use face shields whenever they are at work, prefer to wear safety boots when working and prefer to read labels on containers of the chemicals than listening to suggestions from co-workers. These findings agree with the result of a study by Fikrom et al., (2016) titled Assessment of knowledge, attitude and practices among solid waste collectors in Lideta Sub-city on prevention of occupational health hazards, Addis Ababa, Ethiopia in which most respondents showed favourable attitude towards safety. The finding also corroborates the findings of Adogu, Uwakwe, Egenti, Okwuoha, and Nkwocha (2015), whose result of their study on public waste management practices among residents of Owerri Municipal, Imo State Nigeria showed that 97.5% had a positive attitude towards waste management. However, the waste collectors do not like using examination gloves while working as well as wearing long sleeve shirts as against house wears.

Conclusion

Based on the findings of this study, it can be concluded that waste collectors in Katsina State have a positive attitude towards safety measures.

Recommendations

Findings of the study were used to make the following recommendations:

1. Waste collectors in Katsina State should be encouraged by government and health agencies on how to maintain a positive attitude towards the practice of safety measures of waste collection through mass media, training, seminars/ workshop and community health-related programs.
2. There is a need for prompt payment and attractive remunerations to waste collectors. This will encourage them to practice safety measures of waste collection. Also, well-packaged safety measures of waste collection education intervention by the state government through training and workshops for workers.
3. There is a need for recruitment of more young age waste collectors bearing in mind gender sensitivity for effective waste collection, easy to train and maintain better work experience

which will ultimately improve service delivery and ensure a positive attitude of safety measures.

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PERCEIVED CAUSES AND HEALTH IMPLICATIONS OF UNINTENDED PREGNANCY AMONG SECONDARY SCHOOL STUDENTS IN ILORIN SOUTH LOCAL GOVERNMENT AREA, KWARA STATE

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Abstract

Unintended pregnancy is associated with increased risk for the mother and child, especially when the mother is under-aged. This study examined the perceived causes and health implications of unintended pregnancy among secondary school students in Ilorin South Local Government Area, Kwara State. The study investigated mass media and the influence of peer groups as perceived causes of unintended pregnancy as well depression and reproductive health problems as perceived health implications of unintended pregnancy among secondary school students. A descriptive research design of survey type was employed for the study. Population for the study comprised all-female secondary school students in Ilorin south local government area put at 7,378 students. A multistage sampling technique of purposive, simple random and proportionate sampling techniques was used to select 150 female respondents across selected secondary schools. A researcher structured questionnaire validated by three experts in the Department of Health Promotion and Environmental Health Education and tested for reliability was used for data collection. Frequency count and percentages were used to analyze demographic information while Chi-square was used to analyze hypotheses set at 0.05 alpha level. The findings from the study revealed that: mass media and influence of peers were perceived as causes of unintended pregnancy among secondary school students of Ilorin South Local Government, Kwara State with calc. χ^2 value of 128.40 > table value of 16.92 and calc. χ^2 value of 43.07 > table value of 16.92 respectively at the df 9 and 0.05 alpha level; depression and reproductive health problems were perceived as health implications of unintended pregnancy among secondary school students in Ilorin South Local Government Area, Kwara State with calc. χ^2 value of 121.412 > table value of 16.92 and calc. χ^2 value of 100.95 > table value of 16.92 respectively at df 9 and at 0.05 alpha level. Based on the findings of the study, it was concluded that mass media and the influence of peer groups were perceived as causes of unintended pregnancy while depression and reproductive health problems were perceived as health implications of unintended pregnancy among secondary school students. It was thus recommended among others that appropriate subjects about sexuality should be aired on the broadcast systems as well as enlightenment programs be organized to educate adolescents on health risks associated with unintended pregnancy among secondary school students.

Keywords: unintended pregnancy, health implications, depression, mass media

Introduction

Unintended pregnancy is associated with increased risk for the mother and child, especially when the mother is under-aged. Unintended pregnancy occurs when a child is not desired that is, unwanted or when the pregnancy is mistimed. When this happens to a girl within the ages 13-19years, it is termed teenage pregnancy. Teenage pregnancy usually refers to women who have not reached legal adulthood

to become pregnant. Alabi and Oni (2017) posited that teenage pregnancy is a serious cankerworm that has eaten deep into the fabric of our societies in this contemporary period.

Pregnancy at whatever stage in life can be a life-changing experience that cuts across boundaries, race, educational attainment and socioeconomic status (Krost, Henshaw & Carlin, 2010). It is expected to occur by default after marriage. According to Alabi and Oni (2017), the act of pregnancy in the African context is the responsibility of grown-up young adults, who are prepared physically, emotionally, economically as well as physiologically. However, pregnancies now occur in children especially those in their teens. Nyakubega (2009) explained that this is a result of a lack of knowledge or ignorance about sexual behaviour. When a girl that should be in school becomes pregnant, her entire life could be completely altered as her life dreams and aspirations could be shattered. Teenage pregnancy is a social as well as an economic issue as it portends low education and employment, a high rate of poverty and the psycho-social stigma it carries more so when it is out of wedlock. The correlation between earlier childbearing and failure to complete high elementary school reduces career opportunities for many young mothers (Adeyanju & Afolayan, 2012).

According to the World Health Organization (WHO) (2017), approximately 12 million girls aged 15-19 years and 770,000 girls under 15 years give birth each year in developing regions. At least 10 million pregnancies out of these reported births among adolescents are unintended. Several factors contribute to unintended pregnancies among teenagers. Count (2010) opined that adolescence marks the onset of sexual maturity, hence it is a period for adolescents to show interest in the opposite sex and curiosity about topics of sex. This brings to light that pregnancy that happens at this stage is due to lack of sex education, increased sexuality and careless approach of mass media among others. Carrera (2012) also posited that unrestricted interaction with the opposite sex ignites sparks of lust in teenagers especially when alcohol and drugs are involved, not excluding this age of unrestricted access to social media.

Mohasse (2012) opined that teenage pregnancy could lead to incomplete education, unemployment and other numerous emotional traumas. Early motherhood has been found to affect the psychological development of the child adversely. Aside from psychological risks and effects of teenage pregnancy, physiological and physical risks are also present. A teenage girl's body is not as developed as that of an adult woman, thus certain complications are faced by pregnant teenagers. The WHO (2017) reported that complications during pregnancy and childbirth are the leading causes of death among 15-19 years olds globally. These deaths result from complications such as unsafe abortions, eclampsia, systemic infections, preterm delivery and severe neonatal conditions among others (WHO, 2020). The worldwide incidence of premature birth and low birth weight is higher among adolescent mothers.

Unintended pregnancies among teenagers also impact the rural economy due to the loss of productive man-hours especially when teenage mothers are having complications attributed to the immature nature of reproductive organs. As opined by Adeyanju and Afolayan (2012), teenage pregnancy is a single factor adversely affecting female education in Nigeria. The reason for this is that most teenage mothers often drop out of school thereby limiting their access to post-secondary education consequently limiting their chances of getting better-paid jobs. Teenage pregnancy has therefore become a social menace that prevents many Nigerian youths from reaching their goals in life (Alabi & Oni, 2017).

Unintended pregnancy matters among secondary school girls are arguably still very sensitive in Africa, particularly Nigeria, the most populous black nation in the world. It is a major medical and socio-economic burden and is becoming prevalent in recent times (Briggs, 2001). The increasing trend of unintended pregnancy among secondary school students is attributed to social permissiveness favouring early exposure to casual sexual activity, unmet needs for contraceptives, maternal depression and pre-existing psychological problems in the family. Teenage pregnancy is a social as well as an economic

issue as it portends low education and employment, a high rate of poverty and the psycho-social stigma it carries more so when it is out of wedlock. The correlation between earlier childbearing and failure to complete high elementary school reduces career opportunities for many young mothers.

Since unintended pregnancies among teenage girls are becoming alarming and found to have a negative and social long-lasting effect, it thus becomes imperative to examine the perceived causes and health implications of unintended pregnancies among secondary school students in Ilorin South Local Government Area in Kwara State.

Research Hypotheses

1. Mass media will not significantly be perceived as a cause of unintended pregnancy among secondary school students in Ilorin South L.G.A, Kwara State.
2. The influence of peer groups will not significantly be perceived as a cause of unintended pregnancy among secondary school students in Ilorin South L.G.A, Kwara State.
3. Depression will not significantly be perceived as a health implication of unintended pregnancy among secondary school students in Ilorin South L.G.A, Kwara State.
4. Increased risk of maternal death will not significantly be perceived as a health implication of unintended pregnancy among secondary school students in Ilorin South L.G.A, Kwara State.

Material and Methods

The research design used was the descriptive research of survey type. The population comprised all secondary school students in Ilorin South Local Government Area of Kwara State totalling fourteen thousand and ninety-eight students (14,098). The total number of female students at the time of the study was seven thousand, three hundred and seventy-eight (7,378).

A multistage sampling procedure consisting of purposive, simple random and proportionate sampling techniques was employed to select 150 female students. The purposive sampling technique was used in selecting all-female secondary school students for this study. A simple random sampling of balloting with replacement was adopted in selecting nine (9) secondary schools in Ilorin South Local Government. The proportionate sampling technique was used to select respondents from each of the selected secondary schools to give every sample equal opportunity of being selected for the study. The instrument used for data collection was a researcher designed questionnaire which was validated by three experts and subjected to a reliability test of the split-half method which yielded a co-efficient of 0.76r. Data collected were analyzed using frequency count and percentages for the demographic information while Chi-square was used to analyze the hypotheses set at 0.05 alpha level.

Results and Discussion

Hypothesis 1: Mass media will not significantly be perceived as a cause of unintended pregnancy among secondary school students in Ilorin South Local Government Area, Kwara State

Table 1: Chi-square analysis on mass media as a perceived cause of unintended pregnancy

S/N	ITEMS	SA (%)	A (%)	D (%)	SD (%)	df	Cal. χ^2 Val.	Tab. χ^2 Val.	Decision
1.	Internet access exposes teenagers to pornographic contents	78 (52.0%)	58 (37.7%)	12 (8.0%)	2 (1.3%)	9	128.04	16.92	H ₀ rejected
2.	Newspapers and magazines contain illicit sexual content	66 (44.0%)	70 (46.7%)	12 (8.0%)	2 (1.3%)				
3.	Home Videos and television programmes can portray negative sexual content	33 (22.0%)	60 (40.0%)	51 (34.0%)	6 (4.0%)				
4.	Misuse of mass media and internet by teenagers can develop into sexual urge	26 (17.3%)	57 (38.0%)	48 (32.0%)	19 (12.7%)				
TOTAL		203 (33.8%)	245 (40.8%)	123 (20.5%)	29 (4.8%)				

As revealed by Table 1, the calculated chi-square (χ^2) value (128.04) is greater than the critical value (16.92) thus the null hypothesis was therefore rejected. This means that mass media will be a perceived cause of unintended pregnancy among secondary school students in Ilorin South Local Government, Kwara State.

Hypothesis 2: Influence of peer groups will not significantly be perceived as a cause of unintended pregnancy among secondary schools in Ilorin South Local Government Area, Kwara State

Table 2: Chi-square analysis on Influence of Peer group as a Perceived Cause of Unintended Pregnancy.

S/N	ITEMS	SA (%)	A (%)	D (%)	SD (%)	df	Cal. χ^2 Val.	Tab. χ^2 Val.	Decision
5.	Having friends with poor parenting can influence one to engage in acts which can lead to unintended pregnancy	25 (16.7%)	42 (28.0%)	58 (38.7%)	25 (16.7%)				
6.	Friends who regularly talk about sex and sexuality issues encourage one to engage in the act	23 (15.3%)	75 (50.0%)	37 (24.7%)	15 (10.0%)	9	43.07	16.92	H ₀ rejected
7.	Friends who watch pornographic contents encourage one to do so which can lead to premarital sex	43 (28.7%)	51 (34.0%)	41 (27.3%)	15 (10.0%)				
8.	Friends who engage freely in unsafe sex encourage one to do same which leads to unintended pregnancy	39 (26.0%)	63 (42.0%)	27 (18.0%)	21 (14.0%)				
	TOTAL	130 (22.7%)	231 (38.5%)	163 (27.2%)	76 (12.7%)				

Table 2 shows a calculated chi-square (χ^2) value of 43.07 and a critical value of 16.92 with the degree of freedom of 9 at a 0.05 level of significance. Since the chi-square (χ^2) value (43.07) is greater than the critical value (16.92), the null hypothesis was rejected. Therefore, the influence of peer groups will be perceived as a cause of unintended pregnancy among secondary school students in Ilorin South Local Government, Kwara state.

Hypothesis 3: Depression will not be perceived as a health implication of unintended pregnancy among secondary school students in Ilorin South Local Government Area, Kwara State

Table 3: Chi-square Analysis on depression as a Perceived Health Implication of Unintended Pregnancy.

S/N	ITEMS	SA (%)	A (%)	D (%)	SD (%)	df	Cal. χ^2 Val.	Tab. χ^2 Val.	Decision
9.	A teenager with an unintended pregnancy can become depressed	47 (31.3%)	70 (46.7%)	19 (12.7%)	14 (9.3%)				
10.	Teenage pregnancy predisposes the victim to prolonged delivery which can lead to psychological trauma	21 (14.0%)	54 (36.0%)	51 (34.0%)	24 (16.0%)	9	90.24	16.92	H ₀ rejected
11.	Unintended teenage pregnancy can result in the inability to concentrate on daily activities which can affect meeting up with daily life demands	37 (24.7%)	54 (36.0%)	39 (26.0%)	20 (13.3%)				
12.	Unintended teenage pregnancy can result in rejection by family and friends which can lead to loneliness and insecurity	38 (25.3%)	47 (31.3%)	47 (31.3%)	18 (12.0%)				
	TOTAL	143 (23.8%)	225 (37.5%)	156 (26.0%)	76 (12.7%)				

Table 3 shows the Chi-square Analysis on Depression as a Health Implication of Unintended Pregnancy and it shows that the calculated chi-square (χ^2) is 90.24 and the critical value is 16.92 with the degree of freedom of 9 at a 0.05 level of significance. Since the chi-square (χ^2) value (90.24) is greater than the critical value (16.92), the null hypothesis was rejected. This implies that depression will significantly be perceived as a health implication of unintended pregnancy among secondary school students in Ilorin South Local Government, Kwara State.

Hypothesis 4: Reproductive Health Problems will not significantly be perceived as a health implication of unintended pregnancy among secondary school students in Ilorin South Local Government Area, Kwara State

Table 4: Chi-square analysis on Reproductive Health Problem as a Perceived Health Implication of unintended pregnancy among secondary school students in Ilorin South Local Government Area, Kwara State.

S/N	ITEMS	SA (%)	A (%)	D (%)	SD (%)	df	Cal. χ^2 Val.	Tab. χ^2 Val.	Decision
13.	Teenage Pregnancy exposes the victim to premature delivery as a result of under-developed body system	75 (50.0%)	58 (38.7%)	13 (8.7%)	4 (2.7%)				
14.	Teenage pregnancy can lead to prolonged labour due to underdeveloped pelvis	74 (49.3%)	65 (43.3%)	4 (2.7%)	7 (4.7%)	9	100.95	16.92	H ₀ rejected
15.	Teenage pregnancy can result in Vesico-Vagina Fistula (VVF)	61 (40.7%)	58 (38.7%)	21 (14.0%)	10 (6.7%)				
16.	Teenage pregnancy can result in severe neonatal conditions such as low birth weight babies	92 (61.3%)	47 (31.3%)	4 (2.7%)	7 (4.7%)				
	TOTAL	302 (50.3%)	228 (38.0%)	42 (7.0%)	38 (6.3%)				

Table 4 shows that the calculated chi-square (χ^2) value is 100.95 and the critical value is 16.92 with the degree of freedom of 9 at a 0.05 level of significance. Since the chi-square (χ^2) value (100.95) is greater than the critical value (16.92), the null hypothesis was rejected. Therefore, reproductive health problems will significantly be perceived as a health implication of unintended pregnancy among secondary school students of Ilorin South Local Government Area, Ilorin, Kwara State.

Discussion of findings

Hypothesis 1 stated that mass media will not significantly be perceived as a cause of unintended pregnancy among secondary school students in Ilorin South Local Government Area, Kwara State. The calculated (χ^2) value is 128.04 and the critical value is 16.92 with a degree of freedom of 9. This shows that the calculated (χ^2) value is greater than the critical value thereby rejecting the null hypothesis. Therefore, mass media will be a perceived cause of unintended pregnancy among secondary school students in Ilorin South Local Government

Area, Kwara State. The finding of this study agrees with Hust, Brown & L'Engle (2008), who stated that popular media glorifies teen sex and makes it seem like the norm, and it lacks any information about safe sex practice. Television shows also featuring pregnant teenagers are also becoming popular, and seem to promote this. The media is portraying sex in a degrading manner and the media makes it appear as if this is something that everyone does.

Hypothesis 2 stated that the influence of peer groups will not significantly be perceived as a cause of unintended pregnancy among secondary school students in Ilorin South Local Government, Kwara state. Chi-square was used to test the hypothesis at a 0.05 level of significance. From table 8, it is indicated that the calculated X^2 value is 43.07 and the critical value is 16.92 with a degree of freedom of 9. This shows that the calculated X^2 value is greater than the critical value thereby rejecting the null hypothesis. Therefore, the influence of peer groups will be a perceived cause of unintended pregnancy among secondary school students in Ilorin South Local Government, Kwara State. The finding of this study is in agreement with Bragg (2006), young adolescents are curious, wants to experience things, and will also engage in sexual activity if they hear that their peers are as well. According to L'Engle & Jackson (2008), peers may play an especially important role in sexual socialization- the process through which adolescents adopt attitudes and norms regarding sexual behaviours and relationships. The importance of peer influence for adolescents' sexual behaviours is not surprising, given the key characteristics of this developmental period. Although peers (and perhaps especially popular peers) have been shown generally to exert strong influences on adolescents' behaviours, individual adolescents vary in the degree to which they acquiesce to conformity pressures.

Hypothesis 3 stated that depression will not significantly be perceived as a health implication of unintended pregnancy among secondary school students in Ilorin South Local Government Area, Kwara State. Chi-square was used to test the hypothesis at a 0.05 level of significance. From table 9, it is indicated that the calculated X^2 value is 90.24 and the critical value is 16.92 with a degree of freedom of 9. This shows that the calculated X^2 value is greater than the critical value thereby rejecting the null hypothesis. Therefore, mental health problems will be a perceived health implication of unintended pregnancy among secondary school students in Ilorin South Local Government, Kwara State. The finding of this study agrees with the study of Hodgkinson (2010) which noted that few studies examine depression among pregnant teenagers, even though reports are suggesting that pregnant teenagers are at a higher risk of depression than pregnant adults. Hodgkinson (2010) agrees with the risk factors for depression such as family history, childhood adversity, social isolation, and exposure to stressful life experiences. One of the main concerns associated with pregnant teenagers having depression is that this mental illness may go untreated. If depression remains untreated it may lead to suicidal ideation and attempts. The relationship between maternal depression and birth outcomes remains poorly understood, especially among pregnant teenagers.

Hypothesis 4 stated that reproductive health problems will not significantly be perceived as a health implication of unintended pregnancy among secondary school students of Ilorin South Local Government, Kwara state. Chi-square was used to test the hypothesis at a 0.05 level of significance. From table 4, the calculated X^2 value is 100.95 and the critical value is 16.92 with a degree of freedom of 9. This shows that the calculated X^2 value is greater than the critical

value thereby rejecting the null hypothesis. Therefore, physical health problems will be a perceived health implication of unintended pregnancy among secondary school students of Ilorin South Local Government, Kwara State. The finding of this study agrees with World Health Organization/Guttmacher Institute report (2007), which shows that nearly half (48%) of all unintended pregnancy results in complications which increase maternal morbidity and maternal death, nearly all of which occur in low-income countries and mostly among teenagers. Also, WHO (2005) reported that an average of 529, 000 women die due to pregnancy and child birth-related complications yearly. Nowadays, teenage pregnancy has become a growing concern and therefore various causes of teenage pregnancy have become crucial.

Conclusion

Based on the research conducted, the following conclusions were deduced:

1. Mass media use significantly leads to unintended pregnancy among secondary school students in Ilorin South Local Government, Kwara state.
2. The influence of peer groups significantly leads to unintended pregnancy among secondary school students in Ilorin South Local Government, Kwara state.
3. Unintended pregnancy significantly leads to depression among secondary school students in Ilorin South Local Government, Kwara State.
4. Unintended pregnancy significantly leads to reproductive health problems among secondary school students of Ilorin South Local Government, Kwara State.

Recommendations

The following are the recommendations for this research;

1. Since the usage of mass media cannot be overemphasized as a result of its utmost importance, it is recommended that the appropriate subjects about sexuality should be aired on the broadcast systems or published in articles.
2. As a way to curb bad peer influence, it is recommended that enlightenment programs should be organized to educate adolescents on having high self-esteem. Also, organization of comprehensive education programs such as Teen outreach to help adolescents' self-esteem and to develop a sense of awareness of issues occurring in the world. There should also be an increment in parental guidance to checkmate adolescents' activities.
3. The researcher strongly recommends that enlightenment programs should be organized to educate students on the mental health risk of having an unintended pregnancy. This will go a long way in educating not only students but the larger populace. Mental health specialists and other related professionals should also develop an action plans that can limit the mental health effects of unintended pregnancy through behavioural modifications strategies and others.
4. The need to use protection before sex should be stressed as this is the ultimate form of preventing unintended pregnancy, however, adolescents can also be encouraged to use and access services at Adolescent and Youth Friendly Health Centres (AYFHS) that have recently been incorporated into Primary Health care Centres (PHCs) in Nigeria

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WOMEN SATISFACTION WITH AFFORDABLE NEONATAL HEALTHCARE SERVICES IN NORTHERN NIGERIA

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Abstract

This study examined women satisfaction with affordable neonatal healthcare services in northern Nigeria. For the study, one research objective and its corresponding research question were raised. It is hypothesized that women satisfaction would not be significantly influenced by the provision of affordable neonatal health care services in Northern Nigeria. The study used cross-sectional survey research design. The population of the study was 25,539,366 women of child-bearing age and sample size of 672 was utilized for the study. Multi-stage and simple random sampling techniques were adopted for the selection of 672 child-bearing age women in the area of study. A self-developed eight-item questionnaire was used in data collection and was validated by public health experts. Descriptive statistics of frequency counts and percentages were used for organizing the demographic characteristics of the subjects. The postulated hypothesis was tested using the Chi-square approach at a 0.05 level of significance. The result reveals that women satisfaction was influenced by the provision of affordable neonatal health care services in Northern Nigeria. It is recommended among others that government should reduce the cost of maternal and child healthcare services in Northern Nigeria and also ensure that all women of childbearing age have access to affordable neonatal healthcare services to improve their maternal health.

Keywords: Women, Satisfaction, Affordability, Neonatal Healthcare Services.

Introduction

The number of maternal deaths in developing countries is associated with childbirth. Infant and neonatal mortality and morbidity could as well be linked with poor health care services, lack of health knowledge and bad health practices in our communities. The cost of maternal and healthcare services becomes a barrier in the patronage of health care services. To this end, affordability and women satisfaction need to be assessed with the view to enable the government to come up with policies to improving maternal and neonatal health for both mothers and neonates.

Healthcare is viewed by the World Health Organisation (WHO) as a programme that should make available to the individual and thereby to the community, all facilities and allied sciences necessary to promote and maintain the health of mind and body (Campbell, 2007). WHO study reveals that a significant proportion (40%) of U-5 deaths occurs in the neonatal period (Lawn, et. al., 2005; Rahel, et. al., 2014). African Leadership for Child survival, (2012) study further shows that there were over nine million newborn deaths worldwide every year during perinatal and neonatal period altogether and

nearly all (98%) of these deaths occur in developing countries, Nigeria inclusive. Furthermore, it was categorically estimated that more than 3.3 million babies are stillborn every year; one in three of these deaths occurs during delivery and could largely be prevented (Charlotte, 2014). Another WHO study also reported that every year over four (4) million newborn babies die in the first four weeks of life; three (3) million of these deaths occur in the early neonatal period (WHO, 2015).

The major causes of these deaths identified were birth asphyxia and preterm birth while the contributory causes include pneumonia, septicaemia, diarrhoea and acute gastroenteritis (Bang, et al, 2005). For Nigeria to address the issue of high tolls of newborn deaths, the provision of qualitative newborn healthcare services to the satisfaction of clients is very imperative. Despite that many studies showed that neonatal healthcare service is mostly integrated in maternal and child health care (Auta, 2006; Adamu, et. al., 2009) but the integration of the services in all levels of health care delivery systems would be useful right from the period of labour and delivery, through the first 24 hours to the end of the first week of life, covering the neonatal period (Ahmed & Verber, 2011).

Individual economic status has consistently shown to have a positive association with the satisfaction of health care service and neonatal care is no exception (Jill & Quentin, 2012). Household surveys analysis suggests that for most countries, the cost of health care service is perceived as the main reason for lack of satisfaction with such services. Gagallah, et al., (2013) reported that cost has frequently been shown to be a barrier to utilisation and satisfaction with the provision of healthcare services. Accordingly, Fanan and Felix (2014) emphasize the high cost of getting healthcare as another factor in sub-Saharan Africa. Bazant and Koenig, (2009) studies revealed that affordable care was a significant determinant of satisfaction with newborn care services in both facility and home deliveries in Kenya. Neonatal care refers to care given to newborn infants from the time of delivery through about the first month of life. The term neonate is used for newborn infants during the 28-30 day period. In Nigeria, the study of Daily Trust report of Tuesday, 11 April 2017 pg 26equally stressed that the 2016 recession that worsened the access to healthcare services was due to poverty which indicated that over sixty million of the population was living below the poverty line. It is worrisome to compare the coverage of the Health Insurance Scheme (HIS) of some African countries. Reports revealed that in Rwanda 96% of its citizens were covered in Health Insurance Scheme (HIS), Ghana 46%, Kenya 20% while only 5% of Nigerians have health insurance as of 2016. It is therefore probable that the cost of Medicare of health care services and transportations to healthcare facilities make such services unaffordable. And, the unaffordability of health care services aggravates women dissatisfaction with Nigeria health care system.

Research Question

What is the satisfaction level of women with the provision of affordable neonatal health care services in Northern Nigeria?

Research Hypothesis

HO 1: Women satisfaction would not be significantly influenced by the provision of affordable neonatal health care services in Northern Nigeria.

Material and Methods

A cross-sectional survey research design was used for the study. It is one of the descriptive survey research designs that are observational in nature that involves looking at data from a population at a specific point in time and allows the researcher to look at numerous characteristics at once (Emaiku, 2008). The study was conducted in 2017 to determine women satisfaction with the provision of affordable neonatal health care services in Northern Nigeria.

The population of the study comprised the entire women of child-bearing-age in Northern Nigeria which was projected to 2020 using an annual population growth rate to 117,572,820 as indicated in the 2006 Census.

The sample of the study was as determined by Krejcie and Morgan (1970). They stated that a sample of 384 is sufficient enough to represent 100, 000 and above at the alpha level of 0.05. However, the sample size for the study was increased to 672 women of child-bearing age.

The multistage sampling technique was the adopted procedure used for the study as recommended by Burmgartner and Strong (1994).

Phase I- stratified random sampling was employed to select the six states, two from each of the three geo-political zones in Northern Nigeria.

Phase II- Purposive sampling technique was used to select the tertiary health facilities in the selected states regardless of their location in the state.

Phase III- Simple random sampling was adopted in the selection of two Local Government Areas from each of the six stratified states in northern Nigeria.

Phase IV- Also, simple random sampling was used to select urban and rural Women of Child-Bearing-age respondents from health care facilities during Routine Immunisation (RI) services in Northern Nigeria. Twelve (12) Local Government Areas (LGAs) that were randomly selected included: Katagum and Bauchi, Bauchi state; Dukku and Gombe; Gombe state; Tarauni and Gaya, Kano State; Lere and Ikara Kaduna State; Jos North and Mangu, Plateau State and Kwande, Katsina-ala from Benue State. In each of these selected LGAs 28 rural and 28 urban 28 totalling 672 respondents were used for the study.

A researcher-developed questionnaire based on four optioned Modified Likert-scale of seven (7) items on women satisfaction with affordable neonatal healthcare services in Northern Nigeria was employed for data collection. The instrument was validated by experts in the field of the study. Corrections, suggestions and comments were incorporated to validate the instrument.

Demographic data collected for the study was organised using frequency counts and percentages while the postulated hypothesis was analysed using Chi-square at 0.05 level significance.

Results and Discussion

Table 2 Frequency and Percentage of Demographic Information of the Research Participants

	Frequency	Percentage (%)
Residential Location		
Urban	326	49.9
Rural	327	50.1
Total	653	100.0
Educational Status		
Had no formal Education	189	28.9
Had Formal Education	464	71.1
Total	653	100.0
Occupational Status		
Working Class	328	50.2
Non Working Class	325	49.8
Total	653	100.0
Birth Order		
1 Only	225	34.5
2 – 4	218	33.4
5 and above	210	32.2
Total	653	100.0
Geo-political Zone		
North East	217	33.2
North West	221	33.8
North Central	215	32.9
Total	653	100.0
Sources of Newborn Care		
Maternity	109	16.7
PHC	142	21.7
CHC	126	19.3
GH	113	17.3
FMC	84	12.9
UTH	47	7.2
Others	32	4.9
Total	653	100.0

Table 2 shows the frequency and percentage of demographic characteristics of women of child-bearing age in northern Nigeria. With regards to the residential location of the research participants, 326 (49.9%) were from urban areas while 327 (50.1%) were from rural areas. Similarly, with regards to their educational status 189 (28.9%) had no formal education while 464 (71.1%) had formal education. Moreover, 328 (50.2%) are working-class mothers while the nonworking class were 325 which accounts for (49.8%). With regards to their parity, 225 (34.5%) had an only child; 218 (33.4%) had only 2 – 4 children and 210 (32.2%) had five children and above. Two hundred and seventeen (33.2%) were from the northeastern region; 221 (33.8%) were from the north-western geopolitical zone and the north-central region has 215 which accounts for (32.9%). Most of the research participants relied on primary and secondary health care facilities: Maternity 109 (16.7%); PHC 142 (21.7%); CHC 126 (19.3%); GH 113 (17.3%); as their source of newborn care while very few seek neonatal care from FMC 84 (12.9%); UTH 47 (7.2%) and Others 32 (4.9%).

Table 2: Chi-Square Contingency Table on Women Satisfaction with Affordable Neonatal Healthcare Services in Northern Nigeria

Affordable Neonatal Healthcare Services	Very Satisfied	Satisfied	Dissatisfied	Very Dissatisfied	Total	X ² Cal (O-E) ² /E
Transportation cost to the health facility	0 E 174 (163.25) 0.71	0 E 386(163.25) 303.93	0 E 60(163.25) 65.30	0 E 33(163.25) 108.76	653 478.70	
Labour and delivery care services cost	100(163.25) 24.50	419(163.25) 400.66	63(163.25) 61.56	71(163.25) 52.12	653 538.84	
Immunisation fee: (BCG& OPV)	139(163.25) 3.60	395(163.25) 328.99	83(163.25) 39.44	36 (163.25) 99.188	653 471.188	
Diagnostic services fee for new-born illnesses	146(163.25) 1.82	199(163.25) 7.82	163(163.25) 0.00	145(163.25) 2.04	653 11.68	2,317.99*
Drugs and supplies prices	171(163.25) 0.37	223(163.25) 21.86	137(163.25) 4.22	122(163.25) 10.42	653 36.87	
Medication cost for new-born illnesses	12(163.25) 140.13	64(163.25) 60.34	241(163.25) 37.03	336(163.25) 182.82	653 420.32	
Intensive care services cost for preterm newborn	21(163.25) 123.95	65(163.25) 59.13	287(163.25) 93.80	280(163.25) 83.49	653 360.37	

***Significant X² cal value = 2,317.99, df, 18 > X² tab 88.87 at .05 Significant level**

Table 2 shows the Chi-square contingency analysis on Women Satisfaction with Affordable Neonatal Healthcare Services in Northern Nigeria. The calculated X² value of 2,317.99, df, 18 is larger than the tabulated value of 88.87 at a 0.05 level of significance. The results indicated that women satisfaction was influenced by the provision of affordable neonatal health care services in Northern Nigeria. Therefore, the hypothesis is rejected. The research question is answered and the hypothesis is testified.

Discussion

This study reveals that women satisfaction was influenced by the provision of affordable neonatal health care services in Northern Nigeria. The finding is in line with Srivastava, et al., (2015) who revealed that determinants of maternal satisfaction covered all dimensions of care across the structure, process and outcomes. Structural elements included good physical environments, cleanliness, and availability of adequate human resources, medicine and supplies. Accordingly, access, cost socioeconomic status and reproductive history also influenced perceived maternal satisfaction. Similarly, the outcome of this study lends support to the work of Bang, et al., (2005); Bazant and Koenig, (2009) studies which

revealed affordable newborn care services as the determinant of women satisfaction in both facility and home deliveries in India, Kenya and Pakistan.

In another development, studies conducted by Bazant and Koenig in Kenya (2009); George 2002 in India and Kazim 1995 in Pakistan revealed that affordable care was a significant determinant of women satisfaction as regards newborn care services in health facilities and home deliveries. Also, the outcome of this study is in agreement with the work MacKeith, Chinganya, Ahmed and Murray (2003) Cham, et al., (2009) in Zambia and Gambia respectively found significant associations between cost and maternal satisfaction and utilization of care in both home and institutional births. Studies of Al-Hamdan (2009); Al-Mandhari, et al., (2014); Aradhana, Bilal, et al., (2015) reported significant associations between cost and healthcare satisfaction. It lends supports to Duong (2004) findings which reported that besides the overall cost of care, affordable drugs also influenced care in Vietnam. The availability of free medicine in health facilities also enhanced maternal satisfaction with care in Gambia (Nafisa, et al., 2012). On the cost of transportations to the healthcare facilities, the finding corroborates with Babalola and Okapor (2016) work which revealed satisfaction levels of the health care are higher for women who visited hospital facilities at no cost of transportation.

Conclusion

Based on the finding, it is concluded that women satisfaction was influenced by the provision of affordable neonatal health care services in northern Nigeria.

Recommendations

Based on the conclusions the following recommendations were proffered:

1. Government should reduce the cost of maternal and child healthcare services in Northern Nigeria and ensure that women of childbearing age have access to affordable neonatal healthcare services to improve their neonatal health.
2. Non-governmental organizations should design and come up with some maternal and newborn health care programmes that would strengthen the affordability of neonatal healthcare services in Northern Nigeria.

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MANAGEMENT OF PRIMARY HEALTHCARE SIMILARITIES BETWEEN NIGERIA AND GHANA: A SYSTEMATIC REVIEW

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Abstract

Primary healthcare management was a baby of the Alma Ata declaration which was signed by more than one hundred countries around the world. Although the goal of primary healthcare management of ensuring better and accessible primary healthcare services at the doorsteps of every person may be the same, the strategies and capacities to achieve these valuable objectives may be different, this is depending on individual countries strength and capacity. There is therefore the need to identify the similarities in the implementation of primary healthcare among the two countries, with the view to serve as lessons for others to emulate.

It is a qualitative study, in which a semi-structured interview was conducted using the adapted African regional tools for assessing primary healthcare management. In each of the two countries studied, ten experts were interviewed in accordance with the themes as provided, in addition, a desktop review of primary healthcare management was conducted using the Pub med and Google machine to arrive at the conclusion.

The study found similarities in the management of primary healthcare among the two countries. Most significantly were the disease trends, primary healthcare policies and implementation strategies including categories of staff that provides the basics healthcare services at the primary healthcare levels and the level of corruption that has continued to weaken the provision of primary healthcare services in the two countries.

The study revealed that Policies and Implementation strategies in Nigeria and Ghana were encouraging. However, the incidence of corruption has been the key impediment to the better implementation of primary healthcare services in the two countries. Therefore a holistic approach to ending the menace of corruption is necessary if only primary healthcare is to be accessible to the people, particularly at the grassroots.

Keywords: Health trend, policy implementation, rural health, referrals system, monitoring and evaluation

Introduction

The Alma Ata declaration and subsequent conferences that were held on primary healthcare management were meant to develop actions that will enhance accessibility and quality healthcare services and proffer solutions to other emerging challenges.

The concept of primary healthcare as enshrined in the Alma Ata declaration was more comprehensive and different from all other efforts of the past in trying to ensure better health and adequate coverage of primary healthcare services for the people at the grassroots. The Alma Ata Ten points' resolutions have pointed out areas of concern as far as primary healthcare services are concerned. These were indicated in the primary healthcare framework for the implementation of the Ouagadougou Declaration on primary healthcare and health system in Africa. Regional Committee for Africa;(2011)

Nigeria and Ghana have adopted the declaration framework with the view to ensuring better healthcare services in their various countries. However, each country based on its strength and political will may have adopted a similar or variance approach towards achieving its primary healthcare goal with the view to ensuring adequate coverage and accessibility to basic healthcare services, through effective policy formulation and implementation, provision of adequate human resources for primary healthcare and ensuring a better and well-informed monitoring and evaluation mechanism to enhance quality services delivery, build managerial capacities at the local level and increase community participation in planning and implementation of primary healthcare services to achieve sustainable healthcare services in the communities (WHO, 2007)

Many Countries have declared to use their full potentials in the improvement of their healthcare system through the adoption of a primary healthcare system as enshrined in the Alma Atta conference. Therefore the need for peer-reviewing among Nigeria and Ghana in the implementation of primary healthcare concepts as being implemented in the various countries is critical. Relevant health policies and its implementation, provision of adequate manpower based on their needs, logistic management, resources, leadership problems and development of health policies and its implementation, that will make basic primary healthcare accessible and affordable to most families living in the country and thereby reducing the threat of increased maternal and child mortality in such country in addition to structural and institutional weakness including accountability issues and lack of effective Primary healthcare management practices. PHC as a basic healthcare service was designed at the Alma Atta conference to focus more on the people at the grassroots to ensure accessibility, availability, affordability and acceptability of healthcare services among various communities. However, since the declaration at the Alma Atta, many people living in the rural areas have to travel a long distance to access basic healthcare services, which sometimes lead to people forgoing their treatment because they cannot afford to pay such high amount of money. (WHO, 2008)

Therefore, this study intends to look at similarities in management of primary healthcare between Nigeria and Ghana using the WHO tools for assessing primary healthcare management in Africa as provided in the report on the review of primary healthcare in Africa (2018)

Material and Methods

This is a qualitative study in which a semi-structure interview was conducted using the adopted African regional report review tools for primary healthcare management (2018). The interview guideline contained elaborated questions which were designed to reflect the need for this study and to also guide the conduct of the semi-structured interviews that were framed under themes. Five experienced high-level primary healthcare managers working in the primary healthcare establishments and five experts teaching and researching in the field of primary healthcare in various Universities in Nigeria and Niger were interviewed making a total number of twenty participants. In addition, a desk top review of primary healthcare management for Nigeria and Niger using Pub med and Google machine were made and the data were analyzed.

Results

Health trends in Nigeria:

The findings revealed that Nigeria was faced with healthcare challenges that include the seasonal outbreaks of infectious diseases such as cholera, Lassa fever, gastroenteritis and endemic diseases such as malaria, diarrhoea, HIV/AIDS, yellow fever and other maternal and infant mortality, Poor sanitation, road traffic accidents due to bad road and reckless driving and non Communicable diseases such as protein-energy malnutrition (PEM) lower respiratory tract diseases, cancer, tuberculosis, stroke and hypertension and also a wide spread of inequality of healthcare services between Northern and southern states and among the urban and rural communities.

Health policy

The result found that the Federal ministry of health has the responsibility and powers to make a proposal for healthcare policy formation at the same time vested with responsibilities to set standards, develop strategies for the implementation of primary healthcare activities in the country in consultation with other likeminded Agencies and stakeholders such as states ministry of health, Local Governments health departments and other sister agencies after which such proposal will be forwarded to the council of ministers for adoption and approval.

Several policies and strategies were made to better the implementation of primary healthcare services in the country such as the basic primary healthcare scheme, the primary healthcare policy and strategy, the national healthcare policy and the national health act. Other policies were the primary health under one roof, the national health insurance scheme, the national Midwifery scheme and the community initiative programme and others. The study revealed these policies were not necessarily effectively implemented as Sometimes they were only made for the purpose of funding raising among international donor organizations

Health policies review in Nigeria

The study revealed that the policies could be reviewed based on monitoring and evaluation reports from the federal ministry of health or as a result of the international conventions such as the Alma Atta convention and Abuja declaration. Other reviews were made based on the outcomes of academic conferences and research-based issues and also the activities of pressure groups and International organizations through engagement, advocacy and issuing of threats for sanctions for non-compliance to the policy change usually result in policy review of policies in Nigeria.

Levels of Health care system

The study revealed that Alma Atta declaration of primary healthcare and its subsequent adoption in the country has made Nigeria streamline its healthcare provision into three levels of healthcare services that comprised of tertiary healthcare services, secondary healthcare services and primary healthcare services.

Primary Health Care Management in Nigeria

The study discovered that primary healthcare services were been managed by local government authorities under the leadership of the Chairman, supervisory counsellors for health, primary healthcare coordinators and their assistance. While the implementation is been carried out by Community health extension workers, Environmental health officers, Public health nurses, Midwives and has been supported by religious and traditional leaders as volunteers who provide sensitization and community mobilization which has significantly assisted in reducing some of the barriers that were restraining and resisting the utilization of primary healthcare services in communities in Nigeria.

Urban and Rural Primary Healthcare services

The study also revealed that there were several training health institutions across the country that produces primary healthcare workers in thousands annually. However, the bulk of these healthcare workers were not employed by Government, while those employed by the Government preferred to work in the urban cities instead of rural communities and settlements. There were also no available documents to ascertain the actual available primary healthcare workers in Nigeria due to inadequate records and comprehensive data of primary healthcare workers and their distribution. However, most of the Primary healthcare workers preferred to work in the urban cities neglecting the rural communities and settlements for lack of adequate staff wages and social welfare package, timely promotion and lack of adequate allowances and other incentives. In addition to inadequate working materials and obsolete facilities and structures that were said to have characterized the Nigerian primary healthcare facilities.

Funding of PHC in Nigeria

The study also revealed that Nigeria has never met the 15% benchmark required for the health budget as demanded by the Abuja declaration but even the little available resources were accused of been corruptly diverted for personal use. The complaint of Corruption was said to have blocked the supply of available healthcare services particularly in the hard to reach areas, creating manpower deficits, inadequate facilities and the complete absence of adequate healthcare workers with the basic qualifications to work in the rural communities. The presence of inadequate drugs and hospital facilities could be openly observed. This was because the fund

were been diverted to individual pockets, leaving the patient to purchase drugs in the hands of quacks or unqualified and unregistered pharmacy vendors who may provide them with fake drugs to consume. The study revealed that most primary healthcare facilities were understaffed in some cases with only one or two persons manning facilities with a larger number of patients seeking medical support.

Referral system

Although referral services were usually discussed as the core components for primary healthcare services in Nigeria, in reality, the study revealed that it was not effectively put into practice. Most patients preferred to visit secondary health facilities or tertiary health institutions with health issues that can be handled at the primary healthcare centres. Even when patients were referred from primary healthcare centres, Feedback from the secondary health facilities has always proved difficult because primary healthcare centres are incapacitated to make a meaningful follow-up.

Monitoring and evaluation

There were different mechanisms put in place for monitoring and evaluation of primary healthcare activities at different levels by primary healthcare managers and other primary healthcare workers to support the implementation of primary healthcare activities.

However, the study revealed that Nigeria lacks a centralized data collection system that is been used for the country and data collection were not adequately made and properly managed to guides the policy-making decision.

Ghana

Health Trend

The data reviewed indicated that Ghana has been confronted with various avoidable infectious disease conditions that have to do with a lack of access to essential healthcare services particularly in the hard to reach areas which have been bewildered with infectious diseases such as Malaria, Measles, cholera, HIV/ AIDS, Tuberculosis diarrhoea, hepatitis Schistosomiasis and other non communicable diseases such as diabetes mellitus, Hypertension Lower Respiratory diseases meningitis and Protein-energy malnutrition deficiencies.

The Country Health Policy on Primary Healthcare

The right to health has been enshrined in the Ghana constitution which has created an enabling environment for the development of several primary healthcare policies in the country. The federal ministry of health and its sister agencies were responsible for development policies proposals and strategies for the implementation of primary healthcare services in Ghana.

There were other several primary healthcare policies initiated towards supporting the implementation of primary healthcare as provided in the data such as Ghana shared growth and development II and private health sector development policy. Several policies were made, the participants acknowledged, that there were many Primary healthcare-related policies which were difficult and too numerous to be memorized off the head, they also have the belief that such policies were not adequately disseminated to enable primary healthcare workers themselves to know much about it and that was a problem as the participant believed that many primary healthcare workers themselves do not know most of the policies less to talk about implementing the ideas and strategies embedded in those policies. The participants interviewed were still in doubt whether such numerous healthcare policies previously mentioned such as Ghana Growth and Development Agenda, the strategic framework for health sectors, National health

insurance scheme and private health sector policy has achieved the targeted objective of ensuring accessibility of healthcare services and also closed the healthcare disparity among Ghanaians.

Ghana PHC Policies Formulation

The data gathered through the participants revealed that Ghana usually reviews its policies based on the foreseeing need and circumstances. It was revealed that most policies in Ghana are usually influenced by the International community who usually fund part of the Ghana health programmes including capacity building, immunization programmes and reproductive health programmes, therefore through such funding policy issues were been influenced. Sometimes these policies were made mandatory before funding and support would be made to Ghana. International organisations such as WHO, UNICEF UNDP etc will always insist on their strategy and planning and the country has to queue in to gain the support.

Monitoring and Evaluation report from various primary healthcare centres, districts and regions usually played a greater role in policymaking decisions for Government. The academic and professional conferences have effectively contributed to stimulating discussions on primary healthcare and subsequently lead to policy issues

Primary Healthcare Implementation

Ghana Ministry of Health and Ghana health services were responsible for the provision of strategic and policy guidelines for the implementation of healthcare services in Ghana including Primary healthcare services. The data revealed that the Ministry of Health provides the overall policy guidelines for the implementation of all healthcare services in Ghana including primary healthcare services. Aside from primary healthcare services, Ghana health services were directly in control of Community-based health planning and services. There are multiple stakeholders in the implementation of primary healthcare services in Ghana comprising national and international partners such as UNICEF, WHO, UNDP, Alliance for Reproductive Health etc, that either directly or indirectly supports the implementation of major primary healthcare policies and services in Ghana such as immunization programmes, Breastfeeding programmes, free Maternal and Child Healthcare programme. The data revealed that there are three levels of primary healthcare services implementation in the entire districts in Ghana. These include the district level centres, the sub-district levels and community levels.

The major implementers of primary healthcare services in Ghana were the various healthcare professionals employed by Government, religious organizations, private organizations and international non-governmental organizations. Such as the Community Health Nurses, Community Health Workers, Environmental Health officers, Medical laboratory scientists, Medical officers and Community Health volunteers to provide basic healthcare services across Ghana.

Primary Healthcare Resources.

Available data pointed out that Ghana has several institutions owned by Government, private and religious organizations training and producing various categories of health workers. But most of these health workers do not want to work in the rural communities in Ghana. This is as a result of several negative consequences, such as lack of timely promotion, denial of in-services training and lack of career progression, lack of adequate accommodation to leave with their families, while their female counterparts was also suspicious of their husbands cheating them in the event they relocate to the rural community, leaving their husband and children alone. They also complained of a lack of motivation of any kind for those working in the rural communities particularly hard to reach areas. The implication of such unavailability of qualified health workers was that primary healthcare centres and services were left in the hands of quacks and half bake trained health workers who lack adequate and appropriate required skills to handle primary healthcare services in such centres since the qualified ones have dissented them for better jobs that will provide them with better remunerations.

Monitoring and Evaluation

The data explained that there was no single method for monitoring and evaluation of primary healthcare services in Ghana, this is because some of these programmes were been planned founded and carried out by different organizations other than the government institutions. International and national organizations, donor and development partners from various countries and organizations, religious and private organizations have their various goal and objectives and as such every of this organization tends to developed it monitoring and evaluation system differently from the others since there was no any standardized and compulsory monitoring and evaluation tools for Ghana. However, Ghana's health services as an agency were directly in charge of community-based health planning and services and all the primary healthcare services including community health-based planning services activities in Ghana and has developed standardized monitoring and evaluation mechanisms to serves as the national monitoring and evaluation tools. The Ghana data collection system has been improved in recent times in some of the health facilities at the district levels. Data are collected every day at the facilities, analyzed and directly transmitted to district levels through web-based system that was designed for that purpose. The participants observed a peer review system of monitoring and evaluation in most of the primary healthcare centres where issues were critically discussed and suggestions were offered or are referred to the ministry of health for further action and noting.

Discussion

Demography

Nigeria and Ghana were all described as developing economies and also aid dependent countries with inequality in economic status between the north and the south of their countries. Southern Ghana is more promising compare to the North. So also in Nigeria, the South of Nigeria has more economic advantage compare to the North of Nigeria which also translated to human capital development. The two countries were predominantly farmers and oil-producing countries. The Central Intelligence Agency (CIA) word factbook (2020) explain that Ghana was blessed with cocoa for exportation and nascent oil industry and also was included among the oil-producing countries and viable country for farming activities. Nigeria also relied heavily on Oil as its main source for foreign exchange and farming that has potentials for exportation.

Health Trends:

The finding revealed similarities between Nigeria and Ghana on the part of their health trends. The two countries were bewildered with the prevalence of infectious diseases such as Malaria, typhoid fever, Measles, diarrhoea and vomiting, cholera, Lassa fever, kwashiorkor, poor sanitation, Maternal Mortality and other non communicable diseases, such as hypertension, diabetes mellitus and others.

The findings collaborated with the study conducted by Faisal et, al (2017) and the Ghana Association of chartered certified accountants (2013) which asserted that communicable diseases such as malaria and Cholera. Tuberculosis meningitis and measles and worm infestation were among some of the burden of the diseases in Nigeria while Ghana also has a high prevalence of communicable diseases such as Malaria, HIV/AIDs, tuberculosis, diarrhoea and other non-communicable diseases such as diabetes, hypertension, cardiovascular disease and other chronic respiratory diseases.

Primary Health Care Policies:

In the formulation of the primary healthcare policies in both countries, the findings revealed that the federal government through the federal ministry of health were responsible for the vested power to set standards, formulate policies for the primary healthcare management, develop strategies and guidelines for the implementation of primary healthcare services in their countries, in consultation with other relevant stakeholders. These findings were in agreement with the provisions in the Nigeria health policy (2016) and Ghana health policy (2007).

Implementation of primary health policies:

The findings showed that Nigeria and Ghana Primary healthcare workers were not adequately made to familiarize themselves with most of the contents of the new-made health policies as it affects their services as the documents were not made available to aid understanding of its contents, concepts and guidelines of its operation and strategic implementation, therefore making it difficult for result-oriented programmes. This finding corresponded to Nwafor-orizu, et, al (2018) which indicated that policies implementation were hindered by inadequate information to the public and other relevant stakeholders, therefore making primary healthcare implementation difficult. In addition, Adetukumbo (2015) also pointed out that leadership problem with lack of prerequisite capacity, political will among the primary healthcare managers has continued to hinder effective policy implementation in their countries.

The study shows similarities among professionals that implement primary healthcare services in the two countries which include the Community healthcare extension workers, Environmental health officers, Midwives, Pharmacy, Technicians, Medical lab assistance and others. This corresponded to the finding made by Uzochuku (2017) who explained that in Nigeria, the community health extension workers, nurses, midwives, and other categories of healthcare workers were the major healthcare workers that handles primary healthcare services. Similarly, Emarus et, al (2017) also submitted that Nurses, Midwives, Community Health Extension Workers, Community Health Volunteers and Medical officers were the major primary healthcare workers in Ghana.

Corruption tendencies:

The findings in both Nigeria and Ghana have shown similar trends in corruption tendencies, where corruption has become the biggest monster and tragedy that has destroyed not only the primary healthcare sector but all other sectors in the two countries. These findings were in agreement with the study conducted by Uzochuku (2017) describing Nigeria as a highly corrupt nation to an extent that donations made for immunization programmes to safeguard the lives of young children in Nigeria by the global Alliance for vaccines and immunizations (GAVI) was conspicuously and corruptly diverted into individuals' pocket. Similarly, the Ghana annual report of the African Development Bank indicator of the world bank (2010) ranked Ghana health sector as the 2nd most corrupt country among nations where 95% of the resources allocated to Ghana health sector were diverted to individuals pockets. In addition, the ACC (2010) report also indicated that the Ghana National health insurance scheme as an agency was bewildered with corrupt practices and fraud in relation to financing unnecessary services and the dubious acts of inflating payments.

Funding of Primary Health Care services

Finding reveals that Nigeria and Ghana have similar problems as regards funding of primary healthcare services. The two countries had never made adequate budgetary provision for healthcare as required by the Abuja declaration or elsewhere. The report of pilot corruption risk assessment in selected Ministries, Departments and Agencies MDAs in Nigeria in (2015) indicated that lack of appropriate budgetary provision for the primary healthcare services has increased the number of abandoned projects with the varying outcomes. Similarly in Ghana, the Alliance for reproductive health rights (2019) pointed out that Ghana health sector was facing budget decline since 2016.

Levels of Health Service delivery

The two countries have three levels of healthcare services comprising primary level, secondary facilities and tertiary health institutions. However, the study revealed people both Countries preferred to visit secondary or tertiary healthcare services instead of primary healthcare centres on the assumption that primary health centres were not effective and lack adequate manpower and material resources to handle patients. The findings were in agreement with Francis et, al (2019) which indicated that about 60 – 90 % of the patient usually bye-pass primary healthcare facilities to other levels of healthcare services to obtained healthcare services with the assumption that primary healthcare services lack adequate

qualified manpower and facilities and were constructed by Government only to services the poor people. This finding was in agreement with the statement made by Bill Gates who described Nigeria primary healthcare centres and facilities as one of the most dangerous places in the world someone could give birth (online Guardian newspaper online, 2018).

Urban and Rural dichotomy

Nigeria and Ghana primary healthcare workers preferred to work in urban cities instead of the rural communities. They believed that working in the cities provide more opportunities for quick promotion, educational advancement and other fringe benefits in addition to leaving with their families. This finding collaborated with Nkomazana et al (2015) which indicated that unclear policies, poor infrastructures such as schools for staff children, inadequate incentives and low salaries wages, limited opportunities for career and continue staff development were categorized as factors encouraging migration to both urban cities and abroad in most of the African countries including Nigeria and Ghana.

Referral System

The referral system has not been effectively implemented in the two countries, as findings revealed that it lacks an adequate follow-up mechanism. Many primary healthcare centres do not care to make follow-ups to know what happen to their referred clients and at the same time, the secondary facilities may not care to report back their findings to the referred centre. The system is therefore characterized by a lack of feedback and follow-ups. These findings were similar to the study conducted by Asuke et, al (2016) which revealed that series of factors were connected with the failure of effective implementation of referral system in Nigeria such as shortage of human and material resources, training and retraining to aid effective use of referral system in collaboration with weakening healthcare facilities. In the same vain Padmore and David (2017) also stated that the Ghanaian healthcare system has been weak as regards to referral system and has been bewildered with many challenges such as the ignorance of the patient to distinguish between health problems that can be treated or handle at the primary healthcare Centres and those that required secondary or tertiary healthcare intervention.

Primary healthcare services

The study has revealed similarities in the major services been rendered in primary healthcare centres in the two countries. These services include routine immunizations, treatment of common ailments, maternal and child healthcare services, control of communicable diseases nutritional services, healthcare counselling and health education programmes. These findings corresponded with the study conducted by Maxwell et al, (2017) which explained that primary healthcare centres conduct mainly curative services for the treatment of minor ailment, disease prevention, maternal and child healthcare and referral services.

International donations

The study reveals similarities as regards foreign donors to Nigeria and Ghana. Both Countries have been benefiting from international organizations through the provision of human and material resources supports, capacity training and provision of drugs and other supplies. In addition, many of the primary healthcare policies in Nigeria and Ghana were been influenced by foreign donor organizations. The finding corresponded with Alenoghena et al (2017) who listed some international organizations such as UNICEF, USAID, UNDP, GAVI and others as organizations known to be supporting both Nigeria and Ghana in the implementation of primary healthcare services delivery.

Conclusion

In each of the countries studied, primary healthcare activities were identified and compared. It has shown strategic methodology towards the advancement of primary healthcare management in the two countries. However, the sustainability of primary healthcare Services may depend on the role of strategic implementation not only the planning. However, the incidence of corruption in Nigeria and Ghana has been the key impediments to effective implementation of primary healthcare services

delivery, which, therefore, requires a quick and holistic approach to ensuring effective services delivery and accessibility to primary healthcare services.

Recommendations

Based on the above findings, the researchers wish to make the following recommendations;

- Primary healthcare workers should be made to familiarize themselves with any new developments and policies that are made for primary healthcare services
- Primary healthcare workers should be encouraged to work in rural communities through the provision of adequate incentives, promotion and continuous staff development and in-service training
- A mechanism should be put in place to control the incidence of corruption among management and primary healthcare workers
- Funding should be made available for better productivity and affordable healthcare services at the grassroots
- Nigeria and Ghana should diversify additional means of funding their primary healthcare services to reduce dependence on foreign and international donor organizations

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INFLUENCE OF FAMILY SOCIOECONOMIC STATUS ON THE ACADEMIC PERFORMANCE OF STUDENTS IN SOBA LOCAL GOVERNMENT AREA OF KADUNA STATE

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Abstract

The paper examined the influence of family socioeconomic status on the academic performance of students in Soba Local Government Area. The study adopted a descriptive survey design. The population for this study comprised all public and private school students in Soba Local Government Area. A simple random sampling technique of method was used to select secondary schools in Soba Local Government Area. The researcher wrote the names of the schools in a different sheet of paper and folded it for someone to pick four (4) schools that were used for this study. The purposive sampling technique was used to select fifty (50) students from each school selected with the total of two hundred (200) secondary school students serving as the respondents for the study. A correlation coefficient of 0.61 was obtained and thus shows that the instrument is reliable for the study. Data collected were analysed using percentages and frequency count and the hypotheses were tested using the chi-square statistical method. The result of the findings revealed that the socioeconomic status of the family has a significant influence on the academic performance of students and single parent has a significant influence on the academic performance of students in Soba Local Government Area of Kaduna State. It was concluded that the socio-economic status of parents, as well as single parent's influence on academic performance of students in Soba local Government Area, cannot be over-emphasized. In light of the results of this study, the recommendation was made that parents should work harder to increase their income level. This will have a positive effect on the academic performance of students. It was also recommended that single parents that are promiscuous or humanizers should repent and create more time to look into the academic performance of the children in school.

Keywords: family, socio-economic Status, single parenting and academic performance

Introduction

All stakeholders in Nigeria education system (parents, guardians, teachers, counsellors) are so much concerned about students' achievements and academic standards. This is probably because success in education is highly prime to the development of a nation. This includes scientific and technological development, socio-economic and political advancement and life success. The current poor performance of secondary school students in the Senior School Certificate Examination (SSCE) conducted by the West African Examination Council (WAEC) and National Examination Council (NECO) in Nigeria is disturbing and embarrassing. For instance, the results released by WAEC in 2010 revealed that about 80% of the candidates that sat for the examination failed because they did not have credit passes in five subjects including English Language and Mathematics. Similarly, about 98% of candidates that sat for Nov/Dec 2009 failed the Senior Secondary School Certificate Examination (SSCE) of the National Examination Council as they did not have credits in five subjects including English and Mathematics (Falola, 2010).

Socio-economic status is an economic and sociological combined total measure of a person's work experience and an individual's or family's economic and social position relative to others, based on income and education, and occupation (Marnot, 2004) indicated. When analyzing a family's social-economic status, the household income, earners' education and occupation are examined, as well as combined income with an individual when their attributes are assessed. Lareau (2013) observed that Socioeconomic status is typically broken into three categories, high, middle, and low to describe the three areas a family or an individual may fall into when placing a family or individual into one of these categories any or all of the three variables income, education, and occupation can be assessed. Additionally, low income and little education have shown to be strong predictors of a range of physical and mental health problems due to environmental conditions may be the entire cause of that person's social predicament, to begin with.

According to Asikhia (2010), a single parent faces doubled responsibilities requiring time, attention and money of the parent- Hence, less attention is paid to the education of the child and thus, this goes a long way in affecting the concentration of the child to lessons in school and therefore the academic performance of such child will diminish gradually. Teachers commonly describe children from single parents as more hostile, aggressive, anxious, fearful, hyperactive and distractible than children from intact families (Asikhia, 2010). The same thing occurs when the mother is absent and the father is not privileged enough (Christensen, 2001).

Hill, Castelino, Lansford, Nowlin, Doage, Bates, Pettit (2004) opined that socio-economic status of parents has some influence on the academic performance of children. Children from families with low socio-economic status are at a greater risk of hunger, homelessness, sickness, physical and mental disabilities, violence, teen parenthood, family stress and educational failure. Student from low socio-economic background that encounters these environmental factors is four times more likely to have learning disabilities than students from the high socio-economic background while a combination of these environmental factors accelerates academic success. A student, who has not eaten for days and has clothes that do not fit, cannot maintain focus in a classroom. Anene (2005) argues that students from high social-economic status compared to students from low social economic status families that students coming from low socio-economic backgrounds are not provide the same tools as the students from wealthy families, they are entering schools already behind those not living in similar conditions. Similarly, it is believed that factors such as malnutrition lack of motivation in homes, spousal violence, and single parents as well as the impoverished home environment affect the development of intellectual ability negatively (Mario, 2006). This means that students from low socio-economic backgrounds tend to be below or just an average in their intellectual development particularly when this phenomenon is accessed in terms of scores or tests. American Psychological Association APA (2001), described the influence of family socioeconomic status on children readiness for school, across all socio-economic

groups; parents face major challenges when it comes to providing optimal care and education for their children. For families in poverty, these challenges can be formidable. Sometimes, when necessities are lacking, parents must place top priority on housing, food, clothing, and health care. Educational toys, games, and books may appear to be luxurious, and parents may not have the time, energy, or knowledge to find innovative and less expensive ways to foster young children's development.

The researchers observed that family issue is a general phenomenon which is tagged as one of the major causes of poor performance of students in their academic pursuit. It is not an understatement to say that virtually all homes irrespective of their race. Many naturally gifted students find it difficult to exhibit their potentials due to unpleasant issues in their homes. Some of the contending family issues affecting the academic of students this study will look into are socio-economic of the parents, environmental factor, family type and mothers' influence.

The family has been recognized as having a lot of influence on the academic performance of students (Nzewuwah, 2015; Ajila & Olutola, 2007). Other aspects of the parental environment such as the structure of the family have been grossly neglected. Yet, Ichado (2008) stated that parent's constant disagreement affects children emotionally and this could lead to poor academic performance in school. The family lays the psychosocial, moral and spiritual foundations in the overall development of the child. While the mother's significant role in this cannot be over-emphasized. Studies on father-child influence suggest that the presence of a father in the home influences significantly the development of a child (Agulanna, 2009), which means students from a broken or single homes may experience set back in their academics.

Structurally, a family is either broken or intact. A broken family in this context is not structurally intact for various reasons; death of a parent, divorce, separation, dissolution and illegitimacy in which case, the family was never completed (Chukwudi, 2013). This analysis becomes necessary because life in a single-parent family can be stressful for both the child and the parent. It is against this general background that this study was conceived to investigate the likely family issues that affect students' academic performance in Soba Local Government.

Purpose of the Study

1. To find out if the family socioeconomic status will influence the students' academic performance in Soba Local Government Area.
2. To investigate if single parents will influence the students' academic performance in Soba Local Government Area.

Hypotheses

H₀₁: There is no significant influence between the socio-economic status of the family on students' academic performance in Soba Local Government

H₀₂: There is no significant influence of single parents on academic performance in Soba Local Government.

Material and Methods

The research design used for collecting and gathering data for this research was descriptive research of survey type. This method was adopted to carry out the research study as it requires the researcher to use information collected from the sample respondents to generalize on the population. The population of the study comprised of all students in Soba Local Government Area and it was limited to the assessable population of public and private senior secondary schools in selected Local Governments in Soba Local Government Area.

The sample is a proportion of the population that shares all the general characteristics of the population (William, 2006). A simple random technique method was used to select four (4) public and private secondary schools in Soba Local Government Area which were. The purposive sampling

technique was used to select twenty-five (25) students from each school selected which total to two hundred (200) secondary school students serving as the respondents for the study.

A well-structured questionnaire prepared by the researchers was used in collecting data for this research, the questionnaire was a closed-ended type, it comprises sections A and B, section A comprises of demographic information of the respondents while section B contains the items that asked for the opinion of the respondents on the subject matter, this gives them a restricted response on a four Likert format scale type of (SA- strongly agree, A- agree, D- disagree, SD – strongly disagree).

The questionnaire was administered personally to respondents to minimize errors in the completion of the questionnaire difficult items was explained by the researcher to the respondents. Ethical consideration for the professional integrity of the researcher was carried out using an ethical consent form. The researcher was committed to the unbiased and objective pursuit of knowledge; the researcher considered careful observation of the respondents on the consequence of behaviour while carrying out the research. The right and dignity of participants and privacy were considered. The researcher sought for all the informed consent of all those who participated in the study. The researcher made it clear to respondents that, they are free to decide on whatever information they wish to share with the researcher and that they are under no pressure or obligation to discuss the matter that they do not wish to discuss. Then, with the help of three trained research assistants, the instrument was administered to the respondents and on the spot, collection was done where possible. Where on the spot collection is not possible, the research assistants made a follow-up of the collection to avoid loss and one hundred Percent return.

The data collected was analyzed with the use of descriptive statistics of frequency count and simple percentage for the demographic information of the respondents while the hypotheses formulated for the research was analyzed using inferential statistics of chi-square (χ^2) at 0.05 alpha level

Results and Discussion

Test of Hypotheses

Hypothesis One

H₀₁: There is no significant influence of socio-economic status of the family on students' academic performance in the Soba Local Government Area.

Table 1: Chi-square (χ^2) summary of showing the influence of socio-economic status of the family on students' academic performance in the Soba Local Government Area.

S/N	Items	SA	A	D	SD	Total	X ² cal	df	X ² tab	Decision
1	The income level of parents has a positive impact on students' academic performance.	100	88	8	4	200				
2	Level of parents' education affects	29	130	30	11	200	182.75	9	16.92	Ho: Rejected
3	Occupation of parents affects the academic performance of students.	150	33	1	16	200				
4	Students from low socio-economic backgrounds tend to be below or just an average in their intellectual development	101	80	16	3	200				
Total		380	331	55	34	800				

At 0.05 alpha level of significant

Table 1 showed Chi-square (χ^2) summary showing the socio-economic status of the family have an effect on students' academic performance in the Soba Local Government. The calculated value is 182.75 while the table value is 16.92, degree of freedom of 9 at a 0.05 alpha level of significance. The decision is to reject the null hypotheses if the calculated value is greater than the critical value. Therefore, will socio-economic status of the family have an effect on students' academic performance in the Soba Local Government.

Hypothesis Two

H₀₂: There is no significant influence of single parents on academic performance in the Soba Local Government.

Table 2: Chi-square (χ^2) summary showing the influence of single parents on students academic performance in the Soba Local Government.

S/N	Items	SA	A	D	SD	Total	χ^2 cal	df	χ^2 tab	Decision
1.	Child-rearing of single-parent is more challenging in terms of finance and impartation of knowledge and this may pose a negative influence on students' academic performance in school.	118	39	6	37	200	30.47	9	16.92	H ₀ : Rejected
2	The academic performance of students of single parents is relatively low compare to two parents	124	53	9	14	299				
3	Single parents families do not have time for the academic success of their children	133	48	5	14	200				
4	A promiscuous single mother may not be interested in her children's education and thus may pose treat on academic performance of her children	135	51	4	10	200				
	Total	510	191	24	75	800				

@ 0.05 alpha level of significance.

Table 2 showed a chi-square (χ^2) summary showing the influence between single parents and students academic performance in the Soba Local Government. The calculated value is 30.47 while the table value is 16.92, degree of freedom of 9 at a 0.05 alpha level of significance. The decision is to reject the null hypotheses if the calculated value is greater than the critical value. Therefore, the null hypothesis was rejected, which indicates that there is a significant influence between single parents and students' academic performance in the Soba Local Government Area.

Discussions

The study examined the influence of family socioeconomic status on the academic performance of students' in Soba Local Government Area. The result of research hypothesis one (1) revealed that there significant influence between the socio-economic status of the family and students' academic performance in the Soba Local Government. This result aligns with Hill, et al., (2004), Deslorges & Abouchar, (2013) assertion that the socio-economic status of parents has some influence on the

academic performance of children. Anene (2005), argues that students from high social economic status compared to students from low social economic status families that students coming from low socio-economic backgrounds are not provide the same tools as the students from wealthy families, they are entering schools already behind those not living in similar conditions. Research findings have also shown that a continued effort of parental involvement throughout the child's education can improve academic achievement (Driessen, Smit & Slegers, 2005; Fan, 2001; Hong & Ho, 2005). The result of research hypothesis two (2) revealed that there is a significant influence of single parents on students' academic performance in the Soba Local Government. This is in line with Asikhia (2010) that a single parent faces doubled responsibilities requiring time, attention and money of the parent- Hence, less attention is paid to the education of the child and thus, this goes a long way in affecting the concentration of the child to lessons in school and therefore the academic performance of such child will diminish gradually. Teachers commonly describe children from single parents as more hostile, aggressive, anxious, fearful, hyperactive and distractible than children from intact families (Asikhia, 2010). The same thing occurs when the mother is absent and the father is not privileged enough (Christensen, 2001).

Conclusions

Based on the finding made in this study, the following conclusions are therefore made that;

1. There is a significant influence of the social-economic status of the family on students' academic performance in the Soba Local Government.
2. There is a significant influence of single parents on students' academic performance in the Soba Local Government.

Recommendations

In the light of findings and conclusions made in this study, the following are recommended that:

1. Parents should work harder to increase their income levels. This will have a positive effect on the academic performance of students.
2. Single parents that are promiscuous or humanizers should repent and create more time to look into the academic performance of the children in school.

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THE CRITICAL ROLE OF PEDAGOGY IN THE FORMULATION OF THEORIES FOR THE TEACHING OF PHYSICAL EDUCATION AND SPORTS

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Abstract

A spectrum of teaching styles was developed in the mid-1960s to create some cohesiveness around teaching behaviour. The spectrum was designed not with the intent of prescribing specific teaching practices for the teachers, but as a prompt for teachers to reflect on their teaching activities. This study analyzed the critical role of pedagogy in the formulation of theories for the teaching of Physical Education and sports. How people think about pedagogy are underpinned or informed by particular knowledge paradigms and ways of perceiving the world. The review covered conceptual orientations on pedagogy from science and didactic perspectives including learning and behaviourism theories. Briggs (2003) 3p model was adapted; the model examined the interrelationships of presage, process and product variables in the teaching-learning process. The study concluded that personal development is a prerequisite for effective teaching because different orientations and approaches exist. Thus, it could be asserted that teaching theories in physical education and sports are founded on pedagogical knowledge of teachers, therefore, whatever theory the teacher adopts, the root is traceable to pedagogy.

Keywords: Pedagogy. Theories, Physical education, Sports.

Introduction

The word “Pedagogy” refers to a body of theories and rules aimed at guiding teachers and educators in their daily actions while teaching. It deals with aims and objectives, individuals, and groups with various means to teach the objective. Pedagogy takes a central concern at the issue of power in the teaching and learning context. It focuses on how and in whose interest knowledge is produced and “passed on” and views the ideal aims of education as emancipatory. Watkins and Mortimore (1999) defined pedagogy as ‘any conscious activity by one person designed to enhance learning in another. According to Bernstein (2000), pedagogy’ is a sustained process whereby somebody(s) acquires new forms or develops existing forms of conduct, knowledge, practice and criteria from somebody(s) or something deemed to be an appropriate provider and evaluator’.

Pedagogy signals how questions of audience, voice, power, and evaluation actively work to construct particular relations between teachers and students, institutions and society, and classrooms and communities. In the critical sense, pedagogy illuminates the relationship between knowledge, authority and power. Physical education and sport developed their body of knowledge from pedagogy. Physical education in a strict sense is not a discipline in itself but derives its objectives and scientific foundations from the disciplines of Philosophy, Biology, Psychology and Sociology. Therefore, physical education can be referred to as the process of education that concerns activities, which develop and maintain the human body.

Lusted (1989) claimed that “pedagogy is under-defined, often referring to no more than a teaching style, a matter of personality and temperament, the mechanics of securing classroom control to encourage learning, a cosmetic bandage on a hard body of classroom contact”. The author also considered pedagogy to be an ugly term and rarely used by teachers. Buckingham (1998) added that

pedagogy derives from an academic discourse about education that is largely sustained within the walls of the elite universities and in the pages of obscure academic journals. Stones (2000) further suggested that pedagogy is ubiquitous and resembles an amoeba (shapeless and perpetually changing). Grossberg (1997) posited that ‘‘the very concept of pedagogy has been exploded and multiplied’’ and we get some sense of this explosion when we see the range of references to pedagogy in the fields of education, cultural studies and feminist studies.

A spectrum of teaching styles was designed in the mid-1960s in an attempt to create some cohesiveness around teaching behaviour (Cassidy, Jones & Potrac, 2009). The spectrum was designed not to prescribe specific teaching practices for teachers, but as a prompt for teachers to reflect on their teaching. It was contended that the beauty of the spectrum lay in its ability to awaken teachers to their potential for reaching more students than is possible with a less comprehensive approach. Kirk, Nauhrigh, Hanrahan, Macdonald and Jobling (1996) later synthesized the spectrum in an attempt to make it more ‘user-friendly’. They did this by reducing the number on the continuum from 11 to five and changing the terminology from styles to methods. Kirk et al. (1996) posited that adopting the term ‘method’ meant that the continuum became a more rigorous analytical framework, especially when a method is defined as being ‘like a set of beliefs about the way certain types of learning can best be achieved’.

Further, Gilbert and Trudel’s (2001) model of reflective conversation was designed to induce teachers to think about their practice. The model is based on empirical data and premised on the notion that the reflective conversation begins with a coaching issue. Once the issue is set, the teacher proceeds to generate a strategy through one or more options. Strategy in this context is taken as a plan of action, while methods are the beliefs that inform the plan. This study aims to highlight and critically discuss the importance of pedagogy in the choice of methods of teaching physical education and sports. It shall also look at learning theories as the foundation of teachers’ knowledge of what to teach and then discuss the critical role of pedagogy in the formulation of theories for teaching physical education and sports.

Conceptual orientations on Pedagogy

Tinning (2010) affirmed that reading about pedagogy in both the fields of education and kinesiology one often sees pedagogy equated with teaching and instruction equated with didactics. According to the author, this lack of conceptual clarity is at times confusing and making definitive distinctions between these terms difficult. How people think about pedagogy are underpinned or informed by particular knowledge paradigms and ways of perceiving the world. While there are various ways to categorize these different paradigms, Tinning (2010) discussed three perspectives that influence different conceptions of pedagogy.

Material and Methods

The study adopted an empirical review design method, focusing on the significant roles of pedagogical theories in instructional practices in physical education and sports. The researcher reviewed theories of teaching as propounded by previous researchers and the influence teachers’ beliefs on instructional content delivery to conclude. The gap in the literature has revealed a lack of detailed understanding of how teachers’ knowledge affects student learning and how their teaching mediates the effects of teachers’ knowledge on student performance.

Some researchers attribute many characteristics of teachers’ instruction to teachers’ knowledge and beliefs, whereas the field needs more studies that focus on teachers who work in similar contexts but vary in their pedagogical content knowledge, to identify what and how theoretical knowledge for teaching is related to teachers’ practices and student learning. The primary intent was to generate a more elaborate and comprehensive understanding of the interplay between teachers’ beliefs, pedagogical knowledge based on existing theories and instructional practices.

Pedagogy as Science of teaching

One popular conception of pedagogy is as a science of teaching. As a science, teaching gives room for experimentation, it is the preparatory aspect in which the teacher consults literature, books, and conducts researches to be equipped for the task ahead. The teacher needs to ask the question: “what is the relevance of the topic or subject to the needs of the students and the society?” The teacher must have a proper understanding of what is to be taught. Although teachers might not think of their work as a science, educational researchers from the behavioural psychology tradition considered that pedagogical practice was underpinned by behavioural principles that were amenable to scientific study (Tinning, 2010). Mainstream educational research had, during the 1960s and 1970s, begun to establish a tradition of research that can be characterized as scientific in nature (for example Peterson & Wallberg, 1979) because it employed scientific methods, also because it sought to identify, analyze and understand what Gage (1977) called “the scientific basis of the art of teaching”

This research tradition was predicated on the perspective that teaching can be reduced to a set of variables that can be observed and measured (Dunkin & Biddle’s (1974) presage, process, product model). The art aspect of teaching is when the teacher goes into the presence of the students to teach, either in the classroom or on the field. He demonstrates and explains what he knows to the students. It is important to note here that there must be meaningful communication between the teacher and the students. This means that the language and gesticulations of the teacher must be understandable to the students for learning to take place.

Pedagogy and Didactics

According to Hamilton and McWilliam (2001), the term didactics was originally associated with the art of teaching and “embraced procedures for the efficient transmission or inculcation of received knowledge”. Later, with the rise of behavioural science, it became associated with the science of teaching. Research into physical education was still in its infancy in the 1970s and it focused initially, like in mainstream education, on didactics rather than pedagogy. Tinning (2008) explained the link between pedagogy as follows:

“Didactic is synonymous with instructional techniques or methods but is also used to refer to the teacher’s command of the subject matter knowledge, ability to interpret student responses, and other personal competencies. In complement, pedagogy is more a reference to the teacher’s interpersonal competencies and is thus used to refer to moral and ethical-as opposed to the technical aspects of the teacher’s work with the learners. It is this sense of responsibility to learners that prompted many critical education theorists to adopt the noun pedagogy.

Theories of Learning

The theoretical foundation of research on teachers’ professional knowledge was laid at the American Educational Research Association meeting in 1985 when Shulman proposed a model for conceptualizing knowledge for teaching. There the constructs of generic pedagogical knowledge, content knowledge and pedagogical content knowledge as the core components of the specialized knowledge that is required for teaching were introduced. Although researchers have added to or specified these domains of teacher knowledge over the years, these three components have consistently appeared in literature and thus seem to be internationally agreed upon as core components of teachers’ professional knowledge (Baumert & Kunter, 2006).

Knowledge of generic pedagogy (PK) is described as general, subject-independent knowledge about classroom organization and management, general knowledge of learning theory and general methods of teaching. Content knowledge (CK) includes the knowledge of a subject or discipline per se and is not unique to teaching. It goes beyond the knowledge of facts, concepts, principles and theories to also include an understanding of how concepts and principles of a subject are organized and the rules of evidence and proof that are used to justify claims in a certain subject

or discipline.

A search through literature confirmed that many of the terms and categories used to describe pedagogical theory and practice are contested and subject to multiple interpretations and uses. The question that may be asked is what theoretical perspectives underpin the meanings ascribed to pedagogy in the field of education?

Terms such as constructivism or student-centred when used across, and even within contexts can be obscure rather than clarify and conceptualize. Details of practices used are sometimes not given either, with assumptions that they are already known. Multiple meanings can be a problem when trying to work with the term. This study, therefore, sets out to critically analyze the theories of learning that underlie the pedagogical approaches to teaching and learning and to explain some of the assumptions implicit within them.

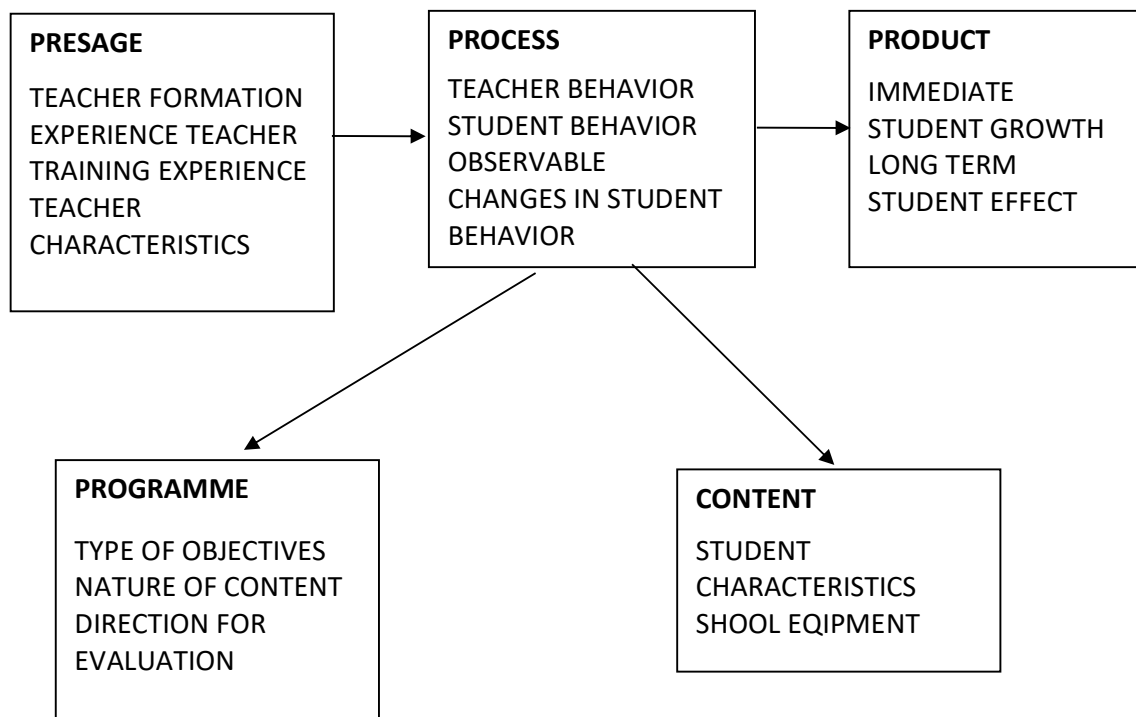
Behaviourism Theory

Behaviourism emerged as a theory of learning from the works of Thorndike, Pavlov and Skinner; this became dominant in the 1960s and 1970s. These scientifically proved laws of stimulus-response and classical and operant conditioning were used to explain the learning process through the use of rewards and sanctions—or trial and error. This was seen as biologically driven, a form of adaptation to the environment. It was propounded that learner is rewarded for small steps of learning and achievement with consistent positive reinforcement. The behaviourist model was later challenged by social learning theory, where children were seen to learn via observation (Bandura, 1977 in Shaffer, 2005) or imitation side by side with adults in an apprenticeship model.

Behaviourism supports teacher-controlled or centred approaches where the teacher is the sole authority figure. Knowledge is parcelled out from different parts of a separated curriculum that children experience as distinct subjects, and directed from the teacher to the students in set sequences, with little student choice or interaction. Assessment is often exam-oriented and high stake, without teachers' direct involvement. Bernstein (2000) noted that such performance pedagogies would be highly visible to the learner, strongly framed and paced by the teacher, with subjects strongly classified. Pedagogic approaches that can broadly be described as 'behaviouristic' in origin may result in practices such as lecturing, demonstration, memorization and imitation/copying (e.g. learning music or dance). (Barratt, Sajid et al., 2007).

Behaviourism could be held to be a universal theory, applicable within a variety of contexts, both cost- and time-efficient and require fewer resources, including demanding less-qualified and skilled teachers. Critiques of behaviourism lie in the surface-nature of the knowledge acquired and how the 'one-size-fits-all' approach excludes students with individual differences, or where the teacher remains unaware of students' current knowledge or misconceptions, or where the use of sanctions such as corporal punishment as a deterrent is acceptable.

Figure one: Framework on the critical role of Pedagogy in the formulation of theories for the teaching of Physical Education and Sports



The framework in Figure one was developed using the 3P model adapted from Briggs' (2003) presage-process-product (3p) model. The underlying assumptions of the 3P model are based on an understanding of teaching and learning as relational phenomena as advanced by Trigwell (2010), that concurrently interact with presage, process, and product factors in the learning environment as a closed system. The "Presage factors" are individual characteristics (of the student/instructor) that simultaneously affect and are affected by the process and product. Student presage factors include individual student's prior cognitive (knowledge) and non-cognitive (motivation) factors, which may or may not impact their learning processes and outcomes.

Instructor/learning environment presage factors simultaneously affect student presage factors, learning processes and outcomes. Among the themes identified as instructor presage factors are course level, instructor/institutional effects, and pedagogical training. "Process factors," for this study, include both teaching and learning processes and the interaction between student approaches to learning and instructor approaches to teaching. Student approaches to learning can be viewed on a continuum ranging from deep to surface approaches. Whether a student's approach to learning is deep or surface depends on the method of learning and the learning-focused activities that students adopt and practice.

In teacher-centred approaches, instructors transmit information in a didactic way, while using student-centred approaches, instructors adopt instructional strategies that achieve qualitative changes in student conceptions (i.e., active learning strategies). In this study, process factors are used to identify what instructional activities and strategies are adopted when delivering classroom

instruction.

In the current study, product factors are used to identify the measures (learning outcomes) that each instructor used to assess or evaluate student learning. Using the 3P model to assess instructional delivery strategies will help us focus on:

- (a) What aspects of instructor and student characteristics were considered while teaching?
- (b) How instructional strategies and activities were designed and implemented to achieve instructional goals? and;
- (c) what learning outcomes the authors of each study sought to assess or evaluate?

Based on the adopted model for this work, it could be adduced that pedagogy has contributed immensely in the preparation of teachers for the task of teaching. It is not enough to prepare theoretically ahead of the class, it is also essential for the teacher to be able to translate theory into practice, and this has been made possible through pedagogical knowledge. If teachers are not familiar with the scope and characteristics of the methods being used, it may be difficult for them to question current practice and make choices about their appropriateness of future action.

Another role of pedagogy is in the selection of teaching methods. Teaching being dynamic in nature gives the teacher a wide range of methods to pick from considering the level and ability of students. Pedagogical knowledge helps the teacher to be able to identify the interest of the students and this, in turn, enhances learning. Physical education should be able to identify the students' area of interest and build upon this teach the desired skills. To teach effectively, knowledge must be presented as problematic and must be linked to the histories and experiences of students. This has been made possible through the knowledge of pedagogy.

The physical education teacher also uses the pedagogical knowledge to choose the learning environment that is conducive to teaching and learning. Students need concentration; therefore, the learning environment must be healthy enough to make the teaching-learning process effective. The goal of physical education as in general education is to develop the "whole student", embedded in pedagogy is the scientific facts and theories employed in teaching physical education and sport. Students need a wide choice of activities that include individual and team sports; teachers have the responsibility to those students who are physically challenged. Pedagogical knowledge will help the teacher to be able to design the teaching programme that will accommodate the needs of the special students.

Pedagogical knowledge has helped in formulating a physical education curriculum design that helps in day-to-day programme implementation in schools. Through its content and process, learners are well equipped with useful goals of personal and social commitment in consonant with goals of education. Pedagogy has also helped teachers to properly articulate their thoughts and to better evaluate physical education programmes and practices. This has helped in educating many people about the scope of physical education and sport. Physical education being scientific in nature, the application of pedagogical knowledge will assist the teacher to draw on scientific inferences from biology, sociology, and psychology for effective and realistic programmes.

Teachers' actions have been guided using their knowledge of pedagogy. This has helped them to acquire an in-depth knowledge of what to teach the students, e. g. in gymnastics, the performance of the activities has been graduated (the stance, the performance of the activity, the finishing and recovery), all these are to be taught. This helps in transmitting correct knowledge to the students. Physical education teachers must have a better understanding of what they are trying to achieve. The purpose of the subject must be imprinted in the teacher's mind when teaching physical skills. Clear knowledge of what to do will have an impact on what activities are taught and how they are taught. Activities must be meaningful, worthwhile and in the interest of human welfare. All these can only be achieved through pedagogical knowledge.

Conclusion

Based on the strength of the analysis in this study, one can conclusively say that all teaching theories in Physical Education and sport are founded on pedagogical knowledge. Whatever theory the teacher adopts; the root will be traceable to pedagogy. It is the foundation upon which all other theories are built. Whatever theory that is being taught must have been researched, and research, in turn, is a product of pedagogy. With this in mind, it could be asserted that pedagogy has played a prominent role in the formulation of theories for the teaching of physical education and sport up till this present time. In essence, teaching is a transformative process and not only a matter of acquiring new knowledge and skills. Therefore, personal development is a prerequisite for effective teaching because different orientations and approaches exist. In any complex human endeavour, there are always more goals to strive for than one can achieve at one time. There are choices to make about what to concentrate on while teaching, thus discussions about goals and appropriate means of content delivery must be deliberated upon while it would more beneficial to clarify what to foster in learners rather than to debate the orientations one is favourably disposed to.

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ASSESSMENT OF ATTITUDE TOWARDS DENTAL HEALTH CARE AMONG PRIMARY SCHOOL PUPILS IN KADUNA STATE, NIGERIA

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Abstract

The study was conducted to assess practice towards dental health care among primary school pupils in Kaduna State. An ex-post facto research design was used to study 400 subjects drawn from twelve primary schools in the six (6) local government areas from the three senatorial zones in Kaduna state. The subjects were drawn through stratified, simple random, purposive, proportional and systematic sampling techniques. A close-ended questionnaire was used to obtain responses from the subjects. Four hundred (400) questionnaires were returned. Descriptive statistics of frequency, percentages, means and standard deviation were used to describe the demographic characteristics of the respondents. One research question was asked and one hypothesis was tested at a 0.05 level of significance using a one-sample t-test. The findings of the study revealed that the attitude of primary school pupils towards dental health care in Kaduna State is positive. It was therefore recommended that primary school pupils should be encouraged by their teachers, parents and health personnel on how to maintain a positive attitude towards dental care.

Keywords: Attitude, Dental care, Primary school, Pupils.

Introduction

Oral health is important for appearance, sense of well-being and also health and oral health can affect the quality of life. Oral health has been linked to sleeping problems, as well as behavioural and developmental problems in children. Oral health may be defined as a standard of health of the oral and related tissues which enables an individual to eat, speak and socialize without active disease, discomfort or embarrassment and which contributes to general wellbeing (Raymer & Gift, 2010). Good oral health practices are necessary from a young age to ensure positive long term dental health and hygiene (Peterson, 2017) and the oral health of children is important towards their overall wellbeing (Peter, 2014). Oral health is an integral part of general health, not giving due care to the teeth and the buccal cavity will lead to dire health and social consequences (Palmer, 2010 and Oluniya, 2014). Oral health status is often determined by the amount deposited on the surfaces of teeth and poor oral hygiene is a predisposing factor to periodontal diseases (National Health Insurance, 2011). Furthermore, poor oral hygiene is associated with cardiovascular diseases and pre-term low-birth-weight infants (Palmer, 2010). In contrast, healthy oral behaviours reduce the amount of plaque deposited on the surfaces of teeth (Oluniya, 2014). In a developing countries like Nigeria, Dental hygiene is poor with inadequate and improper brushing of teeth, no washing of mouth after intake of sweets, widespread substance abuse and addiction, hyperacidity, increased consumption of refined sugar and sweetened foods. Use of toothbrush in underdeveloped areas is grossly limited and toothpick is traditionally utilized for dental cleaning. Regular brushing of teeth after principal meals is not practised universally (Lin, 2012).

Socio-behavioural and environmental factors play an important role in maintaining good oral health (Murphy, 2012). These include nutritional status, tobacco smoking, alcohol, hygiene, stress, systemic condition (Varmaine, Hoogstralitenl, Loveren, Poorterman & Van Exel, 2010). Since the

mouth is regarded as the mirror of the body, it is very important to have good oral health for maintaining good general health. Oral health directly or indirectly influences the quality of a person. Especially in children, the negatives impact of oral diseases, on quality of life has been reported for many years (Allukian, 2012). In young children, the burden of oral diseases restricts their activities in school, particularly their attention in-class work (Paterson, 2017).

Poor oral health can have detrimental consequences on the physical and psychological wellbeing of primary-school-age children which lead to absence in school and poor performance in school, disturbance of sleep, anxiety, irritability; withdrawal from normal activities, difficulty to relax and paying attention in class. Oral diseases may directly affect a limited area of the human body, but the consequences and impact affect the body as a whole. Children with missing front teeth often have a problem forming words correctly and tend to retreat into shyness and avoid socializing. Infected teeth may lead to ear infections, sinus infections, abscesses, painful teeth make chewing and difficult in swallowing. The researchers observed that tens of thousands of primary school age are still affected by noma in the poorest areas of Kaduna State. Moreover, one in every 500 to 700 children is born with a cleft lip and/or palate. And oral and facial trauma, associated with the unsafe environment, sports and violence, exacts a high toll, particularly on primary school-age children in Kaduna State. It is against the background that, the researchers become motivated to study the practice of dental health care among primary school pupils in Kaduna State.

Research Question

What is the attitude of primary school pupils toward dental health care in Kaduna state?

Hypothesis

The attitude of primary school pupils in Kaduna State toward dental healthcare is not significant.

Material and Methods

The ex-post facto research design was used for this study. The population of the study consists of Primary 3 to 6 pupils within the age bracket of 9-12 years in Kaduna state whose population is 920,891 (Universal Basic Education, 2017). For this study, 400 respondents was used as the sample size for this study; based on Yamane (1967) formula for determining sample size. To arrive at the stated sample size, a Stratified sampling technique was used to divide the state into three (3), already existing senatorial zone as strata namely Kaduna Northern zone Kaduna central zone and Kaduna southern zone senatorial. In each of the three (3) senatorial zone or strata, a simple random technique was used to select two Local Government Areas with regard to dental health care among primary school pupils in the state. In each selected Local Government Area, a simple random technique was also used to select two public schools for this study. To compute the number of respondents in each selected public primary school, a proportionate sampling technique was used. This technique was used to give all the respondents an equal chance of been selected for the study.

Systematic sampling was used to select the classes based on the odd number because most of the public schools have more than two arms of the classroom for the sample and in this technique, the researcher and his research assistants will start counting classrooms beginning with primary four (4) A and the third classroom will be selected. This technique was also applied to both primary five (5) and six (6). In each classroom, the researcher and his research assistants will purposively administer a copy of the questionnaire to a respondent in that classroom based on their seating arrangement in the class. This technique is used until the required number of primary school pupils in that classroom has been sampled. The researcher retrieved the filled questionnaire at a spot. The process of data collection lasted for three months. The instrument that was used for data collection is a questionnaire. The questionnaire consists of two sections. Section A: Demographic characteristics of respondents with four (4) items. Section B: contains ten (10) items on the practice of the respondents towards dental health care. To score the

responses of the respondents, based on how they felt towards a particular item, the 4-point Modified Likert scale was used as follows: SA - Strongly agree = 4 points. A – Agree = 3 points. D – Disagree = 2 points. SD – Strongly disagree = 1 point. To ensure the face and content validity of the instrument, the draft copies of the researcher-structured questionnaire was submitted to five (3) jurors in the Department of Human Kinetic and Health Education, Nursing science department and Community medicine department of Ahmadu Bello University Zaria for vetting. The comments and suggestions of the jurors were taken into consideration and reflected in the final clean copies that were distributed to the respondents. The researcher administered and collected the questionnaire forms within three (3) months. The completed questionnaires were collected, coded and analyzed using both descriptive and inferential statistics. Descriptive statistics of frequencies and percentages were used to analyze section A of the questionnaire which deals with demographic characteristics of the respondents, mean score and standard deviation (SD) were used to answer the stated research questions and a one-sample t-test was used to analyze the formulated hypotheses on the practice of primary school pupils towards dental health care.

Results and Discussion

Table 1: Demographic Characteristics of the Respondents

S/N	Variable	Frequency	Percentage
1	Gender		
	(a) male	119	29.75
	(b) female	281	70.25
	Total	400	100
2	Age Range		
	(a) 9 – 10	97	24.25
	(b) 11 – 12	107	26.75
		196	49
	(c) 13 and above		
	Total	400	100
3	Class		
	(a) Primary 3	58	14.5
	(b) Primary 4	71	17.75
	(c) Primary 5	103	25.75
	(d) Primary 6	168	42
	Total	400	100

Table 4.2.1 above reveals that 119 (29.75%) of the respondents were male pupils, while 281 (70.25%) were female pupils. Concerning the age range of the respondents, the table further shows that the majority 196 (49%) of the respondents were between ages 13 and above, 107 (26.75%) were of ages 11-12 years, while, 97 (24.25%) were aged 9-10 years.

The table further indicates that 58(14.5%) of the adult respondents were in primary 4 class, 71 (17.75%) were in primary class 5, while 168(42%) were in primary class 6. Hence, it is assumed that Primary School pupils used as subjects for this study can read and write.

Researcher Question: What is the attitude of primary school pupils toward dental health care in Kaduna state?

The analysis of data to answer this research question is presented in table 2 as follows:

Table 2: Mean Scores of Responses of Adults on Attitude towards dental healthcare

S/N	Statement	Mean	SD
1	I prefer brushing the inner surface of my teeth with the same brush position and gentle back and forth circular motion.	3.13	0.79
2	I like to wash my mouth before and after meals.	1.62	0.72
3	I prefer telling my teacher/ parent whenever I notice pain in my teeth.	3.72	0.53
4	I like using fluoride-containing toothpaste.	3.40	0.65
5	I always like to dispose my toothbrush after a long period of usage.	3.26	0.88
6	Overconsumption of soft drinks cordial and package, fruit juices can cause teeth decay.	2.74	1.05
7	I prefer to take care of my tooth myself whenever my teeth are paining me.	3.27	0.10
8	I like using both school and home hand wash to rinse my mouth as important things to prevent and control the spread of oral disease.	3.77	0.46
9	I like taking my time to brush my teeth properly.	1.64	0.89
10	I prefer using a toothpick – stick to brush my teeth.	1.48	0.88
Aggregate Mean Score		2.80	0.69

The aggregate mean score of 2.80 for pupils indicated that the pupil's attitude towards dental health is positive. Furthermore, it can be inferred from the table that the majority (83%) of the respondents had a positive attitude towards dental health while only 17% of the respondents had a negatives attitude towards dental health. The result revealed that most of the pupils preferred brushing their inner surface of the teeth with the same brush position and gentle back and forth circular motion with a mean of 3.18. The result further revealed that the pupils used fluoride-containing toothpaste for their teeth with a mean score of 3.40.

Hypothesis: The attitude of primary school pupils in Kaduna State toward dental healthcare is not significant.

The summary result of the t-test on sub-hypothesis II is giving in table 3

Table 3: one-sample t-test Analysis on Attitude of Pupils towards Dental Health Care in Kaduna State

Variable	Mean	Std.	Df	t-value	P-value.
Attitude	2.8030	.89272	9	9.929	.000

$$t(8) = .000 < 0.05$$

The above table reveals that the observed t-value of (9.929) for the test at 9 degree of freedom and a significance level of .000 ($p < 0.05$) is enough evidence to reject the null hypothesis and adopt an alternate hypothesis that the attitude of primary school pupils in Kaduna state towards dental health care is significantly adequate.

Discussion

As regards the attitude of primary school pupils in Kaduna state towards dental health care the finding revealed that 83% of respondents had a positive attitude while 17% had a poor attitude. Albino and Lawrence (2013) stated that Zimbabwe primary school pupils have a positive attitude towards dental health care but still lack appropriate knowledge and safe practices in dental care. The belief and method of dental care prevention pupil's males and females sometimes differ probably because of individual knowledge, background, culture, awareness or work. Marga (2011) indicated a significant positive attitude of primary school pupils on their belief towards dental health care and their responding evaluation of consequences of the disease. This finding is in line with Al-Ansari (2016), who revealed that primary school pupils showed a positive attitude towards dental care, the level of trust given to health personnel by these primary school pupils males and females provide information on dental health care. This finding is also in line with Applewhite (2012), who pointed out that there is a high level of belief in preventive ways of dental care. She emphasizes the need for more health education programmes to improve dental care.

Conclusion and Recommendation

Based on the result and in view of the limitation of the study it was concluded that the attitude of primary school pupils towards dental health care in Kaduna State is positive. Based on the findings of this study, it was recommended that primary school pupils should be encouraged by their teachers, parents and health personnel on how to maintain a positive attitude towards dental care.

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IMPACT OF SOCIAL FACTORS ON THE USE OF ALTERNATIVE HEALTHCARE DELIVERY SYSTEM AMONG NURSING MOTHERS IN ABEOKUTA SOUTH LOCAL GOVERNMENT OF OGUN STATE

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Abstract

It has been observed that a lot of nursing mothers self-medicate with Alternative medicines and supplements, most commonly on recommendation by friends and families which increase maternal mortality rate globally as against the Modern Healthcare Delivery System with modern facilities, equipment and qualify personnel which could have prevented and reduces maternal mortality rate in our society. Therefore, this study investigates the impact of Social factors (family background, cultural background and Education) on the use of alternative healthcare delivery systems in Abeokuta South Local Government Area of Ogun State. The study adopted a survey research design and proportionate sampling technique to select Five hundred (500) Nursing mothers from the available Eight (8) hospitals/Health centres in Abeokuta South Local Government Area of Ogun State. The use of an alternative healthcare delivery system social factor questionnaire yielded ($r=8.48$). The social factors have a significant impact on the Alternative Healthcare delivery system ($F_{(3, 496)} = 9.356$) and accounted for .202 to the variance of the Alternative Healthcare Delivery System and accounted for 0.783 to the variance of Alternative healthcare Delivery System. The results revealed with $\beta=.349$ that family background has the highest impact on the use of alternative healthcare delivery system among nursing mothers followed by Education ($\beta=.044$) and cultural background ($\beta= -.369$) which are all significant ($p < 0.05$). Based on the findings of this study, it was recommended among other things that nursing mothers should constantly be provided with relevant information on advantages and disadvantages related to any of alternative and conventional healthcare delivery systems selected which could provide education on the risks taken irrespective of the determinant factors

Keywords: Alternative Health Care, Family background, Cultural Background, Nursing Mothers

Introduction

Alternative healthcare delivery system is a term that describes medical treatments that are used instead of mainstream therapies. It is also referred to as complementary medicine where people from different cultural backgrounds have used different forms of the alternative healthcare system as a means of managing their health problems. Alternative Medicine use in Nigeria is becoming more popular, (Onyiaipat Okoronkwo & Ogbonnaya, 2011; Ezeome & Anarado, 2012; Amira, & Okubadejo, 2009), like in many other countries of the world. Globally, the prevalence of the use of alternative medicine ranges from 30% to 75% (World Health Organization [WHO], 2010).

When unconventional approaches or products are used together with conventional medicine, it is said to be complementary; but when it is used in place of conventional medicine, it becomes an alternative medicine. Therefore, complementary and Alternative Medicine (CAM) is an umbrella term used for

both complementary and alternative health care practices. The trend is increasing globally and the lack of robust evidence of safety, particularly when used in a vulnerable population such as nursing mothers is not a deterrent to alternative healthcare delivery system use (Fraser & Cooper, 2009). The most popular herbal remedies used by nursing mothers in the world include ginger (*Zingiber officinale*), garlic (*Allium sativum*), green tea (*Camellia sinensis*), and peppermint (*Mentha piperita*) (LowDog, 2012). LowDog (2012) reported that factors associated with increased use of herbal medicines among nursing mothers include, low economic status, being less educated and severity of nausea and vomiting.

Alternative medical therapy has been growing in popularity and getting increasing attention and interest. The use of herbal remedies as a form of alternate medical care among nursing mothers has become a major concern in Nigerian communities due to its perceived safety among users and controversial assumption of toxicity, teratogenic potentials and associated feto-maternal complications among healthcare practitioners (Tabatabaee, 2011).

The use of herbal remedies has not been abandoned entirely across the globe. The use of herbal remedies persists in local communities, most especially in developing countries where access to orthodox medicine may be unavailable or unaffordable. The use of herbal remedies may differ from woman to woman depending on their perception of their efficacy and supremacy above the conventional drugs which side effects may aggravate existing symptomatic manifestations during childbearing age/Alternative medicine which has a long history has been relegated to the background by the evolution of modern medicine.

Moreover, the need for nurses to have reliable empirical data on the perception and utilization of herbal remedies by mothers is becoming extremely important for effective educational interventions. Even though studies conducted across the six geo-political zones revealed a strong perception of herbal remedies and a high consumption rate among the Nigerian populace (Banda, Chapman, Goldenberg, Stringer, Cultiane, Sinkala, Vermund and Chi, 2012). This study will provide the knowledge base for intervention programs to address issues relating to the use of herbal remedies among women during childbearing age and investigate the impact of social factors on the use of alternative medicine among nursing mothers in Abeokuta South Local Government Area of Ogun State. Many women self-medicate with alternative medicines and supplements, most commonly on recommendation by friends or families. It was anticipated that the use of some herbal medicines was likely to occur during breastfeeding.

The use of alternative medicine among nursing mothers is for different purposes including breast enlargement, after pain and infection in mothers, babies also can have infected cord, malnutrition, abdominal cramps, respiratory and skin problem.

Material and Methods

The research design adopted in this research was survey research design because the design reported events and situations as it exists without allowing the researcher to manipulate it. The population for this study comprised 500 nursing mothers in Abeokuta South Local Government Area of Ogun State, Nigeria. The sample size for this study was five hundred (500) nursing mothers in Abeokuta South Local Government Area of Ogun State, Nigeria. The Local Government consists of eight (8) health centres/Hospitals. The questionnaire was a modified Likert Scale four points rating of Strongly Agreed, Agreed, Disagreed and Strongly Disagreed. The instrument was validated by health education experts and found suitable for the study. Cronbach Alpha statistics was used to establish the internal consistency of the instrument which produced a reliability coefficient of 0.84.

The completed copies of the questionnaire were collected, coded and analyzed using the descriptive statistics of frequency counts and percentages for the demographic information and inferential statistics of multiple regression was used to analyze hypotheses 1 and t-test for hypothesis 2. All the hypotheses were tested at a 0.05 level of significance.

Results and Discussion

H₀₁: Family background, cultural background and education will not be social predictors of the use of alternative healthcare delivery system among nursing mothers in Abeokuta South Local Government Area of Ogun State

Table 1: Regression analysis showing the level of the social impact of Family background, Cultural background and Education on the use of alternative healthcare delivery system statistical influence

ANOVA ^b						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	35.787	3	11.929	9.356	.000 ^a
	Residual	122.403	496	1.275		
	Total	158.190	499			
a. Predictors: (Constant), EDUCATION, CULTURALBACK, FAMILYBACK						
b. Dependent Variable: AHCDS						

R = .476

R² = .226

Adj R² = .202

Std. Error = 1.12917

Significant = .000^a

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
1 (Constant)	1.909	.899		2.122	.036
Family Background	.466	.121	.349	3.835	.000
Cultural Background	-.740	.185	-.369	-3.992	.000
Education	.104	.218	.044	.479	.003

Table 1 presents the level of the social impact of family background, cultural background and educational status of nursing mothers on the use of alternative healthcare delivery systems. The table shows with beta statistics that there is a relative impact of each of the social variables on the use of alternative healthcare delivery systems among nursing mothers. However, the table shows that family background has the highest prediction ($\beta=.349$) of the use of alternative healthcare delivery system among nursing mothers which is followed by educational status ($\beta=.044$). The cultural background of nursing mothers had the least prediction ($\beta= -.369$). The table revealed that each of the impacts is

significant ($p < 0.05$). Thus, hypothesis 1 was rejected. Hence, family background, education and cultural background have a significant social impact on the use of alternative healthcare delivery systems among nursing mothers in Abeokuta South Local Government Area of Ogun State. The summary table revealed with $r = .476$ that there is a fairly strong positive relationship between all the variables. However, the adjusted $R^2 = .202$ indicates that the independent variables accounted for 20.2% of the total variance in the choice of nursing mothers use of alternative healthcare delivery systems. The joint effect is shown to be significant on nursing mothers use of alternative healthcare delivery systems ($F(1, 498) = 9.356$; $P < 0.05$).

Ho2: There would be no difference in the use of alternative and conventional healthcare delivery systems among nursing mothers in Abeokuta South Local Government Area of Ogun State

Table 2: t-test showing the difference in the mean responses of nursing mothers on use of alternative and conventional healthcare delivery system

Factors	N	Mean	Std. Dev.	Df	t	Sig.
Use of healthcare Alternative delivery system	500	97.76	11.62	499	1.619	.001
Conventional	500	92.17	11.72			

The table presents the mean differences in the responses of nursing mothers on the use of alternative and conventional healthcare delivery systems. The table revealed a significant difference on the use of alternative and conventional healthcare delivery systems among the nursing mothers ($df = 499$; $t = 1.619$; $p < 0.05$). Thus, hypothesis 2 was rejected. Hence, there is a significant difference in the use of alternative and conventional healthcare delivery systems among nursing mothers in Abeokuta South Local Government Area of Ogun State.

Discussion of Findings

This study investigates the impact of social factors on the use of alternative healthcare delivery systems among nursing mothers in Abeokuta South Local Government Ogun State. The study found based on hypotheses tested revealed with $\beta = .349$ that family background has the highest impact on the use of alternative healthcare delivery system among nursing mothers followed by education ($\beta = .044$) and cultural background ($\beta = -.369$) which are all significant ($p < 0.05$).

Based on findings on differences established on the use of alternative and conventional healthcare delivery systems was established among the nursing mothers, this agrees with Oyelakin (2009) that there are individuals choice of health care delivery system. The difference towards the choice of health care delivery system seems further established by Hill (2013) who noted that the secrecy surrounding traditional healthcare has contributed to modern health practitioners to be finding it difficult to accept traditional medicine due to religious, magical and cultural beliefs involved

Conclusion

Based on the findings, this study concludes that there are relative social factors that determine the use of alternative healthcare delivery systems among nursing mothers in Abeokuta South Local Government Ogun State. The social variables such as the family background, cultural background and education played respective roles in selecting any of alternative and conventional healthcare delivery systems with family background ranked the major predictor of the use of alternative healthcare delivery system among nursing mothers but with interference cultural background and educational background.

Based on these social factors, there is a preference among nursing mothers on the use of alternative and conventional healthcare delivery systems.

Recommendations

Based on the findings of this study, the following are recommended:

1. Nursing mothers should constantly be provided with relevant information on advantages and disadvantages related to any of the alternative and conventional healthcare delivery systems selected which could provide education on the risks taken irrespective of the determinant factors.
2. Pregnant women should be carefully educated on best healthcare delivery practices with relation to a specific treatment to facilitate the right decision making.

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ASSESSMENT OF SCHOOL HEALTH APPRAISAL SERVICES PROVISION AMONG URBAN AND RURAL SCHOOLS OF FEDERAL CAPITAL TERRITORY- ABUJA, NIGERIA

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Abstract

This study assessed the adequate provision of school health services between urban and rural government senior secondary school students of Federal Capital Territory, Abuja. A multi-stage sampling technique that involved stratified random and simple random sampling techniques was used for this study. The instrument used for data collection was a structured questionnaire based on five points Likert Scale with 3.00 as the level of agreement that such a service is provided. Three hundred and eighty-four (384) copies of the questionnaire administered, three hundred and seventy-six (376) were valid and used for the analyses. Data collected was analyzed using a two-sample t-test at 0.05 alpha levels. The results revealed no significant difference in the responses of the respondents on the provision of health appraisal and emergency care to sudden injuries and illness among urban and rural senior secondary schools of the Federal Capital Territory. The t- values 0.121 and 0.368 obtained are lower than the t-critical value of 1.96. This means that the null hypotheses are upheld or accepted. It was recommended that schools clinics should be well equipped with beds, stretchers and drugs by the Secondary Education Board and the Federal Capital Territory Administration, to intensify better emergency care to injuries and sudden illness to limit the absentees of students from school.

Keywords: School health programme, School service, health appraisal, emergency care.

Introduction

Health is wealth goes an old adage. It is a necessity for every individual to keep the functions intact and to live long and be able to carry out daily activities. Furthermore, it has often been said that he that has health has hope, he that has hope has life and the greatest of all follies is the neglect of one's health to other virtues of life. Tukurah, (1988) and Umaru (2007) believed that a low level of health status gives way to attack by various communicable diseases that might become endemic and increased death rate within a community or nation at large, thereby causing wastage of human resources that create economic loss, not only to death toll but absenteeism from duty and insufficient energy to withstand the daily requirement of discharging one's duties.

According to Garba, Ajayi, Abdul and Alackson (2006), the provision of a special programme that is the "School health programme" will help ensure that all school children are as healthy as possible so that they can obtain the full benefit of their educational programme as well as develop healthy and productive adulthood. Ademuwagun and Oduntan (1956) and Ajala (1987) explains that the School Health Programme consists of three main components one of which is School health services that is been studied.

The school Health Service provided by the School nurses, dentists, teachers and all School-based / School linked health centre is the services provided when children start going to school to allow for an uninterrupted medical history for children to benefit in their educational carrier (Funso, 2005 and North Caroline Healthy School, 2008). School Health Services provides many services but this study is

concerned with two which include: Health appraisals and Emergency care for injuries and sudden illnesses.

Moronkola (2003) opined that health appraisal as a concept entails finding out the individual health status of students, staff and other members of the school community so that effective teaching and learning process can take place. Igwe (1996), Moronkola (2003) and Ojugo (2005) explained that the main objective of the health appraisal is to detect early any identifiable physical, medical and mental defects that may interfere with the students' ability to benefit from educational opportunities in the school. This will enable the school to plan for appropriate interventions like treatment, counselling education and also evaluation of the School Health Programme in general. In another development Carl, et al (1998) research reveals that most of the students agreed to have received physical and dental examinations in their schools.

A standard school health service aimed at securing the health of the students, staff and other members of the school community by providing emergency care for injuries and sudden illness to those found sick or having some emergency health challenges before they are referred to hospital if there is further need. Igwe (1996), Nichole, Hallenbeck and Robinson (2003) reported that providing an environment that is responsible for emergency health needs of students is essential in creating a safe setting for children in School and that the question about the minimum essential emergency equipment and resources that should be available to take adequate care for injuries and sudden illnesses brings with it many and varied opinions, issues and concerns. Makama (2007) said that the provision of simple care to the injured and sudden ill or sick student can be rendered through the school nurses or trained school personnel, and those serious conditions that cannot be handled by the school are referred to the hospital. Carl, et al. (1998) and Makama (2007) in their studies reveal that there were well equipped first-aid boxes to cater for the care for injury and the sudden illness of their student and personnel's, while Nwachukwu (2004) in his study found out that the provision of first-Aid boxes is deteriorating in Imo state.

The state of the school health services of our schools today among others has been one of the problems confronting the society at large and the educational sector in particular, especially at the secondary school level. The expected school health services today appear to be poorly functional, grossly neglected and unaddressed. Umaru (2007) pointed that one major aspect of the school health services which appraises the health status of the students and staff no longer exist. Today the usual inspection of students' fingernails, hair, and uniform on the assembly ground has disappeared, thereby reducing the means through which health knowledge is enhanced among students. More so, students and staff are often seen in hospitals and clinics outside the school during school hours with minor injuries or illnesses that would have been handled by the school. Therefore, the research study seeks to assess the adequacy of the health services provided in urban and rural Government Senior Secondary Schools of the Federal Capital Territory.

Research Questions

The following research questions were structured for the purpose of this study:

1. What is the health appraisal services provided to urban and rural government senior secondary school students in the Federal Capital Territory?
2. What are the facilities and equipment provided for the care of injuries and sudden illness among urban and rural government senior secondary schools in the Federal Capital Territory?

Hypotheses

To achieve the purpose of the study, two (2) hypotheses were formulated as follows:

1. There is no significant difference in the provision of health appraisal among Urban and Rural government senior secondary schools of Federal Capital Territory.

2. There is no significant difference in the provision of facilities and equipment for care for injury and sudden illness among Urban and Rural government senior secondary schools of Federal Capital Territory.

Material and Methods

Ex-post-facto research design was used. Multistage sampling technique was used to select three hundred and seventy-six (376) respondents from the population of 36,110 students of which 205 were from urban and 171 from rural school settings of the Senior Secondary School of the Federal Capital Territory. In the first stage, schools were stratified into the six Area councils to have a two-thirds number of schools in each to avoid undue advantage to any council. In the second stage, simple random sampling technique where names of all schools in each area council were written on pieces papers and are folded, put into a container, shuffled well and a neutral person dips his hand to pick one at a time after shuffling until the number allocated number for each area council is gotten. In the third stage one "Yes" was written on a piece of paper for an arm and "No" for the remaining arms of the class. The arm that picked "Yes" represents their class SSI, SSII, and SSIII. Finally, in the fourth stage four (4) "Yes" were written on pieces of paper because only four questionnaires were assigned for each class and "No" for the remaining class members of the selected arms of classes respectively. Those who picked "Yes" were use for the study. The main instrument used was a structured and validated questionnaire to elicit appropriate information from the respondents made of 25 items. The instrument consists of two sections A – B. Section A has five items on demographic information of the respondents, Section B consists of BI and BII. BI consists of 10 items on health appraisal services while Section BII was made up of 10 items on emergency care to injuries and sudden illness. This instrument was based on five points Likert scale which required the respondents to tick their responses on each of the statements that appealed to them. A mean score of less (3) for an item or a service is a negative response meaning that such was not provided. However, an item or service is considered been provided when it has a mean score of (3) and above. In order to ensure validation of the instrument, the questionnaire was vetted by (3) experts in the Department of Human Kinetics and Health Education, Ahmadu Bello University Zaria, for comment, observations, correction and suggestions. After incorporating all the suggestions made by them, the questionnaire was finally prepared for the study data collection. The instrument was administered during classes in the selected senior secondary schools by the research and (3) research assistants. Access into the schools was gained after submission of the letter of introduction obtained from the Department of Human Kinetics and Health Education, Ahmadu Bello University Zaria. The students were briefed on the purpose of the visit. Descriptive statistics of means and standard deviation to answer the research questions while inferential statistics of students' two-tail t-test was employed to test the formulated hypotheses at 0.05 level of significance.

Results and Discussion

Research Question 1: What is the health appraisal services provided to urban and rural government senior secondary school students in the Federal Capital Territory?

Table 1. Respondents' Opinion of Health Appraisal services provided in the Schools

S/N	Health Appraisal in the School	Urban Mean	Urban Std. Dev	Rural Mean	Rural Std. Dev
1	Teachers observed and asses my fingers nails, teeth, eyes, ears and clothes at assembly regularly.	3.30	1.394	3.67	1.326
2	Nurses and teachers check my eye and ear regularly in school.	2.34	1.238	2.58	1.210
3	Periodic medical checkups are conducted for students regularly in the school.	2.30	1.335	2.49	1.242
4	The teacher's observations on student's health are referred to the school Nurse or Doctor.	3.75	1.223	3.82	1.308
5	Medical examinations are carried out for students at entry and intervals before leaving school.	3.49	1.369	2.99	1.441
6	Teachers and other staff inspect the general body, clothes, cleanliness, skin, appearance and physical defects of students and action were taken where necessary.	4.16	1.032	4.17	1.059
7	The health information of each student is recorded in a standard form and kept in the school clinic.	3.70	1.213	3.64	1.372
8	Students weight and height are screen in the school to detect abnormalities.	2.31	1.277	2.13	1.189
9	Parents and guardians observed their children health status and report defects to the school.	3.90	1.162	3.90	1.175
10	Physical fitness activities are used to test students' health by teachers or health personnel.	3.89	1.118	3.99	1.206
Aggregate Mean/ Standard Deviation		3.31	1.118	3.34	1.253

Table 1 above revealed the mean score of responses on health appraisal services provided in urban and rural senior secondary schools of the Federal Capital Territory- Abuja. The aggregate mean score of the items is 3.31 and 3.34 respectively for both urban and rural schools. Thus, indicating that health appraisal services are carried out among urban and rural schools. This can be concluded that most areas of health appraisal services are provided significantly by urban and rural senior secondary schools of the Federal Capital Territory, except for nurses and teachers from urban and rural schools do not check their students' eye and ears regularly in school as the mean score of $2.34 \leq 3.00$ and $2.58 \leq 3.00$, periodic medical checkups are not provided to students in urban and rural schools with mean scores of $2.30 \leq 3.00$ and $2.49 \leq 3.00$ and both school settings do not agree that their student's weight and height is screened to detect abnormalities with a mean score of $2.31 \leq 3.00$ and $2.13 \leq 3.00$ respectively. This implies that health appraisal services are provided among urban and rural senior secondary schools of the Federal Capital Territory – Abuja was good.

Research Questions 2: What are the facilities and equipment provided for the care of injuries and sudden illness among urban and rural government senior secondary schools in the Federal Capital Territory?

Table 2. Respondents' Opinion of Facilities and Equipment for Care of Injuries and Sudden Illness provide in the School.

S/N	Emergency care for injuries/ sudden illness	Urban		Rural	
		Mean	Std. Dev	Mean	Std. Dev
1	The school has a building for health care called Sickbay/dispensary or health centre.	4.18	1.205	4.02	1.296
2	Emergency care to injuries and sudden illness are provided within the school premises.	4.21	1.029	4.21	0.948
3	Equipment like stretchers and beds are available at the school clinic	3.45	1.429	3.37	1.510
4	The school nurse or other trained personnel provide emergency services to injury and sudden ill students.	4.10	0.997	3.98	1.067
5	Emergency cases beyond the school clinic are referred hospital and parents are notified.	4.40	0.992	4.43	0.989
6	The school has a well equipped first-aid box for emergency care.	3.99	1.177	3.82	1.167
7	Students are trained on first aid assistance (treatment) procedures.	3.67	1.345	3.59	1.343
8	Teachers and health personnel's keep records of injuries and sudden illnesses occurring in the school.	3.67	1.233	0.59	0.243
9	Health master and prefect only provide emergency care to injured and sudden ill students in the school.	3.52	1.114	3.68	1.228
10	The school has a planned procedure to follow by students and staff in terms of emergency or sudden illness in the school.	3.67	1.114	3.66	1.059
Aggregate Mean / Standard Deviation		3.89	1.173	3.84	1.178

Table 2 above revealed that all the statements on emergency care to sudden injuries and illnesses were provided as their means scores were $3.89 \geq 3.00$ and $3.84 \geq 3.00$ for both urban and rural senior secondary schools of the Federal Capital Territory. For example on schools having a building for health care called Sickbay /dispensary or health centre, their means scores were $4.18 \geq 3.00$ and $4.02 \geq 3.00$ for urban and rural schools respectively. However, the table further revealed that students in urban schools agree with a mean score of $3.67 \geq 3.00$ that teachers and health personnel keep records of injuries and sudden illnesses in the school while those in rural schools do not agree to it provided with a mean score of $0.59 \leq 3.00$. This implies that health appraisal services are provided among urban and rural senior secondary schools of the Federal Capital Territory – Abuja was good.

Hypotheses Testing

The hypotheses raised to support the solution proffered to the research questions raised in the study are two which all aimed at determining possible differences among the students in terms of their location of the school in the provision of School Health Services in the selected schools. The hypotheses are tested as follows:

Hypothesis One: There is no significant difference in the provision of health appraisal between Urban and Rural government senior secondary schools of Federal Capital Territory.

Table 3. Two sample t-test Analysis on School Health Appraisal Programme by School Location.

School Location	N	Mean	S.D	S.E	t-cal	t-crit	DF	Sig	p
Urban	205	3.3063	1.236	.230	0.121	1.96	374	.905	0.000
Rural	171	3.3456	1.253	.232					

t (2, 374) = 1.96, P < 0.05

Table 3 above shows no significant difference between urban and rural government senior secondary schools student's responses on health appraisal care services provision. The observed t-value for the test is 0.121 which is lower compare with the critical value of 1.96 at a 0.05 level of significance. This means that the null hypothesis which says there is no significant difference in the provision of health appraisals between urban and rural government senior secondary school students of the Federal Capital Territory is hereby accepted.

Hypothesis Two: There is no significant difference in the provision of emergency care for injury and sudden illness between Urban and Rural government senior secondary schools of the Federal Capital Territory.

Table 4. Two sample t-test on Provision of Emergency Care for Injury/ Sudden Illness by Schools Location.

School Location	N	Mean	S.D	S.E	t-cal	t-crit	DF	Sig	p
Urban	203	3.8863	1.1724	.0427	0.368	1.96	374	.717	0.000
Rural	173	3.8327	1.1792	.0495					

t (2, 374) = 1.96, P < 0.05

Table 4 above did not reveal a significant difference between urban and rural government senior secondary schools students of the Federal Capital Territory opinion on the provision of emergency care for injury and sudden illness by location. The observed t-value of 0.368 is lower than the critical value of 1.96 at a 0.05 level of significance. This also means that the null hypothesis which says there is no significant difference in the provision of emergency cares for injury and sudden illness between urban and rural senior secondary school students of the Federal Capital Territory is hereby retained.

Discussions

Health appraisal as a concept entails finding out the individual health status of students, staff and other members of the school community so that effective teaching and learning processes can take place. This study was to assess the adequacy of health services provision in urban and rural government senior secondary schools of the Federal Capital Territory - Abuja. The result of the test revealed that health appraisal services were provided to both urban and rural government senior secondary schools of Federal Capital Territory with a mean score of less than 3.31 and 3.34. These findings are contrary to Garba, Ajayi, Abdul and Alackson (2006) whose studies among post-primary schools in Sabon Gari Local Government Area of Kaduna State reveals that only 21.6% of their respondent agreed to have

received health inspection. The same goes with the study of Ojugo (2005) and Makama (2007) who reported the absence of health appraisal in their respective places of study. The study was, however, in agreement with that of Carl, et al. (1998) who reported that most of the respondents agreed to have received physical and dental examinations at their respective school health centres in the United State of America.

The study also found no significant difference in the respondents' responses from both urban and rural schools as both agreed to the provision of emergency care for injury and sudden illnesses with mean scores of 3.89 and 3.84 respectively. The result shows that all emergency care services are functional in both schools locations. The finding is consistent with Igwe (1996) and Nichole, Hallenbeck and Robinson, (2003) who postulated that every school should have programmed relating to emergency care. Relevant to the above findings of Carl, et al. (1998), Garba, Ajayi, Abdul and Alackson (2006) and Makama (2007) whose studies reported good emergency cares in their respective places of study. However, this study is contrary to that of Nwachukwu (2004) who reported that the provision of emergency first aid boxes among schools of Imo State is deteriorating.

Conclusion

The study investigates the adequacy of School health services provided among Urban and Rural senior secondary schools of Federal Capital Territory – Abuja. A total of 384 copies of the questionnaire were administered to the students of which 376 (97.9%) were duly filled and returned and used for the study. Variables assessed were School Health Services components of health appraisal and emergency care for injury and sudden illness and it was concluded that:

1. Health appraisal services for students in both urban and rural of the Federal Capital Territory senior secondary school were inadequate.
2. Emergency care for injury and sudden illness in both urban and rural senior secondary schools of the Federal Capital Territory were adequately provided.

Recommendations

In the light of the above findings, the following recommendations are made.

1. Regular inspection of school children at school assemblies and classes with periodic medical examination, height and screenings, should be provided to the students by the teachers, school health personnel and the health department of the Federal Capital Territory.
2. Schools clinics should be well equipped with beds, drugs, stretchers by the Federal Capital Territory administration to further enhance emergency care.

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INFLUENCE OF BUDGETING ON THE ADMINISTRATION OF PUBLIC SECONDARY SCHOOLS IN SABON TASHA EDUCATION ZONE, KADUNA STATE

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Abstract

The study investigated the influence of budgeting on the administration of public secondary schools in Sabon Tasha Education Zone, Kaduna State. The study was set to: find out the influence of budgeting on staffing in public secondary schools in Sabon Tasha Education Zone, Kaduna State; and determine the influence of budgeting on staff development in public secondary schools in Sabon Tasha Education Zone, Kaduna State. A descriptive survey research design was used in the study. The target population of the study was made up of 35 principals, 572 teachers and 278 non-teaching staff in Sabon Tasha Education Zone, Kaduna State. A sample size of 10 principals, 121 teachers and 56 non-teaching staff were sampled from Sabon Tasha Education Zone, Kaduna State, making the total of 187 respondents, used in the study. The instrument tagged “Budgeting and Administration of Public Secondary School Questionnaire (BAPSSQ)” was used for data collection in the study. The reliability coefficient of the instrument was determined using Cronbach Alpha statistics and a reliability coefficient of 0.80 was obtained. The data collected in the study were analysed using descriptive statistics of frequency, percentage, mean and standard deviation to answer the research questions, while ANOVA was used to test the hypotheses at a 0.05 level of significance. Findings revealed that budgeting had no significant influence on staffing in public secondary schools in Sabon Tasha Education Zone, Kaduna State. However, budgeting influenced staff development in public secondary schools in Sabon Tasha Education Zone, Kaduna State. Based on the above findings, the study recommended among others that school heads should continue to struggle for the acquisition of knowledge and skills necessary to facilitate effective budgeting and administrative task in all areas by employing personal initiatives and through networking.

Keywords: Budgeting, administration, staffing, staff development.

Introduction

Budgeting is the process of formulating into plan all the estimates of expenditure of an organization. Ogbonnaya (2010) defined school budget as an educational plan with an estimate of receipts and expenditures necessary to finance it for a defined period. It follows that the school budget is broadly regarded as an outline of the plan for financing the activities for a given period. Budgeting according to Abdela (2006) is the process whereby the plans of an institution are translated into an itemized, authorized and systematized plan of operation. Budgets are the blueprints, the orderly execution of program plans; they serve as control mechanisms to match anticipated and actual revenues expenditures.

Administration is a discipline within the study of education that examines the administrative theory and practice of education in general and educational institutions and educators in particular. The field ideally distinguishes itself from administration and management through its adherence to guiding principles of educational philosophy (Yakubu, 2019). The school administrators at the secondary school level are the principals. A principal is the designated official in charge of secondary schools in Nigeria.

He is the chief executive, the leader and the administrator of secondary schools. Orji (2001), regarded the principal as the financial manager, whose responsibility it is to carry out financial functions. He takes the vital decisions of ensuring that funds are available and are utilized most efficiently.

Administration is a discipline within the study of education that examines the administrative theory and practice of education in general and educational institutions and educators in particular. The field ideally distinguishes itself from administration and management through its adherence to guiding principles of educational philosophy (Yakubu, 2019). Educational Administration is regarded as the process of integrating the appropriate human and material resources that are made available and made effective for achieving the purposes of a programme of an educational institution. The term “Administration” doesn’t refer to any single process or act. It is like a broad umbrella encompassing several processes such as planning, organizing, directing, coordinating, controlling and evaluating the performance (Diksha, 2015).

Staffing is the process of finding and hiring the best and most qualified candidate in a timely and cost-effective manner (Adam, 2016). Through staffing, organisations make sure that the skill sets of the staff or manpower of the institution remain aligned to its initiatives and goals. Recruitment (staffing) also refers to the overall process of attracting, shortlisting, selecting and appointing suitable candidates for jobs (either permanent or temporary) within an organization. Managers, human resource generalists and recruitment specialists may be tasked with carrying out recruitment, but in some cases, public-sector employment agencies, commercial recruitment agencies, or specialist search consultancies are used to undertake parts of the process (Adam, 2016). Internet-based technologies which support all aspects of recruitment have become widespread.

There is a high demand to know the kind of training needed for the employee by the top management. The nature of budget plans by the school head will determine what training should be provided on specific aspects. All organizations can select the most accurate method, taking into account such factors as organization size, technology, organizational structure, training staff, facilities, and budget (Pajaron, 2015). In addition, since the management is involved, the school management ensures that there must be professional, organizational and personal developments to identify the learning needs to be assessed based on the necessity and requirements of the organization where professional development is acknowledged to be centrally important in maintaining and enhancing the quality of job performance in schools (Craft, 2000; Harris, 2002).

Staff development equips staff with modern skills, knowledge and attitudes required on the job. As explained by Adesina and Ogunsaju (2000), staff development tends to impact positively the workers through the involvement of other people whose primary responsibility relates to teaching and learning. This is because no practitioner gets into the job as a finished product. Staff development programmes should assist teachers to develop skills in modern visual aids, techniques of teaching, knowledge of the subject matter, teamwork, and develop understanding in teachers to function effectively in society. This research, therefore, explores the influence of budgeting on the administration of public secondary schools in Sabon Tasha Education Zone, Kaduna State.

The planning and management of school budgets are facing several limitations especially in terms of expanding sources for allocating financial resources and its management. Finance is one of the most important resources which, through a process and mechanism of budget allocation, are converted into real instructional resources such as teaching and non-teaching personnel, buildings and facilities, learning resources and other goods and services (Melaku, 2010). Inadequate facilities, insufficient manpower training, overcrowded classrooms, etc., are some indicators of low-quality education which are mainly caused by the inadequate allocation of finance to schools (Education Sector Development Program – ESDP III, 2006). Therefore, the extent to which a state has committed itself to education can be seen from how many financial resources are allocated to this sector.

The budget process, however, is facing the challenges of lack of transparency, in the education sector, budget inadequacy and underspending woes in development projects (Hakielimu, 2013). The school budget explains how the money will be collected from the government or public and allocated to different levels and components, and according to different priorities (Hakielimu, 2013; Policy Forum, 2008). Although the public budgets and expenditure on education has increased significantly in recent years it has not adequately improved all secondary school projects. This suggests that the budget for facilitating recruitment of staff (staffing) is still low due to school failure in financial planning and management. This research, therefore, explores the influence of budgeting on the administration of public secondary schools in Sabon Tasha Education Zone, Kaduna State. The study was set to achieve the following objectives:

1. find out the influence of budgeting on staffing in public secondary schools in Sabon Tasha Education Zone, Kaduna State; and
2. Determine the influence of budgeting on staff development in public secondary schools in Sabon Tasha Education Zone, Kaduna State.

Research Questions

The following research questions were answered in the study:

1. Does budgeting influence staffing in public secondary schools in Sabon Tasha Education Zone, Kaduna State?
2. Is there influence of budgeting on staff development in public secondary schools in Sabon Tasha Education Zone, Kaduna State?

Research Hypotheses

The following hypotheses were formulated and tested in the study at a 0.05 level of significance:

- H0₁: There is no significant difference in the opinions of principals, teachers and non-teaching staff on the influence of budgeting on staffing in public secondary schools in Sabon Tasha Education Zone, Kaduna State.
- H0₂: There is no significant difference in the opinions of principals, teachers and non-teaching staff on the influence of budgeting on staff development in public secondary schools in Sabon Tasha Education Zone, Kaduna State.

Material and Methods

The study adopted a survey research design. The population of the study include 35 principals, 572 teachers, and 278 non-teaching staff in Sabon Tasha Education Zone, Kaduna State (Ministry of Education, Science and Technology, Kaduna State, 2018). Using random sampling technique, 10 principals, 121 teachers, and 56 non-teaching staff making the total 187 respondents sampled for the study. The instrument tagged “Budgeting and Administration of Public Secondary School Questionnaire (BAPSSQ)” which was structured based on a 5-point Likert Scale was validated by experts in the field of educational administration and planning and used for data collection in the study. The data collected from the pilot study were analysed using the Cronbach Alpha technique and a reliability coefficient of 0.80 was obtained. With the aid of the research assistants, the researcher collected the responses from both the principals, teachers and students on the spot to avoid loss of the questionnaire and thereafter was taken for analysis. The descriptive statistics of frequency count, mean and standard deviation were used to answer the research questions at the decision rule of 3.00, while analysis of variance (ANOVA) was used to test the hypotheses at a 0.05 level of significance. ANOVA was used because it is an appropriate statistical tool used to compare the response means between groups and it determines whether any of these means are significantly different from each other (Laerd

Statistics, 2013). Hence, the hypothesis that has a P-value greater than 0.05 or $p = > 0.05$ was retained and the one with less than 0.05 or $p < 0.05$ was rejected.

Results and Discussion

Research Question One: Does budgeting influence staffing in public secondary schools in Sabon Tasha Education Zone, Kaduna State?

Opinions of principals, teachers and non-teaching staff were gathered to provide the answer to this research question. The summary of analysis made with respect to research question one is presented in table 1.

Table 1: Influence of Budgeting on Staffing in Public Secondary Schools in Sabon Tasha Education Zone, Kaduna State

SN	Item	Respondents	Mean	SD
1.	Through budgeting, the school is provided with adequate English teachers.	Principals	2.200	0.918
		Teachers	2.871	0.895
		Non-Teaching	2.357	1.419
2.	Through budgeting, the school is provided with adequate Mathematics teachers.	Principals	2.630	1.074
		Teachers	2.847	1.054
		Non-Teaching	2.607	1.154
3.	Through budgeting, the school is provided with adequate Christian Religion Studies teachers.	Principals	2.601	1.264
		Teachers	2.912	0.827
		Non-Teaching	2.915	1.195
4.	Through budgeting, the school is provided with adequate Laboratory Technicians.	Principals	2.420	1.173
		Teachers	2.756	1.165
		Non-Teaching	2.982	1.017
5.	Through budgeting, the school is provided with adequate Arts teachers.	Principals	2.738	1.100
		Teachers	2.190	1.199
		Non-Teaching	2.539	1.073
6.	Through budgeting, the school is provided with adequate Science teachers.	Principals	2.841	1.032
		Teachers	2.013	1.037
		Non-Teaching	2.464	1.278
7.	Through budgeting, the school is provided with Qualified Library staff.	Principals	1.800	0.632
		Teachers	2.793	1.182
		Non-Teaching	2.878	1.129
8.	Through budgeting, the school is provided with adequate Civic Education teachers.	Principals	2.901	0.994
		Teachers	2.256	0.996
		Non-Teaching	2.517	1.334
9.	Through budgeting, the school is provided with adequate workshop attendants.	Principals	2.810	0.918
		Teachers	2.899	1.135
		Non-Teaching	2.617	1.103
10.	Through budgeting, the school is provided with adequate Social Science teachers.	Principals	2.491	0.966
		Teachers	2.785	1.000
		Non-Teaching	2.725	1.028
Average Mean			2.61	1.07

Table 1 shows that budgeting did not influence staffing in public secondary schools in Sabon Tasha Education Zone, Kaduna State. The table showed that the average response mean of 2.61 is less than the rating mean of 3.0. Similarly, all the ten items stated on this research question recorded the response mean which is far less than the rating mean. For instance, item number 7 which says through budgeting, the school is provided with qualified library staff recorded the least response mean of 1.800 for principals, 2.793 for the teachers and 2.878 for non-teaching staff. Detail shows that a total of 1 principal stayed undecided with item number 7 while 3 principals disagreed and 6 principals strongly

disagreed. Also, a total of 27 teachers strongly agreed, while 41 teachers agreed as against 2 teachers that stayed undecided while 35 teachers disagreed and 16 that strongly disagreed. In like manner, 32 non-teaching staff agreed with item number 7, against 11 that stayed undecided while 9 disagreed and 4 strongly disagreed with the item.

Research Question Two: Is there influence of budgeting on staff development in public secondary schools in Sabon Tasha Education Zone, Kaduna State?

Opinions of principals, teachers and non-teaching staff were gathered to provide the answers to this research question. The summary of analysis made with respect to research question two is presented in table 2.

Table 2: Influence of Budgeting on Staff Development in Public Secondary Schools in Sabon Tasha Education Zone, Kaduna State

S/N	Item	Respondents	Mean	SD
1.	Through budgeting, teaching staff in this school are allowed to go for workshops to update their knowledge.	Principals	3.803	0.421
		Teachers	4.446	1.408
		Non-Teaching	4.196	1.256
2.	Through budgeting, teaching staff in this school are allowed to go for symposia to update their knowledge.	Principals	3.711	1.251
		Teachers	3.264	1.108
		Non-Teaching	3.035	1.374
3.	Through budgeting, teaching staff in this school are allowed to go for in-service training to update their knowledge.	Principals	3.381	0.948
		Teachers	3.652	1.100
		Non-Teaching	3.589	0.869
4.	Through budgeting, non-teaching staff in this school are allowed to go to conferences to update their knowledge.	Principals	3.624	0.875
		Teachers	3.214	1.034
		Non-Teaching	3.517	0.990
5.	Through budgeting, teaching staff in this school are allowed to go to conferences to update their knowledge.	Principals	3.142	1.414
		Teachers	3.107	0.989
		Non-Teaching	3.964	1.111
6.	Through budgeting, teaching staff in this school are allowed to go for seminars to update their knowledge.	Principals	3.710	0.483
		Teachers	3.107	1.055
		Non-Teaching	3.142	1.016
7.	Through budgeting, non-teaching staff in this school are allowed to go to workshops to update their knowledge.	Principals	3.000	0.816
		Teachers	3.305	1.023
		Non-Teaching	3.375	0.864
8.	Through budgeting, non-teaching staff in this school are allowed to go for symposia to update their knowledge.	Principals	3.180	0.421
		Teachers	3.231	1.062
		Non-Teaching	3.321	0.974
9.	Through budgeting, non-teaching staff in this school are allowed to go for in-service training to update their knowledge.	Principals	3.701	0.831
		Teachers	3.016	1.224
		Non-Teaching	3.232	1.044
10.	Through budgeting, non-teaching staff in this school are allowed to go for seminars to update their knowledge.	Principals	3.179	0.875
		Teachers	3.462	1.291
		Non-Teaching	3.446	1.189
		Average Mean	3.43	1.01

Table 2 showed that budgeting greatly influences staff development in public secondary schools in Sabon Tasha Education Zone, Kaduna State. The table showed that the average response mean of 3.43 is higher than the rating mean of 3.0. This result implies that, through budgeting, teaching staff are allowed to go for workshops to update their knowledge as this item attracted the highest response mean of 3.803 for principals, 4.446 for the teachers and 4.196 for non-teaching staff. Detail shows that a total of 8 principals agreed against 2 principals that stayed undecided with item number 1 on the table. Also,

a total of 31 teachers strongly agreed, 46 agreed, while 9 teachers stayed undecided, against 11 that disagreed and 24 that strongly disagreed. In like manner, 12 non-teaching staff strongly agreed with item number 1 and 35 non-teaching staff that agreed, against 1 that stayed undecided while 6 disagreed and 2 non-teaching staff that strongly disagreed with the item.

Hypotheses Testing

This section tested the two null hypotheses formulated in this study using analysis of variance (ANOVA) at a 0.05 level of significance.

Hypothesis One: There is no significant difference in the opinions of principals, teachers and non-teaching staff on the influence of budgeting on staffing in public secondary schools in Sabon Tasha Education Zone, Kaduna State.

The opinions of principals, teachers and non-teaching staff on the influence of budgeting on staffing in public secondary schools in Sabon Tasha Education Zone, Kaduna State was tested using analysis of variance (ANOVA). The summary of the hypothesis tested is presented in table 3:

Table 3: Summary of ANOVA Statistics on the Influence of Budgeting on Staffing in Public Secondary Schools in Sabon Tasha Education Zone, Kaduna State

Status	Sum of Squares	Df	Mean Square	F-ratio	F-critical	Prob.
Between Groups	.028	2	.028	1.216	2.61	.837
Within Groups	161.392	185	.656			
Total	161.419	187				

Table 3 showed the f-ratio value of (1.216) at 185 degrees of freedom and 0.05 level of significance. The critical value (2.61) is higher than the f-ratio value (1.216), the probability level of significance P(.837) is higher than 0.05. This implied that budgeting had no significant influence on staffing in public secondary schools in Sabon Tasha Education Zone, Kaduna State. Hence, the null hypothesis which states that there is no significant difference in the opinions of principals, teachers and non-teaching staff on the influence of budgeting on staffing in public secondary schools in Sabon Tasha Education Zone, Kaduna State was retained.

Hypothesis Two: There is no significant difference in the opinions of principals, teachers and non-teaching staff on the influence of budgeting on staff development in public secondary schools in Sabon Tasha Education Zone, Kaduna State.

The opinions of principals, teachers and non-teaching staff on the influence of budgeting on staff development in public secondary schools in Sabon Tasha Education Zone, Kaduna State was tested using analysis of variance (ANOVA). The summary of the hypothesis tested is presented in table 4:

Table 4: Summary of ANOVA Statistics on the Influence of Budgeting on Staff Development in Public Secondary Schools in Sabon Tasha Education Zone, Kaduna State

Status	Sum of Squares	Df	Mean Square	F-ratio	F-critical	Prob.
Between Groups	138.480	2	69.240	12.660	2.61	.002
Within Group	14686.517	185	41.723			
Total	14824.997	187				

Table 4 showed the f-ratio value of (12.660) at 185 degrees of freedom and 0.05 level of significance. The critical value (2.61) is less than the f-ratio value (12.660), the probability level of

significance $P(0.002)$ is less than 0.05. This implied that budgeting had an influence on staff development in public secondary schools in Sabon Tasha Education Zone, Kaduna State. Hence, the null hypothesis which states that there is no significant difference in the opinions of principals, teachers and non-teaching staff on the influence of budgeting on staff development in public secondary schools in Sabon Tasha Education Zone, Kaduna State was rejected.

Discussions

Findings on research question one revealed that budgeting had no significant influence on staffing in public secondary schools in Sabon Tasha Education Zone, Kaduna State. This result implies that budgeting does not facilitate the provision of qualified staff in schools. Hence, the null hypothesis which states that there is no significant difference in the opinions of principals, teachers and non-teaching staff on the influence of budgeting on staffing in public secondary schools in Sabon Tasha Education Zone, Kaduna State was retained. This finding supports the findings of Ogbonnaya (2001) that budgets are often prepared hurriedly such that important issues such as staffing are lost sight of. Additionally, Ter (2018) revealed that the budget allocated in each school is not adequate to fully implement the annual budget plan; no effective transparency and accountability of financial management and control to cater for concerns like staffing.

Findings on research question two revealed that budgeting influenced staff development in public secondary schools in Sabon Tasha Education Zone, Kaduna State. This result implies that through budgeting, teaching staff are allowed to go for workshops to update their knowledge. Hence, the null hypothesis which states that there is no significant difference in the opinions of principals, teachers and non-teaching staff on the influence of budgeting on staff development in public secondary schools in Sabon Tasha Education Zone, Kaduna State was rejected. This finding is in line with the findings of Vadesto (2015) which revealed that 80% of school heads plan their school budget according to the needs of the school and directives with guidelines from the central authority like the ministry of education and vocational training. In addition, most of the heads of the school suggested that capacity building through workshops, seminars are of prime importance to support their daily activities.

Conclusion

Given the findings from this study, it was discovered that budgeting does not facilitate the provision of qualified staff in schools. Through budgeting, teaching staff are allowed to go for developmental programmes such as workshops to update their knowledge.

Recommendations

The study recommended that:

1. The principals should ensure that their budgeting process caters for the provision of qualified and competent class teachers, librarians, laboratory attendants, and every other specialist that can facilitate the attainment of the goals of secondary education.
2. Government and the principals should make provision for in-service, symposia, and conferences in the budget for non-teaching staff to boost their capacity in supporting the teaching staff in realizing the goals of secondary education.

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LEVEL OF EDUCATIONAL DIFFERENTIALS IN AWARENESS OF CONTRACEPTIVES AMONG ANTENATAL ATTENDEES IN MORO LOCAL GOVERNMENT AREA, KWARA STATE

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Abstract

Generally, inadequate awareness of contraceptives had been responsible for the increase in population, high crime rate, insecurity in the country due to high birth rate and cases of unwanted pregnancies. This makes women susceptible to infection for which contraceptives played an important role in their prevention and control of infections thereby helping to maintain the economic growth of the society. This study, therefore, examines the level of educational differentials in awareness of contraceptives among antenatal attendees in Moro Local Government Area, Kwara State. A descriptive research design of survey type was adopted for the study. The population for the study comprised all women attending antenatal clinics in Moro, Kwara State. A multistage sampling technique was used to select 230 respondents for this study. The instrument used for the study was a researcher structured questionnaire which was used for data collection from the respondents, the instrument was validated by three experts. The reliability of the study was established through a split-half method in which the reliability coefficient of 0.76 was obtained. The data generated were analyzed using Anova statistical tool. The findings for the study revealed that: Married women attending antenatal clinics were aware of contraceptives based on their educational level in Moro L.G.A., Kwara State. This is because there was a statistically significant difference at the $p < .000$ level in the awareness of contraceptives for the four educational level groups $F(3, 226) = 5.96, p < .000$. The study concluded that married women attending antenatal clinics were aware of contraceptives based on their educational level in Moro Local Government Area, Kwara State. Based on the findings, it was recommended among others that religious leaders and followers should be educated by health educators on the importance of being aware of different types of contraceptives, there should be enlightenment for women to prevent them from superstitious belief against having knowledge about contraceptives.

Keywords: Awareness, Contraceptives, Educational Level, Determinants, Antenatal Attendees

Introduction

In most parts of Africa, human reproduction is seen as a natural process that no human being can influence except for what the creator has bequeathed on us. This belief has been reinforced by a lack of appropriate information and education. The fact that family planning services are almost exclusively targeted towards women excluding men who are in most cases responsible for making reproductive health decisions. There is the absence of adequate information and many unfounded rumours made African men not generally be in favour of contraceptives (Fredrick, 2007). In developing countries, birth control has reduced the number of deaths during pregnancy by 40% (about 270,000 deaths prevented in 2008) and could reduce it by 70% if the full demand for birth control is met. Birth

control can enhance women's delivery results and their children's survival by extending the period between pregnancies, (Cleland, Conde-Agudelo, Peterson, Ross, Ahmed, Liu & Tsui, 2012).

In developing nations like Nigeria, children are seen as valuable assets that contributed meaningfully to the development of their communities where agriculture is the major source of income. Besides, aged parents and extended family relations depend on their children for maintenance at old age. Hence, they are reluctant to limit birth. The rapid population growth made Nigerian former President Babangida make policy that each family should have only four children. Consequently, the mass media started awareness campaigns on the consequences of having many children (World Health Organisation (WHO), 2013). Women's incomes, assets, weight, their children's schooling and health status increase with more access to birth control. Birth control boosts economic growth and development because of fewer dependent children, more women engaging in the workforce, and less usage of scarce resources (Cunning, Schultz, Van Braeckel, Temmerman, Roelens & Degomme, 2012). Contraceptive methods are considered the first line of defence against unwanted pregnancy.

Inadequate provision of birth control services is due to the death of trained personnel or transfer of active staff from certain posts and resulting in the poor commitment of some of them in the planning and implementation of the programme. Furthermore, there is a lack of knowledge, ranging from a lack of display of educational and communication materials to limited disclosure of methods and counselling about contraceptive methods, particularly for women, the long term and permanent ones. Also documented are the negative attitudes of service providers, poor accessibility to services, and inadequate modern family planning supplies at the health facilities (Orach, Otim, Aporomon, Amone, Okello, Odongkara, & Komakech, 2015). Women should be appropriately aware of contraceptives and the risk attached to inadequate knowledge about contraceptives to prevent pregnancy, make menstrual periods more regular and lighter, decrease menstrual cramps and acne. It can also make one less likely to get ovarian and uterine cancer, pelvic inflammatory disease, ovarian cyst and anaemia and it does not interrupt lovemaking, its related to maternal and child morbidity and mortality, it decreases mother to child transmission of HIV, its save money, its saves lives and improve health, its bring about wanted pregnancy, regulate the interval between one pregnancy and another as well as to determine the number of children in the family (World Health Organization, 2014).

Childbearing and contraceptive use are among the most important reproductive health decision that many have to make (Gartner, 2009). Birth control, also known as contraception and fertility control, is a method or device used to prevent pregnancy. Birth control has been used since ancient times, but effective and safe methods of birth control only became available in the 20th century. Birth control methods include barrier methods, hormonal birth control, intrauterine devices (IUDs) sterilization, and behavioural methods. Safe sex practices, such as the use of male or female condoms not only prevent pregnancy but can also prevent sexually transmitted infections (Taliaferro, Sieving, Brady & Bearinger, 2011). Other methods of birth control do not protect against sexually transmitted diseases. The emergency of birth control pills can prevent pregnancy if taken within 72 to 120 hours after unprotected sex. Some argue that not having sex is the best form of birth control, but only sex education may increase teenage pregnancies if offered without birth control education because it is going to lead to non-compliance (Duffy, Lynch & Santinelli, 2008).

Birth control use in developing countries has decreased the number of deaths during or around the time of pregnancy by 40% (about 270,000 deaths prevented in 2008) and could prevent 70% if the full demand for birth control were met. Birth control can improve adult women's delivery outcomes and their children's survival by extending the time between pregnancies (Cleland et al., 2012). The health benefits of contraception are associated with child spacing and the use of specific methods can play a major role in protecting the lives of infants, children, women and the family as a whole on the Africa continent.

Education has been identified as an important factor in contraceptive use in several studies. Education delays the onset of fertility by giving women more influence in their relationships when it comes to contraceptive use. A girl child's ability to gather information improves as a result of education, and their awareness of contraception rises as a result, (Canning, & Schultz, 2012). According to a study conducted in Uganda, it was found that women with higher education were more likely to use any method of contraception, compared to those with no education (Lynch, Sundaram, Maisog, Sweeney, & Buck-Louis, 2014).

This study goes on to state that the importance of female education in fertility choice cannot be underestimated, and the benefit increases with the level of education. A study conducted by Olatekan and Olufunmi (2012), found that educated women in Nigeria were more likely to use contraceptives hence decrease in their fertility, while another study, conducted by Nketiah, Arthur and Abuosi (2012) found out that women living in urban areas with a higher level of education married later and were more likely to use contraceptives, thus reducing their childbearing years and their total number of children. According to a survey of Malawian women, those with lesser levels of education are less likely to utilize contraception than those who are wealthy and educated (Palamuleni & Adebawale, 2014). Furthermore, in Kenya, women with higher education and who belonged to the wealthier quintiles used more contraceptives than women who were poorer and less educated (Hounton, Barros, Amouzou, Shiferaw, Maïga, Akinyemi & Koroma, 2015).

Ideally, women should be aware of different types of contraceptives. Nigerian women have on average nearly six children over the course of their lifetime and this is expected to be double in the next 25 years (Osakue, 2010). Many developing societies are characterized by rapid population growth due to high fertility but declining mortality. This can partly be blamed on the government's inability to provide access to information on contraception. There had been different studies on the correlation between religion, culture, poverty and awareness of contraceptives. The researchers observed that due to child preferences, some couples want to have a male child; and in cases when the child born to them is female, the family is unhappy and the couple may wish to have another child in order to have a male child. They take this decision without taking cognizance of any side effects on raising them. The situation is so serious that the birth rate continues to increase among some families that are neither well cared for nor educated. These unspaced children make it difficult for the children to have three square daily meals by their parents. It is on this premise that the researchers investigated 'Level of educational differentials in awareness of contraceptives among antenatal attendees in Moro Local Government Area, Kwara State'.

Research Question

Will there be a significant difference in the awareness of contraceptives among married women attending antenatal clinics based on the educational level in Moro L.G.A., Kwara State?

Research Hypothesis

There is no significant difference in the awareness of contraceptives among married women attending antenatal clinics based on the educational level in Moro L.G.A., Kwara State

Material and Methods

A descriptive research design of survey type was used for this study. The population for the study comprised of all married women attending antenatal clinics in Moro L.G.A., Kwara State. The population for the study was made up of 38 health centres and 384 women attending antenatal clinics. A multistage sampling technique that comprised simple random sampling technique, proportionate sampling technique and convenience sampling technique were used for the study. A simple random sampling technique was used to select eight (8) health centres out of 38 health centres in Moro local government area of Kwara State. A proportionate sampling technique was used to select 60% of the women attending antenatal clinics in each of the health centres which made a total of two hundred and

thirty (230) respondents. The convenience sampling technique was used in the administration of the questionnaire to the respondents from each of the health centres.

Table 1: List of selected health centres and numbers of respondents for the study

Name of Selected Health Centers (20%)	Number of Attendees	Percentage (60%)
1. Basic Health Centre, Arobadi	25	15
2. Basic Health Centre, Bode saadu	120	72
3. Basic Health Centre, Elemere	19	11
4. Basic Health Centre, Lanwa	18	11
5. Basic Health Centre, Malet	17	10
6. Basic Health Centre, Megida	21	13
7. Basic Health Centre, Oloru	100	60
8. Basic Health Centre, Shao	64	38
TOTAL	384	230

Fig. 1: Field work

The instrument for data collection was the researcher's structured questionnaire entitled 'Use of contraceptives among married women'. The questionnaire was divided into two sections, A and B. Section A deals with demographic data of respondents while section B elicited information from the respondents on contraceptives among married women. The response mode of the questionnaire was based on a 4-point Likert scale format of Strongly Agree (SD), Agree (A), Disagree (D), and Strongly Disagree (SD). To ensure the validity of the research instrument, it was validated by three experts in the Department of Health Promotion and Environmental Health Education, Faculty of Education, University of Ilorin for both face and content validity of the instrument. Their comments and suggestions were used to improve the quality of the research instrument. The reliability of the instrument was carried out using the split-half method of reliability with Cronbach alpha with a correlation coefficient of 0.76 which was reliable enough for the study. The completed copies of the questionnaire were collected, collated, coded, entered and analyzed. Descriptive statistics of frequency count and the percentage was used to analyze the demographic characteristics of respondents while ANOVA was used to test the hypotheses formulated for the study.

Results and Discussion

Hypothesis: There is no significant difference in the awareness of contraceptives among married women attending antenatal clinics based on the educational level in Moro L.G.A., Kwara State.

Table 2: ANOVA statistics on awareness of contraceptives among married women attending antenatal clinics based on their educational level.

	N	Mean	Std. Deviation	Std. Error	95% confidence interval for mean		Minimum	Maximum
					Lower Bound	Upper Bound		
O' level and below	69	41.5507	7.08050	.85239	39.8498	43.2516	27.00	54.00
NCE/ Diploma	47	45.3404	5.95737	.86897	43.5913	47.0896	34.00	54.00
Degrees	83	44.2169	5.41914	.59483	43.0336	45.4002	32.00	54.00
Others	31	33.0645	7.22466	1.29759	30.4145	35.7145	27.00	49.00
Total	230	42.1435	7.36813	.48584	41.1862	43.1008	27.00	54.00

ANOVA

	Sum of Square	Df	Mean Square	F	Sig.
Between Groups	3416.672	3	1138.891	28.549	.000
Within Groups	9015.593	226	39.892		
Total	12432.265	229			

The mean difference is significant at the 0.05 level

The table above shows the result of the tested hypothesis which stated that there is no significant difference in the awareness of contraceptives among married women attending antenatal clinics based on the educational level in Moro L.G.A., Kwara State. A one-way between-groups analysis of variance was conducted to explore the differences in educational level on awareness of contraceptives. Participants were divided into four groups according to their educational level (O' level and below, NCE/ Diploma, Degrees and Others). There was a statistically significant difference at the $p < .000$ level in the awareness of contraceptives for the four educational level groups $F(3, 226) = 5.96$, $p < .000$. There was not much statistically significant difference in mean scores between O' level and below, and Degree on the awareness of contraceptive methods except other levels of education which is much different.

In the research question, the majority of the respondents were of the opinion that married women attending the antenatal clinic were aware of contraceptives based on educational level. Similarly, the hypothesis was rejected; implying that there is a difference in the awareness of contraceptives among married women attending antenatal clinics based on the educational level in Moro L.G.A., Kwara State. Post-hoc comparisons using the Tukey HSD test indicated that the mean score for NCE/ Diploma (Mean = 45.34, Standard Deviation = 5.96) was significantly different from Below O' level (M = 41.55, SD = 7.08), Degrees (Mean = 44.22, Standard Deviation = 5.42) and Others (Mean = 33.07, Standard Deviation = 7.23).

Tukey Post-Hoc Tests for Differences of Mean of Educational Level on Awareness of Contraceptive among Married Women

Educational Level	Mean Difference	Std. Error	Adjusted P-value
NCE/Diploma - O' level and below	3.789	.3442	.060
Degrees - O' level and below	2.666*	.6612	.020
Others - O' level and below	8.486*	1.2498	.001
Degrees - NCE/Diploma	-1.124	.1233	.231
Others - NCE/Diploma	-12.276	.3123	.457
Others – Degrees	-11.152	2.3819	1.234

Post-hoc comparisons using the Tukey HSD test indicated that the difference between degrees holder and O' level and below is statistically significant with an adjusted P-value of 0.02 lesser than the 0.05 family error rate and a mean difference of 2.666. It was also discovered that others and O' level and below are statistically significant with an adjusted P-value of 0.02 lesser than the 0.05 family error rate and a mean difference of 8.486.

This finding is similar to the findings of Mills, Rindfuss, McDonald and Te Velde (2011), who reported that women's education is in line with lower fertility which constitutes the management of reproductive resources. Maternal education has once been linked with the reduction of child mortality among rural dwellers. Usually, educated women have more awareness and opportunities to know the importance of contraceptives in respect to birth control. The educated women are more likely to marry late, to the first pregnancy to leave more time between births and have few children in total. There is a noticeable positive relationship between education and contraceptive use (Smock, & Greenland, 2010). It was also reported in a study conducted on factors influencing the choice of family planning among couples in South West, Nigeria, that education is a determinant of awareness on the use of contraceptive methods by women of childbearing age in Nigeria (Olaitan, 2011).

Conclusions

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

- i. There is a difference in the awareness of contraceptives among married women antenatal attendees based on educational levels in Moro L.G.A., Kwara State.

Recommendations

Based on the conclusion drawn from this study, the following recommendations were made: Community leaders and followers should be educated by health educators on the importance of being aware of different types of contraceptives. There should also be enlightenment for women to prevent them from superstitious beliefs against having knowledge about contraceptives. There should be an inclusion of subjects that teaches about contraceptives in the school curriculum at all levels of education.

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ASSESSMENT OF THE EFFECT OF RICE SMUGGLING ON WELL-BEING OF SMALLHOLDER FARMERS IN OGUN STATE, NIGERIA

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Abstract

This study was carried out to assess the effect of rice smuggling on the well-being of smallholder rice farmers in Ogun State, Nigeria. The population of the study comprised of all smallholder rice farmers. Respondents were made up of 125 farmers who were randomly sampled from nine Local Government Areas (LGAs) purposively selected based on their location along Nigeria-Benin border where smuggling activities take place. A structured questionnaire was used to obtain data for the study. Data collected was subjected to descriptive and inferential statistics analysis. Findings from the study revealed that most of the respondents (75.2%) were male, 26.4% were between 41 and 50 years and only 14% are above 50 years of age. The respondents (31.2%) had at least secondary education and majority of them (65.7%) reported that rice smuggling into the country adversely affect the level of patronage of homegrown rice. Yet, the study revealed that of all the responses on effect of rice smuggling, only bribery and corruption was statistically significant to have effect on well-being of smallholder rice farmers. It was recommended that Government should provide more incentives to rice farmers by subsidizing rice production inputs and processing machines in order to encourage more production and rice milling for value addition to discourage further smuggling of rice into Nigeria.

Keywords: Smuggling, well-being, smallholder rice farmers

Introduction

Successive regimes in Nigeria have attempted to reduce poverty and food insecurity in the nation, the approaches used have habitually been adopted by the meaning given to food unavailability by the different military regimes or interventionists. For the past three decades, successive governments have been making tremendous efforts to curtail the high dependency on rice (*Oriza sativa*) importation by putting embargo on it, at the same time creating an enabling environment that will stimulate the production of home-grown rice.

The Nigerian government established the Green Revolution in 1980 as a tool to ensure sustainable rice production but the government then imported rice from America and India without protecting the home industries (Matemilola & Elegbede, 2017). Not until, recently, the democratically elected government in 2015 came up with a strong policy that totally bans the importation of foreign rice into the country and creating an enabling environment to stimulate local rice production through the provision of subsidized farm input such as fertilizer, herbicides, pesticides and improved varieties of rice seeds to farmers through cooperative groups nationwide.

Given the current globalization trend and an increasingly competitive world economy that Nigeria faces in relation to the rice economy. Nigeria, which is the largest producer of rice in West Africa and third in Africa after Egypt and Madagascar producing about 3.3 million metric tons on the average annually, falls short of meeting its local demand which is placed at about 5 million tons

(Osabuohien & Urhie, 2017). The amount of money set aside for rice importation, if redirected into the improvement of rice production such as supporting both small scale and large-scale rice cultivation and milling of rice grown in Nigeria to meet international standards like its rivals from other countries, would enable Nigeria meet its rice demand and maybe exporting rice to neighboring countries in a couple of years from now (Agro Nigeria, 2019). Rice producers in the country are struggling against imported varieties to dominate the market, the federal government shut land borders between Nigeria and neighboring countries to curtail rice smuggling into the country (FAO, 2018).

In the last 3 years, smallholder rice farmers in Ogun State have suffered a setback as a result of some difficulties facing them such as less patronage, low income, and inadequate facilities due to the activities of rice smugglers that had struck back with full force with the assistance of some personnel of the authorities concerned who had compromised at the expense of rice farmers which has led to the deteriorating well-being of these farmers (Ibrahim, 2018). People engage in smuggling to make illegal money as the products are gotten at much cheaper price, hence they tend to make ample profits. If rice smuggling into the country is not banned, it may destroy Nigeria's rice value chain attained by the previous administrations and this might lead the indigenous farmers to go into other trade (NRMAN, 2019). Smuggling can destroy the health through importation of expired, inferior and unhealthy goods, it destroys the economy drastically and it's basically an act of criminality that can lead to armed robbery and other crimes. The native farmers suffer a great deal from the effect of smuggling, with high cost of in rice production along with decreasing price of rice, farmers will not be able to make profit and this discourages them from planting. Rice smuggling prevents domestic traders from engaging in the rice business because of unfair competition (Emmanuel, 2015). Smuggled rice is sold below production cost because smugglers avoid tax payments on imported rice, hence, minimizing costs, and giving them price advantage over farmers who plant rice locally.

The World Bank report that over N6 billion representing about 25 percent of the total current annual revenue in Nigeria were collected by the Customs Service through nefarious smuggling across the sub-regional borders (World Bank, 2019). The report, further indicated that rice smuggling into Nigeria will further hamper the operational efficiency of the custom service and cause more revenue losses if urgent steps are not taken by government to tackle it. It advised a liberalization of trade policies which encourage smuggling across the borders (The Nigerian Voice, 2019). Nigeria is considered as the Africa's largest rice importer, the government and private sector therefore need to join efforts to develop ways to enhance means to improve the efficiency of domestic rice production (FAO, 2017). The government of Nigeria is expressing its determination to end the era of food imports, particularly rice smuggling and develop rice value chains to produce and add value to the product and create domestic and export markets for farmers (IFPRI, 2018). It is however, not clear whether rice smuggling into Nigeria has effect on well-being of rice farmers in Ogun State, Nigeria, which form the tenet of this research.

Objectives of the Study

The general objective of this study is to assess the effect of rice smuggling on well-being of smallholder rice farmers in Ogun State, Nigeria. Specifically, this study intends to:

- i. describe the socio-economic characteristics of smallholder rice farmers in in Ogun State;
- ii. assess the perceived effects of rice smuggling in Ogun State; and
- iii. determine the effect of rice smuggling on well-being of smallholder rice farmers in Ogun State.

Methods and Material

The study was carried out in Ogun State which is geographically located in the south west Nigeria. Geographically, it lies on longitude 7°00'N of the equators and 3°35'E of the Greenwich meridian. It covers area approximately 16,980.55 square kilometers. The State has an estimated population of 3,751,140 (Census 2006). It was created in February 1976 and borders Lagos State to the south, Oyo and Osun states to the north, Ondo to the east and Republic of Benin to the west. The State has 20 LGAs with nine of them bordering Nigeria-Benin boarders where smuggling take place. The climate is equatorial, notably with dry and wet seasons with relatively high humidity with an average daily temperature ranges between 32°C (WDI, 2016). Agriculture is one of the major occupations in Ogun State and the climate in the state favors the cultivation of rice and other food crops.

The population for the study comprises of all smallholder rice farmers in the study area. A multi-stage sampling procedure was used to select a representative sample for the study. Ogun State consists of 20 Local Government Areas, nine LGA's were purposively selected based on their location along Nigeria-Benin border where smuggling activities take place and also known for rice cultivation. Three communities from each LGA were randomly selected in the second stage. A total of 125 smallholder rice farmers were randomly selected in the third stage. A structured questionnaire was used as instrument for data collection, which were categorized according to the specific objectives set out for the study.

The data collected was analyzed using descriptive statistical such as frequency counts and percentages. Regression analysis was used to establish the effect of rice smuggling on well-being of smallholder rice farmers. The model is shown below:

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + \mu$$

Where:

Y = Cumulative effects of smuggling and associated variables on well-being of native rice farmers

β = Constant

μ = Random error term

β_1 β_6 = partial regression coefficient attached to the predictor.

X_1 = Age

X_2 = Farm size,

X_3 = Income

X_4 = Educational qualification

X_5 = Perceived effects of smuggling

X_6 = Factors contributing to rice smuggling

Results and Discussion

Socio Economic Characteristics of Respondents

The selected socio-economic characteristics of the respondents include age, sex, marital status, religion, educational qualification, family size, primary occupation, secondary occupation, monthly income, farm size, and means of farmland acquisition and years of farming experience.

Table 1 shows that 26.4% of the respondents were between 41 and 50 years and 14.4% were above 50 years. It further shows that the mean age of the respondents was 34.5 years which implies that the majority of the respondents are in their active years. This corroborates the findings of Bello-Kano (2008) who reported that rice farmers in Ogun state are in their active years. Result on Table 1 shows that the male respondents constitute 75.2% while the female constitutes 23.2%. The dominance of the male rice farmers shows that rice production is a male dominant occupation in Ogun State. However, it

has been observed that more females will probably engage in farming, especially rice production with encouragement and incentives (Bakare, 2004).

Result on Table 1 shows that 48.8% of the respondents were married while 29.6% were single and 12% were divorced. The dominance of the married ones among the respondents is likely as a result of the need to meet family food need and income, this may be as a result of the need to use family labour to compliment the efforts of the farmers. This further corroborates with the findings of Bakare (2004) who reported that farmers are married to enhance their labour strength through family labour. Results on Table 1 show that 31.2% had formal education while 18.4% of the respondents had no formal education. Literate population are easy targets for extension information dissemination. So, since more of the respondents have at least primary education, it will be easy to educate them on modern rice production information and value chain development information.

Results on table 1 indicate that 38.4% had family size of 5-6 children, 28.8% had between 1-2 children while 16.4% of the respondents had between 3 and 4 children. However, the mean family size is 4 which implies that most of the respondents have a small family size. The result further shows that all the respondents take rice production as their primary occupation. This is probably as a result of the lucrateness of the venture and recent policy initiatives that focus on rice production. Yet, 36.0 of the respondents are traders, 16.8% are marketers while 15.2% engaged in painting and 12.0% are carpenters distinctively. The need for engaging in these secondary occupations may be as a result of the need to augment income from rice farming which is in tandem with the findings of Ajala (2015) who alluded to the fact that farmers engage in numerous incomes generating activities. About 21.6% of the respondents' income falls within the range of ₦31,000 – 50,000 as their monthly income, 16.8% of the respondents' income were between ₦71,000 – 90,000 while 15.2% of the respondents earned within ₦91,000 – 110,000. This corroborates the findings of Ajala, (2015) who reported that farmers in Ogun State are narrowly above poverty line.

Table 1: Socio-Economic Characteristics of Rice Farmers

Variable	Frequency	Percentage (%)	Mean	
Age				
Less than 20years	19	15.2	34.5	
21-30years	34	27.2		
31-40years	21	16.8		
41-50years	33	26.4		
>50	18	14.4		
Sex				
Male	94	75.2		
Female	29	23.2		
Marital status				
Single	37	29.6		
Married	61	48.8		
Divorced	15	12.0		
Widowed	7	5.6		
Separated	5	4.0		
Religion				
Christianity	64	51.2		
Islam	49	39.2		
Traditional	12	9.6		
Educational Qualification				
No Formal education	23	18.4		
Primary education	36	28.8		
Secondary education	39	31.2		
Tertiary education	27	21.6		
Others	.0	.0		
Family size				
1-2	36	28.8	5.0	
3-4	21	16.8		
5-6	48	38.4		
7-8	9	7.2		
9-10	11	8.8		
Primary occupation				
Farming	125	100		
Secondary occupation				
Teaching	9	7.2		
Painting	19	15.2		
Carpentry	15	12.0		
Tailoring	9	7.2		
Trading	45	36.0		
Marketing	21	16.8		
Plumbing	7	5.6		

Source: Field survey, (2019)

Perceived Effects of Rice Smuggling

Results on Table 2 presents the perceived effects of rice smuggling. Highlights of the findings shows that 43.2% of the respondents strongly agreed that rice smuggling into the country has led to low patronage of local rice while 34.4% agreed to the statement. Additionally, 39.2% of the respondents agreed that massive rice smuggling into the country is threatening the

confidence and ability of local rice millers and farmers whereas 34.4% strongly agreed, and 12.8% disagreed with the statement respectively. Also, 40.8% of the respondents agreed that most rice farmers are unable to meet the cost incurred in production because Nigeria market is flooded with smuggled rice while 9.6% strongly disagreed. Furthermore, 28.8% agreed that many prefer smuggled rice to locally produced rice because it is cheaper while 20.0% strongly agreed. Hence, 39.2% of the respondents strongly agreed that rice smuggling discourages local production whereas 18.4% disagreed. On the issue of rice smuggling contributing to unemployment rate, 38.4% of the respondents believe that rice smuggling does not contribute to unemployment rate and 20.0% strongly disagreed. In another perspective, 44.8% strongly agreed that it is usually difficult to source for loan to finance rice production because lenders believe that smuggling will affect loan recovery. However, 38.4% of the respondents agreed that many farmers, especially youths are discouraged from rice production due to increase rate of smuggling activities in their areas. Yet, 35.2% of the respondents agreed that their income from rice production has considerably reduced due to high rate of smuggling while 21.6% strongly disagreed to the statement.

Table 2: Perceived Effects of Rice Smuggling

S/N	Statement	SA(%)	A(%)	U(%)	D(%)	SD(%)
1.	Rice smuggling into the country has led to low patronage of local rice	43.2	34.4	3.2	8	12
2.	Massive rice smuggling into the country is threatening the confidence and ability of local rice millers and farmers	34.4	39.2	7.2	12.8	6.4
3.	Most rice farmers are unable to meet the cost incurred in production because Nigeria market is flooded with smuggled rice	27.2	40.8	0	18.4	9.6
4.	People prefer smuggled rice to locally produced rice because it is cheaper.	20.0	28.8	7.2	28.8	15.2
5.	Rice smuggling discourages local production.	39.2	30.4	0	18.4	12.0
6.	Rice smuggling discourages investment in local rice production	18.4	23.3	38.4	-	20.0
7.	Rice smuggling has contributed to high unemployment rate in my area.	10.4	25.6	9.6	36.0	18.4
8.	It is usually difficult to source for loan to finance rice production because lenders believe that smuggling will affect loan recovery	44.8	26.4	0	8.8	20.0
9.	Many farmers, especially youths are discouraged from rice production due to increase rate of smuggling activities in my area.	23.2	38.4	5.6	15.2	17.6
10.	My income from rice production has considerably reduced due to high rate of smuggling.	26.4	35.2	.0	16.8	21.6

Source: Field Survey (2019)

Perceived Effect of Rice Smuggling on Well-Being of Smallholder Rice Farmers

Table 3 presents the effect of rice smuggling on well-being of smallholder rice farmers. The highest average mean rating of these factors revealed that porosity of borders (\bar{x} = 28.0), poor processing and packaging of locally produced rice (\bar{x} = 27.3) and high rate of unemployment (\bar{x} = 26.7) were major perceived effect of rice smuggling. Collectively, these imply that the porosity of Nigeria borders encouraged smuggling of rice, the more porous borders are, the more smugglers take advantage of this ugly situation. In the same vein, poor processing and packaging of locally produced rice as a factor that encourages smuggling of rice, this could affect consumers' preference due to its value addition to foreign rice. The next set of highly rated factors by the respondents include; low price of smuggled rice (\bar{x} = 26.3), nonchalant attitudes of custom officers (\bar{x} = 25.6), insufficient local rice production (\bar{x} = 23.2), bribery and corruption (\bar{x} = 21.0), and high profit accrued from smuggled rice occasioned by non-payment of tariffs and tax to the government (\bar{x} = 8).

Table 3: Perceived effect of rice smuggling on well-being of smallholder rice farmers

Possible Factors	To a larger extent (%)	To a lesser extent (%)	Not at all (%)
High rate of unemployment	45.6	36.0	18.4
Insufficient local rice production	34.4	44.0	21.6
Low price of smuggled rice	31.2	36.8	40.0
Porosity of Nigeria borders	55.2	32.8	12.0
Poor processing and packaging of locally produced rice	39.2	34.4	26.4
Nonchalant attitudes of custom officers	30.4	38.4	31.2
Bribery and corruption as impediments to avert smuggling	18.4	32.0	49.2
High profit accrued from smuggled rice occasioned by non-payment of tariffs and tax to government	32.8	49.6	17.6

Source: Field survey (2019)

Regression Analysis showing effect of rice smuggling on well-being of smallholder rice farmers.

The study findings on Table 4 shows that low price of smuggled rice (0.185), poor processing and packing of local rice (0.324), nonchalant attitudes of customs officers (0.173) and bribery and corruption (0.239) positively affect rice smuggling. One unit increase, increase rise smuggling by their corresponding coefficient. However, high rate of unemployment (0.079); insufficient rice production (-0.289); porosity of Nigerian borders (-0.089) and high profit accrued from rice smuggling (-0.208) inversely affect rice production. Implying that one unit increase of these variables decrease rice smuggling by their corresponding coefficients. Yet, the findings shows that only poor processing and packaging of local rice and bribery and corruption were significant.

In a study by Mohammed (2018) reported that rice production in Nigeria is primarily affected by poor harvesting, handling, processing and packaging. These factors tend to reduce patronage and consumption pattern and also increase the chance of consumers' preference for foreign rice. This is in

line with the findings of who reported that bribery and corruption are important factors contributing to smuggling of rice in Nigeria, (Hasan, 2011). In another perspective, poor processing and packaging of local rice as a predictor of rice smuggling, the findings of Nabegu (2016), contributes to the study were poor processing and handling of rice by farmers and processor affects the consumption of local rice by the masses.

Table 5: Regression Analysis on Factors Contributing to Rice Smuggling

	Beta	SE	t-value	P-value
Constant	-	-	-	-
High rate of unemployment	-0.079	-	-0.0887	0.271
Insufficient rice production	-0.289	-	-0.879	0.351
Low price of smuggled rice	0.185	-	1.674	0.173
Porosity of Nigeria borders	-0.089	-	-0.327	0.583
Poor processing and packaging of local rice	0.324	-	1.251	0.021*
Nonchalant attitudes of custom officers	0.173	-	-1.58	0.117
Bribery and corruption	0.239	-	2.217	0.039*
High profit accrued from smuggled rice	-0.208	-	-0.891	0.243

Conclusion

It is concluded that majority of the rice farmers are male in their active years. Also, rice smuggling into the country had a great effect on the patronage of the homegrown rice. It is evident from the study that porosity of Nigerian borders, poor processing and packaging of locally produced rice, affect the well-being of smallholder rice farmers. It is concluded that rice smuggling generally affects the entire nation's economy and make rice farmers suffered from related rice smuggling activities leading to poor well-being (financial, health, mental and psychology). If rice smuggling into the country remain unabated, it will destroy Nigeria's rice value chain development attained by the previous administration and this might lead the abandonment of rice production by indigenous farmers.

Recommendations

Based on the findings from this study, the following recommendations are made towards reducing the effects of smuggling on the well-being of smallholder rice farmers.

- It is recommended that platform for sensitization on rice farming and processing should be intensified to encourage rice value chain activities.
- The economic recovery growth plan of the current administration that has employment generation and total closure of land borders should be given more attention to encourage patronage of local rice
- Strict laws with adequate sanctions should be enacted by Federal Government to checkmate rice smuggling activities using its apparatus to reduce to a large extent, rampant cases of bribery and corruption.

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SENIOR SCHOOL AGRICULTURAL SCIENCE TEACHERS' AWARENESS AND UTILIZATION OF INNOVATIVE TEACHING STRATEGIES IN ILORIN METROPOLIS, NIGERIA

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Abstract

Poor student academic performance in both internal and external examinations has been attributed to a variety of factors, one of which is the teacher's teaching method, which is teacher-centered, and thus there is a need for teachers to employ various innovative teaching strategies that can assist them in effectively discharging their duties while also significantly improving students' learning. Therefore, this study assessed senior secondary school agricultural science teachers' awareness and utilization of innovative teaching strategies in Ilorin Metropolis, Kwara State, Nigeria. The study used a descriptive survey design approach. Two research questions and two hypotheses guided the study. The target population for this study was all the agricultural science teachers in public senior secondary schools. A simple random sampling technique was used to select 89 agricultural science teachers who participated in the study. A researcher designed questionnaire was used for data collection. Data were analyzed using percentages, mean, t-test and ANOVA. Result of the findings showed that the senior secondary school teachers' awareness of innovative teaching strategies and its utilization in teaching agriculture was high. The study revealed that there was no significant difference in the senior secondary school agricultural science teachers' awareness and utilization of innovative teaching strategies based on gender, years of teaching experience and qualification. It was concluded that senior school agricultural science teachers' awareness and utilization of innovative teaching strategies were high. Since agricultural science teachers are already familiar with the teaching strategies, workshops, seminars and symposia should be organized for in-service agricultural science teachers in order to sustain their level of awareness and utilization of innovative teaching methods.

Keywords: Innovative Teaching Strategies, Agricultural Science, Ilorin Metropolis, Senior School

Introduction

The Nigeria agricultural sector is still the major provider of employment, and it remains essential for economic development. Likewise, in most parts of the country, food security is still a serious issue and consequently food production will continue to be a major focus of training institutions and agricultural education. Education is said to be a strategic tool for social and economic change on a national and global scale. The development of human capital required handling current and future challenges of globalization and the information economy is the focus of education systems all over the world (Dike, 2014).

Education is also extensively regarded as the most operative method for transforming a people's social, psychological, physical, political, intellectual and developmental characteristics, and curriculum remains the goal for accomplishing this goal. In Nigeria, agriculture has been introduced in general school curricula at upper basic and senior school secondary education levels as an elective prevocational or optional vocational subject. The basis for offering agriculture to secondary school students is to curb negative or bad attitude to farming by many secondary school students, whose work-related choices are frequently limited and therefore exposing them to the knowledge and skills that they would need in agricultural production, should they choose to become farmers (Lencucha, *et. al.*, 2020).

Many Nigerian secondary school graduates are currently unemployed and unable to take on agriculture (Vanguard, 2019). Despite receiving secondary education, they remain oddly idle because they lack the prerequisites for job creation and expertise to survive social and environmental hazards (Africa Centre for Economic Transformation, 2020). It is evident in agricultural education literature and studies that the teaching and learning of agricultural science is faced with problems such as inadequate teaching and learning resources, inadequate qualified and competent agricultural science teachers, poor funding, lack of interest and motivation on the part of students, inadequate marketable skills acquisition by the students, majority of the teachers teach the subject theoretically and basically with the use of lecture method which is devoid of students involvement as active learners. In teaching, new methods and technologies adaptation are necessary to bring change in existing system for fulfillment of predetermined educational objectives (Vijayalakshmi, 2019).

In the same vein, United Nations (2011) contended that to meet up with the swift scientific progress in technology requires the presence of informed, resourceful, well-trained and skillful teachers who are capable in carrying out their responsibility and duties. The persistent poor performance of students in agricultural science at senior school certificate examinations have given upswing to a notion that most agricultural science teachers in secondary schools in Nigeria, possibly do not make use of different method of teaching strategies to be able to deal with some precise problems related with the teaching of agricultural science (Ige, *et al.*, 2016). In other words, it infers that teachers are conversant in agricultural science contents but not in instructional aspects. Darko, *et al.* (2015) opines that most of the time, agricultural science is imparted to the learners using lecture or descriptive method instead of a hands-on approach.

The objectives of teaching agricultural science cannot be attained, unless teachers are fortified with a diverse method of teaching in order to instill the purposes of agricultural science in students. The learning of agricultural science in real-life context is necessary for personal development and also, the development of the agricultural sector of the nation (Food and Agriculture Organization, FAO, 2015). The use of multiple and relevant learning and teaching strategies and assessment practices will provide a basis for this. In an effort to secure result-oriented agricultural science knowledge transfer in secondary schools, Kaya and Akdemir (2016) proposed the use of activity-oriented strategies like cooperative learning, guided-inquiry, demonstration, use of analogy, thinks and do, and many others. Thus, research in education in Nigeria has persistent to seek better means of instruction to improve the academic performance of students (Olanipekun & Aina, 2014).

Furthermore, the causes of gender variances in educational outcomes have been the subject of widespread study and discussion. A particular contentious issue involves the likely role played by biological differences between male and female. Another hypothesis is that male and female teachers have exclusive biases concerning how they absorb boys and girls in the classroom, on teaching strategies. A study by Wood (2012), reveals that male teachers' awareness of the utilization of instructional materials in teaching is higher than that of the female teachers. El-Emadi, *et al.* (2019), discovers that female teachers are more aware and utilize innovative teaching strategies than male teachers. As such, this study investigated the influence of agricultural science teachers' gender, teaching experience and qualification on the awareness and utilization of the innovative teaching strategies in Ilorin Metropolis. It is therefore, expected to provide baseline information which can be used in formulating new policies and innovative teaching materials towards improving the agricultural science knowledge of students in the State and the world at large.

Research Questions

The following research questions were raised and answered in the course of the study:

- i. What is the level of senior school agricultural science teachers' awareness of innovative teaching strategies in Ilorin Metropolis?
- ii. What is the level of senior school agricultural science teachers' utilization of innovative teaching strategies in Ilorin Metropolis?

Research hypotheses

- i. There is no significant difference in the senior school agricultural science teachers' awareness of innovative teaching strategies in Ilorin Metropolis based on gender, years of teaching experience and qualification.
- ii. There is no significant difference in the senior school agricultural science teachers' utilization of innovative teaching strategies in Ilorin Metropolis based on gender, years of teaching experience and qualification.

Methods and Material

This research adopted the descriptive research of the survey type. The population for the study comprised all senior school agricultural science teachers in Ilorin Metropolis, Kwara State, Nigeria. A stratified sampling procedure was adopted, it involves categorizing the agricultural science teachers into private and public-school teachers. Two hundred agricultural science teachers in the senior secondary schools were listed as the sample frame. A simple random sampling technique was used to select 89 teachers from a pool of the 200 were used as sample for the study. A researcher-designed questionnaire was used as instrument for data collection. The instrument was titled “*Senior School Agricultural Science Teachers’ Awareness and Utilization of Innovative Teaching Strategies Questionnaire (SSASTAUISQ)*”. The questionnaire was divided into two sections A and B. Section A sought demographic characteristics of the respondents and consisted of four items (gender, teaching experience, qualification, and school location). Section B of the instrument was used to collect data on agricultural science teachers’ level of awareness of innovative teaching strategies. Section B was also used to seek data on teachers’ level of utilization of innovative teaching strategies. The face and content validity of the instrument was determined by three experts in the rank of senior lecturer from the Department of Science Education, Faculty of Education, University of Ilorin. Their suggestions were incorporated and used to produce the final copy of the instrument. The instrument was pilot tested and reliability of the instrument was ensured by using a test-retest method with a coefficient of 0.78.

Research questions were answered using an average mean score while research hypotheses were tested using the independent t-test and One-way ANOVA statistic at a 0.05 level of significance.

Results and Discussions

Research Question 1: What is the level of senior school agriculture science teacher’s awareness of innovative teaching strategies in Ilorin Metropolis?

Table 1 indicates that 89 agricultural science teachers participated in this study. Responses to items that sought information on senior school agriculture science teacher’s awareness of innovative teaching strategies in Ilorin Metropolis revealed that the senior school agriculture science teacher’s awareness of innovative teaching strategies was high because the benchmark average weighted mean score stood at 1.50. Their average weighted mean score of 1.75 is above the benchmark average weighted mean score. To answer this research question, respondents’ responses on the level agriculture science teacher’s awareness of innovative teaching strategies questionnaire were collated. The data collected from the sampled teachers were analyzed using average mean rating. A total score between 1 – 1.49 = Low Level of Awareness, 1.50 – 2.0 = High Level of Awareness.

The summary of the results is as shown in **Table 1**.

Table 1: Average Mean of Senior School Agricultural Science Teachers' Awareness of Innovative Teaching Strategies in Ilorin Metropolis, Nigeria

S/N	Items	Mean	Remark
1.	Acronym Memory	1.60	HL
2.	Active Learning	1.97	HL
3.	Supervised Practice	1.94	HL
4.	Collaborative Learning	1.90	HL
5.	Experimental Learning	1.90	HL
6.	Jigsaw Learning	1.42	LL
7.	Computer-Assisted Instruction	1.73	HL
8.	Constructivism	1.69	HL
9.	Cooperative Learning	1.89	HL
10.	Demonstration	1.96	HL
11.	Field Trip	1.91	HL
12.	Individual Learning	1.96	HL
13.	Laboratory Method	1.93	HL
14.	Mind Map	1.48	LL
15.	Minimalism	1.34	HL
16.	Models	1.75	HL
17.	Multimedia	1.72	HL
18.	Problem Solving	1.97	HL
19.	Project-Based Learning	1.82	HL
20.	Role-Playing	1.88	HL
21.	Computer-Based Learning	1.76	HL
22.	Inquiry-Based Learning	1.80	HL
23.	Fish-Bowl	1.53	HL
24.	E-learning	1.67	HL
25.	Vee Mapping	1.25	HL
	Average Weighted Mean Score	1.75	HL

Key: LL= High Level of Utilization, LL = Low Level of Utilization

Research Question 2: What is the level of senior school agriculture science teachers' utilization of innovative teaching strategies in Ilorin Metropolis , Nigeria?

Table 2 shows that 89 agricultural science teachers participated in this study. Responses to items that sought information on the level of senior school agricultural science teachers' utilization of innovative teaching strategies in Ilorin Metropolis revealed that the senior school agriculture science teachers' utilization of innovative teaching strategies in Ilorin Metropolis was high because the benchmark average weighted mean score stood at 2.00 and their average weighted mean score is 2.18 which is above the benchmark average weighted mean score.

To answer the research question, respondents' responses on the level of agricultural science teachers' utilization of innovative teaching strategies questionnaire were collated. The data collected from the sampled teachers were analyzed using average mean rating. A total score between 0-1.49= Low Level of Utilization, 1.5-3.0 = High Level of Utilization. The summary of the results is shown in Table 2.

Table 2: Average Mean of Senior School Agriculture Science Teachers' Utilization of Innovative Teaching Strategies in Ilorin Metropolis, Nigeria

S/N	Items	Means	Remark
1.	Acronym Memory	1.89	HL
2.	Active Learning	2.75	HL
3.	Supervised Practice	2.62	HL
4.	Collaborative Learning	2.47	HL
5.	Experimental Learning	2.57	HL
6.	Jigsaw Learning	1.56	HL
7.	Computer-Assisted Instruction	1.83	HL
8.	Constructivism	2.06	HL
9.	Cooperative Learning	2.54	HL
10.	Demonstration	2.67	HL
11.	Field Trip	2.33	HL
12.	Individual Learning	2.71	HL
13.	Laboratory Method	2.53	HL
14.	Mind Map	1.74	HL
15.	Minimalism	1.72	HL
16.	Models	2.15	HL
17.	Multimedia	2.02	HL
18.	Problem Solving	2.55	HL
19.	Project-Based Learning	2.22	HL
20.	Role-Playing	2.28	HL
21.	Computer-Based Learning	2.03	HL
22.	Inquiry-Based Learning	2.12	HL
23.	Fish-Bowl	1.76	HL
24.	E-learning	1.83	HL
25.	Vee Mapping	1.44	HL
Average Weighted Mean Score		2.18	HL

Key: LL= High Level of Utilization, LL = Low Level of Utilization

Hypotheses Testing

Two research hypotheses postulated for this study were tested using the independent t-test and the ANOVA statistics at 0.05 level of significance.

H₀₁: *There is no significant difference in the senior school agricultural science teachers' awareness of innovative teaching strategies in Ilorin Metropolis based on gender, Teaching Experience and Qualification.*

As shown on Table 3, male agricultural science teacher had a mean score of 44.62 with standard deviation 3.35, while female agricultural science teacher had a mean score of 43.12 with a standard deviation of 4.08, the calculated t-value was 1.85 while its calculated significance value is .07 at alpha level of 0.05. On this basis, null hypothesis one was therefore not rejected. This means that there was no significant difference in the senior school Agriculture Science teachers' awareness of innovative teaching strategies in the study area based on gender. The reason was that the calculated significance value (.07) was greater than 0.05 alpha level ($p > 0.05$).

Also, Table 3 shows an F-value .21 with calculated significant .82 at 0.05 alpha level. Since calculated significance .82 is greater than 0.05 alpha level, hypothesis three is thus not rejected. This implies that there was no significant difference in the senior school agricultural science teachers' awareness of innovative teaching strategies in the study area based on years of teaching experience.

Moreover, the table shows an F-value 1.43 with calculated significant .25 at 0.05 alpha level. Since calculated significance .25 is greater than 0.05 alpha level, hypothesis three is thus not rejected.

This implies that there was no significant difference in the senior school Agriculture Science teachers' awareness of innovative teaching strategies in the study area based on qualification.

Table 3: Analysis of Difference in The Senior School Agriculture Science Teachers' Awareness of Innovative Teaching Strategies in Ilorin Metropolis Based on Gender, Teaching Experience and Qualification

Variables	N	Mean	Std.	Df	Cal.t-Value	Sig. (2-tailed)	Decision
Male	37	44.62	3.35	87	1.85	.07	H ₀₁ Not Rejected
Female	52	43.12	4.08				

Variables	Source of Variance	Sum of Square	Df	Mean of Square	F	Sig.	Decision
Teaching Experience	Between Groups	5.98	2	2.99	.21	.82	H ₀₁ Not Rejected
	Within Groups	1297.08	86	15.08			
	Total	1303.06	88				
Teaching Qualification	Between Groups	41.86	2	20.93	1.43	.25	H ₀₁ Not Rejected
	Within Groups	1261.20	86	14.67			
	Total	1303.06	88				

$p > 0.05$

H₀₃: *There is no significant difference in the senior school agricultural science teachers' utilization of innovative teaching strategies in Ilorin Metropolis based on years of teaching experience.*

As shown on Table 4, male agricultural science teacher had a mean score of 56.76 with standard deviation 10.60, while female agricultural science teacher had a mean score of 52.73 with a standard deviation of 8.91, the calculated t-value was 1.94 while its calculated significance value is .06 at alpha level of 0.05. On this basis, null hypothesis two was therefore not rejected. This means that there was no significant difference in the senior school agricultural science teachers' utilization of innovative teaching strategies in study area based on gender. The reason was that the calculated significance value (.06) was greater than 0.05 alpha level ($p > 0.05$).

Also, Table 4 shows an F-value 1.29 with calculated significant .28 at 0.05 alpha level. Since calculated significance .28 is greater than 0.05 alpha level, hypothesis four is thus not rejected. This implies that there was no significant difference in the senior school Agriculture Science teachers' utilization of innovative teaching strategies in the study area based on years of teaching experience.

Moreover, Table 4 shows an F-value .36 with calculated significant .70 at 0.05 alpha level. Since calculated significance .70 is greater than 0.05 alpha level, hypothesis six is thus not rejected. This implies that there was no significant difference in the senior school Agriculture Science teachers' utilization of innovative teaching strategies in the study area based on qualification.

Table 4: Analysis of Difference in the Senior School agricultural science Teachers' Utilization of Innovative Teaching Strategies in Ilorin Metropolis based on Gender, Teaching experiences and Qualification

Gender	N	Mean	Std.	Df	Cal.t-Value	Sig. (2-tailed)	Decision
Male	37	56.76	10.60	87	1.94	.06	H ₀₂ Not Rejected
Female	52	52.73	8.91				

	Source of Variance	Sum of Square	Df	Mean of Square	F	Sig.	Decision
Teaching Experience	Between Groups	245.58	2	122.79	1.29	.28	H ₀₂
	Within Groups	8197.86	86	95.32			Not
	Total	8443.44	88				Rejected
Teaching Qualifications	Between Groups	69.45	2	34.72	.36	.70	H ₀₂
	Within Groups	8373.99	86	97.37			Not
	Total	8443.44	88				Rejected

p > 0.05

Discussion

Five main findings can be deduced from this study. First, senior school agriculture science teachers' awareness of innovative teaching strategies in Ilorin Metropolis was high. This finding may be due to the fact that respondents have been taught about these innovative methods during their teacher training or have read about these innovative strategies from literature or from internet or they might have been taught during in-service trainings attended. This finding is in supports of Oyelekan, *et al.* (2017) who asserted that science teachers' level of awareness of the innovative teaching strategies in Ilorin, Nigeria was high.

Second, the senior school agriculture science teachers' utilization of innovative teaching strategies in Ilorin Metropolis was high. The finding may be due to the fact that the teachers being aware of innovative strategies were prompted to use the innovative teaching strategies in their teaching. This finding incongruent with that of Oyelekan, *et al.* (2017) who reported that science teachers' level of utilization of the innovative teaching strategies in Ilorin, Nigeria was high. On the contrary, Achor, *et al.*, (2010) concluded that science teachers do not utilize most of the strategies they are aware of, this is an indicator that certain concepts in science have probably not been taught using the appropriate teaching strategies.

Third, there was no significant difference in the senior school agriculture science teachers' awareness of innovative teaching strategies in Ilorin Metropolis based on gender. This may be due to the fact that both male and female agricultural science teachers were given equal opportunity to attend the in-service training by their various schools and both genders were well aware of these innovative teaching strategies. This finding is in contrary with that of Achor, *et al.*, (2010) who found that there was a significant difference in teachers' awareness of innovative teaching strategies in secondary school science in Benue State, Nigeria based on gender. Also, it was found that there was no significant difference in the senior school agriculture science teachers' utilization of innovative teaching strategies in the study area based on gender.

Fourth, there was no significant difference in the senior school agricultural science teachers' utilization of innovative teaching strategies in the study area based on years of teaching experience. These findings suggest that both fewer experienced teachers and more experienced teachers make more effective use of these innovative teaching strategies. This finding is in line with that of Oyelekan, *et al.*, (2017) who reported that there was no significant difference in science teachers' level of utilization of the innovative teaching strategies based on experience. This negates the findings of Achor, *et al.*, (2010) who reported that experienced teachers effectively used these strategies than less experienced teachers.

Fifth, there was no significant difference in the senior school agriculture science teachers' awareness of innovative teaching strategies in the study area based on qualification. This finding is in agreement with that of Khurshid and Zahur (2013) who reported that teachers with more professional qualifications were more aware of the innovative teaching methodologies than teachers with less professional qualifications. The study also revealed that there was no significant difference in the senior school agricultural science teachers' utilization of innovative teaching strategies in the study area based on qualification. This finding aligns with that of Oyelekan, *et al.*, (2017) who asserted that there was no significant difference in science teachers' level of utilization of the innovative teaching strategies based on qualifications.

Conclusion

From the result of the study, it can be concluded that the findings revealed that senior school agricultural science teachers' awareness and utilization of innovative teaching strategies in Ilorin Metropolis was high. It is also concluded that there was no significant difference in the senior school agricultural science teachers' awareness and utilization of innovative teaching strategies in the study area based on their gender, years of teaching experience and qualification.

Recommendations

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

1. The Kwara State Government, relevant agencies and school proprietors should organize workshops, seminars and conferences on innovative instructional strategies as in-service training for agricultural science teachers irrespective of their experience or qualifications.
2. School administrators should always encourage agricultural science teachers to use the innovative teaching strategies while teaching different concepts in agriculture lessons.
3. Agricultural science teachers should avail themselves of the opportunities that will be provided by the government and agencies on innovative strategies to improve the performance of their students.
4. Teachers training institutions in the Kwara State and Nigeria at large should modify their curriculum to inculcate and also make the use of innovative techniques a prerequisite for graduation.

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KNOWLEDGE AND ATTITUDE TOWARDS SEXUAL AND REPRODUCTIVE HEALTH RIGHTS AMONG REPRODUCTIVE-AGE WOMEN (RAW) IN MALETE, KWARA STATE

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Abstract

Sexual and reproductive health rights are essential human rights which are indisputable globally and therefore should be well known and embraced by all individuals. This study was carried out to assess the knowledge and attitude towards sexual and reproductive health rights among Reproductive-Age Women (RAW) in Malete, Kwara State. A descriptive research design of cross-sectional study of survey type was employed for the study. The sample for the study was drawn from the 5,467 RAW in the study area using a multi-stage sampling technique. A Sample of 360 respondents were used for the study was Researcher-developed structured questionnaire which was validated by experts in related fields and tested for reliability using split-half technique was adopted for data collection. Frequency counts and percentages were used to analyse the data collected. This study showed that the knowledge of RAW about sexual and reproductive health rights was very low (17%); knowledge of sexually transmitted infections among RAW was moderate (56%); and knowledge of RAW about the benefits of family planning was low (35%). It was also revealed that RAW in Malete showed negative attitude to sexual behaviours like socializing with opposite sex, premarital sex etc. Based on these findings, increasing the knowledge of RAW in Malete through intensive awareness and advocacy campaign on sexual and reproductive health rights was recommended.

Keywords: Knowledge, attitude, sexual and reproductive health reproductive-age women, Malete.

Introduction

Across all cultures, sexual and reproductive health is basically fundamental to individuals, families and their social, spiritual and psychological well-being. This could actually be related to the fact that sexual and reproductive health is strongly perceived to be very important throughout the life course of every individual. According World Health Organisation (WHO) (2015) sexual health is fundamental to the physical and emotional health and well-being of individuals couples and families; and ultimately to the social and economic development of communities and countries. Mercer (2014) submitted that sexual health is essentially important at every stage of life because sexual health is no longer restricted solely to sexually transmitted infections (STIs) or prevention of unplanned/unintended pregnancy but it is increasingly recognized as an additionally encompassing elements of broader reproductive health, sexual function and non-volitional sex.

Sexual and reproductive health is a state of complete physical, emotional, mental, and social well-being in all matters relating to sexuality and reproductive system, its functions and processes (United Nations Population Fund, 2016). It indicates that people are able to have a satisfying and safe sex life and that they have the capability to reproduce and the freedom to decide if, when and how often to do so. Cartwright (2008) described sexual and reproductive health as enjoyment of sexual relation without exploitation, oppression or abuse; safe pregnancy and childbirth, and avoidance of unintended pregnancies; and absence and avoidance of STIs, including HIV. This simply means the ability to have informed, consensual, safe, respectful and pleasurable sexual relationships and healthy reproductive

life. Sexuality is a central aspect of humanity and encompasses sex, gender identities and roles, sexual orientation, eroticism, pleasure, intimacy, and reproduction (United Nations, 1994).

However, Glasier, Gulmezoglu, Schmid, Moreno and Van Look (2006) opined that improving sexual and reproductive health remains an issue of public health importance worldwide. For this reason, attainment and sustainability of sexual and reproductive health entails that the sexual and reproductive health rights of all individuals must be respected, protected, and satisfied. In 2002, a WHO-convened international technical consultation on sexual health submitted that sexual and reproductive health rights include the right of all individuals, free of coercion, discrimination and violence, to: the highest attainable standard of sexual health, including access to sexual and reproductive health care services; seek, receive, and impart information related to sexuality; sexuality education; respect for bodily integrity; choose their partner; decide whether or not to be sexually active; consensual sexual relations; consensual marriage; decide whether or not, and when, to have children; and pursue a satisfying, safe and pleasurable sexual life.

Worku and Gebresilassie (2008) defined sexually transmitted infections (STIs) as forms of reproductive tract infections which are caused by organisms that are passed through sexual activity with an infected partner. United Nations Population Fund (UNFPA) (2008) stated that an estimated 340 million new cases of four common sexually transmitted bacterial and protozoan infections are acquired annually and if other STIs are added, the estimates for new infections rise to more than one billion which means that slightly more than one infection among seven adults of reproductive age. Glasier et al. (2006) reported that sexually transmitted infections, excluding HIV/AIDS, are the second most important cause of loss of health in women, especially young women, and are a substantial cause of morbidity in men. Similarly, after pregnancy-related causes, sexually transmitted infections are the second most important cause of healthy life lost in women.

Most often, people perceive sexual and reproductive health services as services related mainly to family planning and treatment of STIs/reproductive tract infections. In an attempt to correct this perception, WHO (2004a) identified the five core components of sexual and reproductive health care which are: improvement of antenatal, perinatal, postpartum, and newborn care; provision of high-quality services for family planning, including infertility services; elimination of unsafe abortions; prevention and treatment of sexually transmitted infections, including HIV, reproductive tract infections, cervical cancer and other gynaecological morbidities; and promotion of healthy sexuality. According to WHO (2010) the ability of individuals to achieve sexual health and wellbeing depends on them having: access to comprehensive information about sexuality; knowledge about the risks they face and their vulnerability to the adverse consequences of sexual activity; access to good quality sexual health care; and an environment that affirms and promotes sexual health.

WHO (2016) opined that promotion of family planning by ensuring access to preferred contraceptive methods for women and couples is essential to securing well-being and autonomy of women, while supporting the health and development of communities. Taylor (2014) contended that family planning gives women the option to wait until they are financially able to take good care for a child and gives them time to pursue educational and employment goals without worrying about the financial implications of unintended/unwanted pregnancy. Collumbien, Gerressu and Cleland (2004) submitted that family planning could prevent up to one-third of all maternal deaths by allowing women to delay motherhood, space births, avoid unintended pregnancies and unsafely performed abortions, and stop childbearing when they have reached their desired family size.

Furthermore, the use of family planning in preventing unwanted/unplanned pregnancies has been found to be a significant strategy in saving public expenditures. According to Amaral et al. (2007) reported that the unintended pregnancies prevented by California's family planning demonstration project would have incurred US\$1.1 billion in public expenses within two years, which is significantly

more than the US\$403.8 million expended on the project. Stover, Dougherty and Hamilton (2006) found a potential savings of almost US\$25 for every dollar spent on family planning at HIV/AIDS care and treatment facilities. Population Reference Bureau (2009) reported that babies born less than two years after their next oldest brother or sister are twice as likely to die in the first year as those born after an interval of three years. In addition, WHO (2007) argued that experts now recommend that after a live birth, women should wait at least two years before trying to become pregnant again in order to reduce infant health risks/deaths.

Sexual behaviour as contended by Mercer et al. (2013) is a key component of well-being which is often influenced by social norms, attitudes and health. According to Gebhard (2017), sexual behaviour is any activity (solitary, between two persons or in a group) that involves sexual arousal. Omeje, Ekwueme, and Ugwu (2013) submitted that sexual behaviour means all sexual actions and responses demonstrated to seek sexual pleasure. Sexual behaviour has also been described as a broad spectrum of behaviours, ranging from the solitary (such as masturbation, and autoerotic stimulation) to partnered sex (intercourse, oral sex, non-penetrative sex), through which humans display their sexuality (sexual behaviour, n.d). According to Eyo (2004) sexual behaviour refers to the total action of individuals in handling their sexual impulses, which actually implies the notion of expressing it as a male or female and how to live with it.

In addition, it has been established through various literature that sexual behaviour could be categorized as healthy and risky sexual behaviour. Omeje et al. (2013) argued that healthy sexual behaviour is any sexual behaviour that is planned or intended, done with caution and respect such as the one acted out between life partners or married couples. Centres for Disease Control and Prevention (2010) argued that risky sexual behaviour is generally described as behaviour (such as early sexual debut, having multiple sexual partners, having sex while under the influence of alcohol or drug) that increases one's susceptibility of contracting STIs/HIV and experiencing unplanned pregnancies.

Sexual and reproductive health rights are essential human rights which are indisputable globally and therefore should be well known and embraced by all individuals, especially the RAW. RAW, in the context of this study, are described as women between the age of 15 – 49 years regardless of their marital status.

This study was particularly targeted at the group in order to find out their knowledge and attitude to sexual and reproductive health rights. However, to the best knowledge of the researcher, no study has been conducted among RAW in Malete, Kwara State investigating their knowledge and attitude to sexual and reproductive health rights. Upon this premise, the researcher was prompted to investigate the knowledge and attitude of RAW to sexual and reproductive health rights. The researcher's experience revealed that women in the study area are often regarded as third parties in issues that are strongly connected to their sexual and reproductive health care because of the unequal power relation between women and men which reduces their power of decision making over their sexual and reproductive health. Similarly, the researcher's informal conversation with some female members of the community showed that their sexual and reproductive health rights concerning child birth and spacing, consensual sex life among others are usually violated probably due to their inadequate knowledge about these rights. Hence, the researcher conducted this study to actually investigate the knowledge and attitude towards sexual and reproductive health rights among RAW in Malete, Kwara State.

Objectives of the Study

The general objective of the study was to assess the knowledge and attitude towards sexual and reproductive health rights among reproductive-age women (RAW) in Malete, Kwara State.

The specific objectives were to:

1. To determine the knowledge of sexual and reproductive health rights among RAW in Malete, Kwara State.

2. To find out the attitude towards sexual behaviour among RAW in Malete, Kwara State.

Research Questions

In order to guide the conduct of this study, the following research questions were raised and answered:

1. What is the knowledge of sexual and reproductive health rights among RAW in Malete, Kwara State?
2. What is the knowledge of STIs/HIV among RAW in Malete, Kwara State?
3. What is the knowledge of right to the benefits of family planning among RAW in Malete, Kwara State?
4. What is the attitude towards sexual behaviour among RAW in Malete, Kwara State?

Methods and Material

A descriptive research design of cross-sectional survey type was employed to assess the knowledge and attitude towards sexual and reproductive health rights among RAW in Malete, Kwara State. The study population comprised all the RAW in the study area, estimated to be 5467. The sample size of 359 (approximated to 360) was determined with the aid Research Advisor application. The sample for the study was then selected using a multi-stage sampling technique. At the first stage, cluster sampling technique was used to divide Malete community into 18 clusters based on proximity and each of the clusters comprised a group of households. At the second stage, simple random sampling technique was adopted in choosing 20 RAW within each cluster using random numbers. At the third stage, systematic random sampling technique was employed to select a starting point (first household) within each cluster by spinning a bottle (grid method). Lastly, purposive sampling technique was used to choose the index person from the clusters.

Data used for this study was gathered through the use of researcher developed questionnaire tagged “Questionnaire on Knowledge and Attitude to Sexual and Reproductive Health Rights among RAW (QKASRHRAW)”. A modified four-point Likert rating scale of Strongly Agree (SA) = 1, Agree (A) = 2, Disagree (D) = 3 and Strongly Disagree (SD) = 4 was adopted in designing QKASRHRAW. The research instrument was subjected to content and face validity by giving it to three (3) experts in related fields. The corrections, modifications and suggestions raised by them were used to adequately improve the original draft of the questionnaire. During the second look, the jurors adjudged the instrument valid. The instrument’s reliability was established with the use of split-half method and a reliability coefficient of 0.71 was obtained, showing that the measuring instrument was very reliable.

The data obtained were collated, coded and analysed using frequency counts and percentages. In order to answer the three (3) research questions on the knowledge of RAW about sexual and reproductive health rights, STIs and benefits of family planning, percentage score statements 80 percent and above specified Very High (VH); 79 per cent – 60 per cent indicated High (H); 59 per cent – 40 per cent classified as Moderate (M); 39 per cent – 20 per cent considered Low (L); and less than 20 per cent signified Very Low (VL) knowledge. In answering the fourth research question which is on the attitude of RAW to the identified sexual behaviours, the Likert scale Strongly Agree (SA) and Agree (A) were merged and tagged “Positive Attitude” indicating healthy sexual behaviour while that of Disagree (D) and Strongly Disagree (SD) were also merged and tagged “Negative Attitude” indicating risky sexual behaviour.

Results and Discussion

Research Question 1: What is the knowledge of sexual and reproductive health rights among RAW in Malete, Kwara State?

Table 1: Frequency and percentage analysis of the knowledge of RAW about sexual and reproductive health rights
(n = 360)

S/N	Items Description	Frequency	Percentage (%)	Decision
1.	Women have right to freely make autonomous decisions about their sexual and reproductive issues	57	15.83	Very low
2.	Women have right to be free from sexual violence	68	18.89	Very low
3.	Women have right to consensual sex	65	18.05	Very low
4.	Women have right not be subjected to torture or ill treatment	61	16.94	Very low
5.	Women have right to be free from discrimination and being treated with inequity	57	15.83	Very low
6.	Women have right to healthy, enjoyable and violence-free relationships	54	15.00	Very low
7.	Wife and husband have equal right in making decision on family size and child spacing	65	18.05	Very low
Average Total			17.00	Very low

Table 1 reveals that the knowledge of sexual and reproductive health rights among RAW in Malete, Kwara State was very low (17%).

Research Question 2: What is the knowledge of STIs/HIV among RAW in Malete, Kwara State?

Table 2: Frequency and percentage analysis of the knowledge of STIs/HIV among RAW
(n = 360)

S/N	Items Description	Frequency	Percentage (%)	Decision
1.	Having sex while under the influence of alcohol or drug makes one susceptible to having STIs/HIV	201	55.83	Moderate
2.	Having multiple sex partners makes an individual prone to contacting STIs/HIV	198	55.00	Moderate
3.	Having sexual intercourse with sex workers is a risk factor of STIs/HIV	216	60.00	High
4.	HIV can be transmitted through mosquito bite	194	53.89	Moderate
5.	HIV can be transmitted through hand shaking or hugging	209	58.06	Moderate
6.	The use of condom during sexual intercourse protect against STIs/HIV	192	53.33	Moderate
7.	Sharing of sharp objects is a cause of HIV	201	55.83	Moderate
Average Total			56.00	Moderate

Table 2 shows that the knowledge of STIs/HIV among RAW in the study area was moderate (56%). Only their knowledge about having sexual intercourse with sex workers is a risk factor of STIs/HIV was high (60%).

Research Question 3: What is the knowledge of the right to benefits of family planning among RAW in Malete, Kwara State?

Table 3: Frequency and percentage analysis of the knowledge of RAW about the benefits of family planning (n = 360)

S/N	Items Description	Frequency	Percentage (%)	Decision
1.	Family planning reduces the risk of maternal mortality and morbidity resulting from repeated pregnancies	126	35.00	Low
2.	Birth timing in relation to the mother's age helps in avoiding a number of congenital anomalies which are associated with advancing maternal age	101	28.05	Low
3.	Proper child spacing helps in improving and maintaining the health of mothers	165	45.83	Moderate
4.	A child is likely to receive full share of care and love from his parents when the family size is moderate and births are properly spaced	162	45.00	Moderate
5.	Limiting the family size enhances child growth and development	134	37.22	Low
6.	Family planning is an essential strategy of insuring survival of all children in the family	104	28.89	Low
7.	Household resources are economically managed when intervals between pregnancies/births are properly regulated	90	25.00	Low
Average Total			35.00	Low

Table 3 indicates moderate level of knowledge among RAW as regards “proper child spacing helps in improving and maintaining the health of mothers” (45.83%) and “a child is likely to receive full share of care and love from his parents when the family size is moderate and births are properly spaced” (45%). However, the overall knowledge of RAW about the benefits of family planning was low (25%).

Research Question 4: What is the attitude to sexual and reproductive health rights among RAW in Malete, Kwara State?

Table 4: Frequency and percentage analysis of RAW's attitude to sexual behaviour in Malete, Kwara State (n = 360)

S/N	Item Description	SA	A	Positive attitude (%)	D	SD	Negative attitude (%)
1.	There is nothing bad in engaging in homosexuality	4 (1.11%)	10 (2.78%)	3.89	88 (24.44%)	258 (71.67%)	96.11
2.	It is acceptable to have baby out of wedlock	9 (2.50%)	28 (7.77%)	10.27	174 (48.33%)	149 (41.40%)	89.73
3.	It is appropriate to socialize with the opposite sex	42 (11.67%)	66 (18.33%)	30	94 (26.11%)	158 (43.89%)	70
4.	It is all right to have baby out of wedlock	59 (16.4%)	37 (10.27%)	26.67	135 (37.50%)	129 (35.83%)	73.33
5.	There is nothing bad in having anal sex	33 (9.17%)	42 (11.67%)	20.84	138 (38.33%)	147 (40.83%)	79.16
6.	It is acceptable to have physical intimacy (e.g. hugging) with the opposite sex	12 (3.33%)	26 (7.22%)	10.55	121 (33.61%)	201 (55.83%)	89.44
7.	There is no problem in practising extramarital affair	0	5 (1.39%)	1.39	69 (19.17%)	286 (79.44%)	98.61
Average Total				14.80			85.20

It is shown through table 4 that RAW in Malete, Kwara State showed negative attitude to the described sexual behaviours because the average total score of the negative attitude (85.2%) was higher than that of the positive attitude (14.2%). This simply implies that all the sexual behaviour identified in the table were risky sexual behaviours.

Results and Discussion

The conduct of this study was guided by four research questions which focused on the knowledge of sexual and reproductive health rights, knowledge of the right to benefits of family planning and attitude to sexual and reproductive health rights among RAW in Malete, Kwara State. The findings of the study revealed that the knowledge of RAW about sexual and reproductive health rights was very low (17%). This assertion is corroborated by that of Igbokwe (2011) which reported low level of knowledge of sexual and reproductive health rights among childbearing mothers in Nsukka Local Government Area of Enugu State. However, it is apparently credible to contend that this low knowledge level of sexual and reproductive health rights is a major factor contributing to the sexual and reproductive ill health prevalent among women aged 15- 44 in low income communities as submitted by Wiklund (2015).

Furthermore, this study showed that RAW in Malete showed negative attitude to sexual behaviours like socializing with opposite sex, premarital sex, extramarital sex/affairs, homosexuality, having physical intimacy with the opposite sex etc. Although this submission negates that of Twenge, Sherman and Wells (2015) which reported positive attitude towards most of these identified sexual behaviours among the Americans. However, the researcher agrees with the finding of this study because in most African communities, especially in areas like the study area, good sexual values are often embraced and promoted as they are seen as societal pride and dignity.

Conclusion

Based on the findings of this study, the following conclusions were drawn:

1. The knowledge of RAW about sexual and reproductive health rights was very low.
2. Knowledge of RAW about the right to benefits of family planning was low.
3. The attitude of RAW was negative to sexual and reproductive health rights like socializing with opposite sex, premarital sex, extramarital affairs, homosexuality, anal sex, having physical intimacy with the opposite sex and having baby out of wedlock; all of these behaviours were, therefore, tagged risky sexual behaviours.

Recommendation

The following recommendations were given in accordance with the findings of this study:

1. There is need to increase the knowledge of RAW in Malete on sexual and reproductive health rights through intensive awareness and advocacy campaigns by the health care providers and community leaders.
2. Providing the study population with clear and effective health information on the benefits of family planning to children, parents, families and the country at large.
3. Integration of sexual and reproductive health information to antenatal and postpartum services and commencement of the teaching of sexual and reproductive health education to females from childhood.

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PERCEIVED EFFECTS OF PARENTAL DIVORCE ON EMOTIONAL HEALTH OF SECONDARY SCHOOL STUDENTS IN ILORIN WEST LOCAL GOVERNMENT AREA OF KWARA STATE

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Abstract

Every human institution is faced with one problem or another, the problem facing the family unit today is mostly divorce. The study examined the perceived effects of parental divorce on emotional health of secondary school students in Ilorin West Local Government Area of Kwara State. Specifically, this study investigated if (i) stress (ii) anxiety and (iii) fear are effects of parental divorce on emotional health of secondary school students in Ilorin West Local Government Area of Kwara State. The population comprised of all government secondary schools in Ilorin West Local Government Area of Kwara State. Ilorin West Local Government had a total number of forty-two (42) schools. A multi stage sampling technique consisting of stratified, proportionate and accidental sampling techniques was used to select 381 respondents for the study. A validated and reliable questionnaire was used for data collection. A correlation coefficient of 0.76r was obtained through split-half method using Cronbach Alpha. The demographic data of respondents was analysed using descriptive statistics of frequency count and percentage, percentile was used for answering the research questions while inferential statistics of chi-square (χ^2) was used to analyse the postulated null hypotheses at 0.05 alpha level. The findings revealed that; Stress is a perceived effect of divorce on emotional health with the cal. χ^2 value of 796.40 > the critical value of 16.92 at df 9 @ 0.05 alpha level; Anxiety is a perceived effect of divorce on emotional health with the cal. χ^2 value of 630.80 > the critical value of 16.92 at df 9 @ 0.05 alpha level and Fear is a perceived effect of divorce on emotional health with the cal. χ^2 value of 595.36 > the critical value of 16.92 at df 9 @ 0.05 alpha level. The study concluded that stress, anxiety and fear are perceived effects of divorce on emotional health of secondary school students in Ilorin West Local Government Area of Kwara State. It is therefore, recommended that School counsellors should organize a counselling session with parents, a marital education can reduce anxiety for their children and class teacher could also reduce the effect of divorce on school students.

Keywords: Effect, Parents, Divorce, Emotional Health and Student

Introduction

Every human institution is faced with one problem or another, the problem facing the family unit today is mostly divorce. It is a social problem which has become a threat to the existence of marriage institution. Divorce as a matter of facts breaks through bonds which once united couple and their family suffers the consequences (Nicholas 2005). Amato (2012) defined divorce as the final termination of marital union, cancelation of the legal duties and responsibilities of marriage and dissolving the bonds of matrimony between couples.

Divorce therefore, is widely viewed as a personal misfortune for either of the spouse in any society but it is a universal escape for the inevitable tension of marriage however, divorce can be seen as the dissolution of marriage contract between a man and a woman by the judgment of a court of competent jurisdiction, or by an act of legislature (Bourque, 2009). As a result of divorce on broken home, children

fail to develop ties to one or few important persons in the family and when these ties are disrupted, children are taught to be impaired in developing close relationship in adulthood (Bala 2006).

Sanders (2008) further affirmed that those children from divorced family feel bitter and carry tension and anxiety to school. As a result, they cannot think clearly or critically as a happy person and at the same time cannot concentrate on anything taught at school, when a mother is out of home, leaving the children under the charity, tutelage and mercy of step mother, these children are made to face many problems, like emotional disturbance (fear and insecurity), not inspired to study malnutrition, sickness and disease, negligence, as such they are not likely to perform up to expectation at school. Boyan (2011) opined that psychological effect of divorce on children can cause them to develop anxiety disorders where they experience overwhelming fear of being abandoned.

Marriage is an ageless contract desired and designed by God for the purpose of unity of man and woman for procreation. This divine institution is losing its glory. The marital instability can be attributed to various factors such as lack of trust, abuse, and lack of communication and parental or friends influence. Which all leads to divorce, this problem does not border only on Ilorin metropolis of Kwara State but a universal problem. Divorce is a very disastrous situation for everyone concerned. It has a negative effect on the married couple, their children, friends, relatives and the general public, but the children are the mostly affected. Children of divorced parents usually exhibit insecurity, irritability and endless desire for attention. The children's skill and perception became dampened and may lead to poor overall emotional health status in both home and school. In fact, the effects are numerous. These problems have therefore prompted the researcher to carry out his study on the effects of divorce on emotional health of secondary school students, in Ilorin West Local Government Area of Kwara state.

Hawthorne (2012) asserted that divorce is a terrible thing for everybody concerned, it has a negative effect on married couple, their children, their friends and relative but it is more devastating for the growing children as they are confronted in their home by situations and experience that may be frustrating, unpleasant, and capable of arousing anxiety from time to time in their lives, some of these negative experiences arouse fear, pain and stress. Barrett and Russell (2015) opined that emotions involve different components, such as subjective experience, cognitive processes, expressive behaviour, psychophysiological changes, and instrumental behaviour, the different components of emotion are categorized somewhat differently depending on the academic discipline. Emotions can be defined as a positive or negative experience that is associated with a particular pattern of physiological activity, emotions produce different physiological, behavioural and cognitive changes, the original role of emotions was to motivate adaptive behaviours that in the past would have contributed to the survival of humans. Emotions are responses to significant internal and external events (Schacter, Gilbert, Wegner, & Hood, 2011).

Dixon (2013) stated that emotional health is a state of positive psychological functioning. It can be thought of as an extension of mental health; it's the "optimal functioning" end of the thoughts, feelings, and behaviours that make up both our inner and outer worlds. It includes an overall experience of wellness in what we think, feel, and do through both the highs and lows of life. Achieving emotional health and wellbeing is an active process that involves not only identifying emotions but also shaping how we think about them and how we act (or refrain from acting) on them. Marriage is one of the oldest socially recognized institution and essential for the procreation of children and satisfaction of our sexual urges, in different societies there are different methods of marriage. Some of the societies allow a male to marry only a single female whereas in other societies a husband is allowed to have more than one wife (Rahim, 2011).

Demo and Acock (2008) noted that adolescents living in single-parent families can “acquire certain strengths, notably a sense of responsibility, as a consequence of altered family routines”. It is likely, however, that such benefits will accrue only where the altered routines are structured and predictable. Changes that involve the emergence of more chaotic patterns of family life are unlikely to be beneficial for children, even if some strive to furnish a sense of order where their parents fail to do so. Butler (2005) note that the children in their study demonstrated “an active role helping their parents cope with divorce, even in circumstances where parents did not seem able to contain their more negative emotions and impulses”. Children also benefit where a parental separation provides release from an aversive family situation; for example, where the parental relationship is highly conflicted and the children are drawn into the conflict (Booth and Amato 2010, Carbone 2008) or where the child’s relationship with a parent figures is of poor quality (Brown & Carole, 2012).

Similarly, some societies will not allow a woman to have more than one husband whereas other societies will not mind a woman having more than one husband. In some cases, the parent arranges the marriage whereas in others the men and women arrange their marriage. Marriage is a term for social relationships of husband and wife or of plural mates, also used for the ceremony of uniting marital partners (Rahim, 2011). McIntosh and Long (2006) stated that divorce also known as dissolution of marriage, is the termination of a marriage or marital union, the cancelling or reorganizing of the legal duties and responsibilities of marriage, thus dissolving the bonds of matrimony between a married couple under the rule of law of the particular country or state.

Emotional well-being is a term that has been used increasingly in recent decades. The implications of decreased emotional well-being are related to mental health concerns such as stress, depression, and anxiety. These in turn can contribute to physical ill-health such as digestive disorders, sleep disturbances, and general lack of energy, according to (Harvard medical school 2010). Emotional well-being is also one of two aspects of personal well-being that can be measured in quantitative quality of life assessments, the other being 'life evaluation', the evaluation of one's life in general against a scale (Kahneman, Daniel and Angus, 2010). Miller (2013) stated that some of the effects associated with divorce include academic, emotional and psychological problems, although this may not always be true, studies suggest that children from divorced families are likely to exhibit such behavioural issues among which are anxiety, fear stress than those from non-divorced families. Arbuthnot and Gordon (2007) posited that parental separation has been reported in the literature as being associated with a wide range of adverse effects on children’s wellbeing such as fear and anxiety both as a short-term consequence of the transition and in the form of more enduring effects that persist into adulthood, effects reported include adverse impacts on cognitive capacity.

Educational background means the same thing as “education.” Therefore, education can be defined as the process or art of imparting knowledge, skill and judgment, adding the word “background” may sound more impressive, but the meaning is the same (Mulholland, Watt, Philpott & Sarlin 2009). Hetherington (2009) opines that, there are bound to be conflict when one partner tries to claim educational superiority over the other. When there are no similarities in educational background they tend to view things or issues differently which pose problems to their marital status. It is therefore a vital importance that the difference in their educational background should be such that permits intelligent exchange of viewpoints and most important of all at social discussion. The man or woman should at least partake in homely or formal discussions. No partner is happy if his or her partner is unable to keep pace with discussion or debates. The reverse is the case when the educational differences are such that militates against one being unable to discuss in social gathering (Hetherington, 2009).

It is however, imperative to note that the purpose of these study is aimed at examining the effect of stress as a result of parental divorce on emotional of health of secondary school students, also intended at assessing the effect of anxiety as a result of parental divorce on emotional of health of secondary school students and lastly, the purpose of these study is targeted at evaluating the effect of fear as a result of parental divorce on emotional of health of secondary school students in Ilorin West Local Government Area of Kwara State, Nigeria.

Research Questions

The following questions were raised to guide this study:

1. Will stress be a perceived effect of divorce on emotional health of secondary school students in Ilorin West Local Government Area of Kwara State?
2. Will anxiety be a perceived effect of divorce on emotional health of secondary school students in Ilorin West Local Government Area of Kwara State?
3. Will fear be a perceived effect of divorce on emotional health of secondary school students in Ilorin West Local Government Area of Kwara State?

Research Hypotheses

The following null research hypotheses were tested:

H0₁: Stress will not significantly be a perceived effect of divorce on emotional health of secondary school students in Ilorin West Local Government Area of Kwara State.

H0₂: Anxiety will not significantly be a perceived effect of divorce on emotional health of secondary school students in Ilorin West Local Government Area of Kwara State.

H0₃: Fear will not significantly be a perceived effect of divorce on emotional health of secondary school students in Ilorin West Local Government Area of Kwara State.

Methodology

The research design that was used for this study is descriptive research design of survey type because it is suitable for gathering data from relatively large number of cases at a particular time. Colorado State University (CSU, 2014) described survey research as a chosen method of data collection among educationists. CSU (2014) contends that the popularity of survey research and its consistency is due to its efficiency and versatility.

The population of the study comprises of all government secondary schools in Ilorin West Local Government Area of Kwara State, Nigeria. According to the information obtained from the Federal Ministry of Education (FME, 2018), a total number of forty- two (42) schools were recorded in Ilorin West Local Government Area of Kwara State as at the time this research was carried out. A multi-stage sampling technique was used for the study.

There were forty-two (42) government secondary schools in Ilorin West Local Government Area of Kwara State. The first stage involved the use of systematic techniques which was used to select twenty-two percent (22%) of the total number of schools in the Local Government which amounted to nine (9) schools, this was done balloting system. The nine (9) secondary schools selected were: Mount Carmel Secondary School, Ansarul-Islam Senior Secondary School, Barakat Community Secondary School and Government Girls Day Secondary School, Ilorin Grammar School, Baboko Community Secondary

School, College of Arabic and Islamic Studies, Queen Elizabeth School and Government High School, Ilorin The second stage involved the use of proportionate sampling method to select ten percent (10%) of secondary school students in each of the nine (9) secondary schools selected. This amounted to a total number of three hundred and eighty-one (381) respondents. The third stage involved the use of accidental sampling technique to select respondents from each of the senior classes in participating schools. Therefore, students will be allowed to participate voluntarily. In all, a total of 381 respondents formed the sample for the study. This sample size is deemed adequate based on research Advisory (2006) asserted that for a population that runs in ten thousand, a sample size that is adequate enough for this study is between 380 and 383.

Table I: shows the data of the respondents

S/N	Name of Schools	Total Number of Students	10% of Population in Each Schools Selected	Sample Selected
1.	Mount Carmel	280	28.0	28
2.	Ansarul-Islam	327	32.7	32
3.	Barakat	813	81.3	81
4.	Government Girls	312	31.2	31
5.	Ilorin Grammar	318	31.8	31
6.	Baboko	366	36.6	36
7.	CAIS	421	42.1	42
8.	Queen	381	38.1	38
9.	Government High School	623	62.3	62
	Total:	3, 841	384.1	381

The research instrument that was used in gathering and collecting data for this study was a researcher's developed structured questionnaire was designed by the researcher after a careful study of related literature. The questionnaire comprises of two sections. Section A acquires demographic information of the respondents while Section B collects information on the level of awareness of divorce effect on emotional health of secondary school students. The questionnaire was patterned after the four-point Likert type rating scale format of Strongly Agree (SA) = 4 points, Agree (A) = 3 points, Disagree (D) = 2 points and Strongly Disagree = 1 point was used. Ogunbiyi (2003) noted that Likert scale technique would enable the respondent to indicate the degree of their beliefs in a given statement and encourages them to express their thoughts freely.

To ascertain the content validity of the instrument, copies of the questionnaire carefully constructed by the researcher were examined by three (3) other experts in the Department of Health Promotion and Environmental Health Education, University of Ilorin. In line with the recommendation of the supervisor, corrections and suggestions were incorporated into the final draft of the instrument for this study. To determine the reliability of the instrument, the researcher adopted a split-half method. The instrument was administered to twenty (20) respondents outside the study area (Secondary Schools at Ilorin South Local Government Area of Kwara State) once. The questionnaires were collected after two weeks interval and was analysed and correlated using Pearson Product Moment Correlation (PPMC) to determine the constituency of the instrument. A coefficient of 0.76r was obtained which shows that the instrument is reliable for this study. The rights and dignity of participants and privacy were considered.

The administration of the instrument (questionnaire) was carried out personally by the researcher with the help of two research assistants who were trained prior to the time of administration. The researcher was obligated to maintain professional integrity, unbiased and subjective quest for facts and knowledge. Data and information gathered from respondents were kept highly confidential and prompt retrieval of completely filled questionnaires was ensured to avoid loss. The data that was obtained during administration was sorted, coded and subjected to appropriate statistical analysis. Section A which contains the demographic data of respondents was analysed using descriptive statistics of frequency count and percentage, percentile analysis was used to answer the research questions while inferential statistics of chi-square (χ^2) was used to analyze the postulated null hypotheses at 0.05 alpha level, using Statistical Package for Social Sciences (SPSS) version 23.0.

Results and Discussion

Hypotheses Testing

Three null hypotheses were postulated and tested for this study.

Hypothesis One: Stress will not significantly be a perceived effect of divorce on emotional health of secondary school students in Ilorin West Local Government Area of Kwara State.

Table 2: Chi-square analysis showing the characteristics of perceived effect of stress on emotional health of secondary school students.

SN	Statement	SA F/%	A F/%	D F/%	SD F/%	Row Total	Cal X ²	df	Crit . Val ue	Decisio n
1	students from divorced parent often experience stress	112 (29.4)	224 (58.8)	28 (7.3)	17 (4.5)	381 (100)				
2	students from divorced parents often experience headaches as a result of stress at home	117 (30.7)	242 (63.5)	14 (3.7)	8 (2.1)	381 (100)	796.4 0	9	16.9 2	H ₀ Rejecte d
3	student from divorced parents can experience tension as a result of stress	161 (42.3)	206 (54.1)	10 (2.6)	4 (1.0)	381 (100)				
4	student from broken homes often have poor rapport with people as a result of stress	106 (27.8)	257 (67.5)	13 (3.4)	5 (1.3)	381 (100)				
Column Total		496	929	65	34	1524				

P<0.05 alpha level

Table 2 revealed that the calculated chi-square value of 796.40 was greater than the critical value of 16.92 with 9 degree of freedom at 0.05 alpha level of significant. Therefore, the null hypothesis was rejected which mean that stress will be a perceived effect of divorce on emotional health of secondary school students in Ilorin-West local Government Area of Kwara state.

Hypothesis Two: Anxiety will not significantly be a perceived effect of divorce on emotional health of secondary school students in Ilorin West Local Government Area of Kwara State.

Table 3: Chi-square analysis showing the characteristics of perceived effect of anxiety on emotional health of secondary school students.

SN	Statement	SA F/%	A F/%	D F/%	SD F/%	Row Total	Cal X ²	df	Crit. Value	Decision
1	anxiety as a result of parent divorce may expose children to suicidal attempt	176 (46.2)	199 (52.2)	6 (1.6)	0 (0)	381 (100)				
2	anxiety as a result of parent divorce may expose children to extensive thinking which leads to heart failure	153 (40.2)	182 (47.7)	26 (6.8)	20 (5.3)	381 (100)	630.80	9	16.92	H ₀ Rejected
3	student from divorced parents may become anxious over marriage	129 (33.9)	173 (45.4)	52 (13.6)	27 (7.1)	381 (100)				
4	students from divorced parent may have anxiety over their failure	196 (51.4)	163 (42.8)	19 (4.9)	3 (0.9)	381 (100%)				
	Column Total	654	717	103	50	1524				

P<0.05 alpha level

Table 3 revealed that the calculated chi-square value of 630.80 was greater than the critical value of 16.92 with 9 degree of freedom at 0.05 alpha level of significant. Therefore, the null hypothesis was rejected which mean that anxiety will significantly be a perceived effect of divorce on emotional health of secondary school students in Ilorin-West local Government Area of Kwara state.

Hypothesis Three: Fear will not significantly be a perceived effect of divorce on emotional health of secondary school students in Ilorin West Local Government Area of Kwara State.

Table 4: Chi-square analysis showing the characteristics of perceived effect of fear on emotional health of secondary school students.

SN	Statement	SA F/%	A F/%	D F/%	SD F/%	Row Total	Cal X ²	Df	Crit. Value	Decision
1	children from broken homes may experience persistence fear (unreasonable fear)	164 (43.1)	177 (46.5)	13 (3.4)	27 (7.1)	381 (100)				
2	children from broken homes may experience low self-esteem	116 (30.5)	196 (51.4)	24 (6.3)	45 (11.8)	381 (100)	595.36	9	16.92	H ₀ Rejected
3	children from broken home may experience slurred speech	160 (42)	184 (48.3)	29 (7.6)	8 (2.1)	381 (100)				
4	children from broken homes may often experience irregular heart beat	163 (42.8)	188 (49.3)	17 (4.5)	13 (3.4)	381 (100)				
	Column Total	603	695	83	93	1524				

P<0.05 alpha level

Table 4 showed that the calculated chi-square value of 595.36 was greater than the critical value of 16.92 with 9 degree of freedom at 0.05 alpha level of significant. Therefore, the null hypothesis was rejected which mean that fear will significantly be a perceived effect of divorce on emotional health of secondary school students in Ilorin-West local Government Area of Kwara state.

Discussion of Findings

In research question one, majority of the respondents were of the view that stress is a significant effect of parental divorce on emotional health as perceived by secondary school students in Ilorin West Local Government Area of Kwara State, Nigeria. Consequently, hypothesis one was rejected, implying that stress is a perceived effect of divorce on emotional health of secondary school students in Ilorin-West local Government Area of Kwara state, Nigeria. The result was in line with the findings of Hawthorne (2012) asserted that divorce is a terrible thing for everybody concerned, it has a negative effect on married couple, their children, their friends and relative but it is more devastating for the growing children as they are confronted in their home by situations and experience that may be frustrating, unpleasant, and capable of arousing anxiety from time to time in their lives, some of these negative experiences arouse fear, pain and stress.

Also, in research two, majority of the respondents were of the opinion that anxiety is a significant effect of parental divorce on emotional health as perceived by secondary school students in Ilorin West Local Government Area of Kwara State, Nigeria. Conformingly, hypothesis two was rejected, denoting that

anxiety is a perceived effect of divorce on emotional health of secondary school students in Ilorin-West local Government Area of Kwara state, Nigeria. The study ropes the findings of Miller (2013) stated that some of the effects associated with divorce include academic, emotional and psychological problems, although this may not always be true, studies suggest that children from divorced families are likely to exhibit such behavioural issues among which are anxiety, fear stress than those from non-divorced families and Boyan (2011) opined that psychological effect of divorce on children can cause them to develop anxiety disorders where they experience overwhelming fear of being abandoned and Sanders (2008) further affirmed that those children from divorced family feel bitter and carry tension and anxiety to school. As a result, they cannot think clearly or critically as a happy person and at the same time cannot concentrate on anything taught at school

In research three, majority of the respondents were of the opinion that fear is a significant effect of parental divorce on emotional health as perceived by secondary school students in Ilorin West Local Government Area of Kwara State, Nigeria. Similarly, hypothesis three was rejected inferring that fear is a perceived effect of divorce on emotional health of secondary school students in Ilorin-West local Government Area of Kwara state, Nigeria. The findings corroborate with Arbuthnot and Gordon (2007) posited that parental separation has been reported in the literature as being associated with a wide range of adverse effects on children's wellbeing such as fear and anxiety both as a short-term consequence of the transition and in the form of more enduring effects that persist into adulthood, effects reported include adverse impacts on cognitive capacity.

Conclusion

Based on the findings of this study, the following conclusion was drawn that;

1. Stress is a significant effect of divorce on emotional health as perceived by secondary school students in Ilorin West Local Government Area of Kwara State, Nigeria.
2. Anxiety is a significant effect of divorce on emotional health as perceived by secondary school students in Ilorin West Local Government Area of Kwara State, Nigeria.
3. Fear is a significant effect of divorce on emotional health as perceived by secondary school students in Ilorin West Local Government Area of Kwara State, Nigeria.

Recommendations

Based on the findings of this study, it was recommended among others that;

1. School counsellors should organize a parent meeting to explain some positive techniques to help smooth the transition after divorce for their children. The school counsellor can also meet with the students and parents to organize an easy-to-read calendar that identifies what days the child goes where and what transportation will be used, this might help the child keep up with day-to-day transitions between homes. Duplicate copies of grades, behavior contracts, and updates are also encouraged as that way both parents feel involved and included in parenting the child through school activities.
2. An emerging body of evidence suggests that marital education, family counselling, and related service can improve middle-class couples' communication and problem-solving skills, resulting initially in greater marital satisfaction and, in some cases, reduced anxiety.
3. Class teacher could also play a vital role in reducing the effect and burden of divorce on school students; he/she should be approachable, give regards to individual differences and lastly listen patiently to students, which may trigger the student to share what he/she might be passing through with the teacher.

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INFLUENCE OF DEMOGRAPHIC CHARACTERISTICS OF REGISTERED ANTENATAL CARE PREGNANT WOMEN ON THEIR PRACTICE OF MALARIA PREVENTION STRATEGIES IN NORTH-EAST ZONE, NIGERIA

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Abstract

This study assessed the influence of demographic characteristics of registered antenatal care [ANC] pregnant women on their practice of malaria prevention strategies 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 registered pregnant women from six (6) states in North-east zone, Nigeria. Thus, a total number 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 regression analysis was used to test formulated null hypothesis. The finding of the study revealed that; two demographic characteristics: marital status and occupation with the p-values of 0.009 and 0.000 respectively influenced significantly the practices of the pregnant women of malaria prevention strategies. The conclusion drawn was that the registered ANC pregnant women's marital status and occupation influenced their practices of malaria prevention strategies positively while their age, education and income did not. It was recommended that, public enlightenment campaigns concerning malaria prevention strategies should be intensified to increase the awareness and good practice of malaria prevention among the ANC and non-ANC registered pregnant women across all their demographic characteristics.

Keywords: Demographic characteristics, influence, practice, malaria, prevention, strategies, pregnant women.

Introduction

Malaria remains a leading cause of morbidity and mortality worldwide, especially among pregnant women that are living in Sub-Saharan Africa, where at least 90% Of the malaria death occurs World Health Organisation (WHO, 2015). The WHO (2015) recommends that pregnant women use long-lasting insecticidal treated nets [LLINs], intermittent preventive treatment in pregnancy [IPTp] with sulfadoxine-pyrimethamine [SP] and receive prompt and effective diagnosis and treatment of malaria with a safe drug in order to prevent advance complications.

Recognising the need to hasten progress in reducing the burden of malaria, WHO developed the Global Technical Strategy for Malaria [GTS] 2016-2030, which sets out a vision for accelerating advocacy plan, action and investment to defeat malaria [AIM] by 2030 (WHO, 2015; Federal Ministry of Health [FMOH], 2014). In Nigeria, majority of pregnant women do not go to any health facility when

they have malaria. This is particularly common in states where culture of the people made women in seclusion and lack decisions about attending ANC facility. In 2008, the number of women who were attended by skilled health care providers during ANC was estimated at 65 per cent in the North-Central Region of Nigeria, 43 per cent in the North-East, and 31 per cent in the North-West, compared to 87 percent, 70 per cent, and 87 percent for the South-East, South-South and South-West regions (NPC, 2009). Behavioural factors is the human element that constitute serious challenge in disease prevention.

These behaviours are socio-cultural practices that promote mosquito breeding and access to people, as well as the failure of the risk population to use proven and effective methods of malaria preventive measures promptly and appropriately (Godwin *et al.*, 2010). According to Oladimeji *et al.* (2018), barriers to effective utilisation of malaria prevention interventions are beliefs, fear of side effects from current malaria preventive measures, corruption by workers and cost of nets, and poor environmental hygiene.

In 2008 Arogundade and Anonyuo conducted a survey to assess the uptake of IPTp-SP and insecticide treated nets (ITNs) by pregnant their study found out that sleeping under an ITN the night before the survey was associated with receiving IPT (OR=1.59, $p=0.006$), as well as ANC registration by pregnant women. Also, the study revealed that ANC registered pregnant women were 6 times as likely to receive IPTp-SP as those who had not registered (OR=5.6, $p<0.0001$). Yusuf *et al.* (2016) reported that in North-East zone IPTp-SP use is 30.1% and ITN use is 66.0% which are below RBM target of 80% coverage. This revelation implies much is still needed about knowledge and practices to prevent and manage malaria attacks in Nigeria.

Onyeneho (2014) carried out a study to identify key socio-demographic and knowledge factors associated with compliance for preventing MiP among 720 women. Majority of those with good knowledge of malaria in pregnancy and currently living with a partner used ITN every night during the last pregnancy. Akaba *et al.* (2013) study at a booking clinic of the University of Abuja Teaching Hospital among 403 consenting pregnant women found that, IPTp-SP was used by 15.9% of the respondents, ITNs ownership was 42.8%, however its use declined from 28.5% to 24.6% during pregnancy. Omake-Amari *et al.* (2015) explored malaria preventive practices among pregnant women in Ebonyi State, Nigeria and found out that pregnant women often ($xW=1.70-3.05$) adopted most of the malaria preventive practices. Similarly, showed that pregnant women in the study areas had adequate knowledge about ITN for malaria prevention

According to Mutagonda *et al.* (2012); Ossai, (2014) studies which claimed that most women are not aware of the use of SP for IPTp-SP in relationship with pregnancy age. Specifically, majority of pregnant women are not aware why SP was recommended and being given by health workers or the correct timing of IPTp-SP, and the number of SP doses are required for IPTp during pregnancy. Again, most pregnant women had the less knowledge on the usage and values of SP for IPTp and ALu for treatment of MiP

Statement of the Problem

Malaria is a preventable disease, despite various government programmes to reduce its menace, malaria constitutes serious problem, in some parts of Nigeria. Many pregnant women are still not utilising various malaria prevention interventions programmes to reduce maternal and child mortality from malaria infection. Nigeria is currently implementing prevention of 'MiP' intervention as a component of Focused Antenatal Care Services [FANC] which has provision for the most practical place for these malaria interventions delivery. During ANC the key interventions for the prevention of MiP include the administration of SP for IPT under direct supervision of skilled service providers, distribution of LLINs, and appropriate case management through prompt diagnosis and effective treatment with recommended drugs (Adamu, 2016).

Relying on field survey and observation methods, the authors found that pregnant women are frequently reporting to hospitals and clinics with complains 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 still birth 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 is imperative that a study is carried out to study investigates the influence of demographic characteristics of registered ANC pregnant women on their practice of malaria prevention strategies in north-east zone, Nigeria. 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 and their practices of malaria prevention, especially among women.

Purpose of the study

The purpose of the study is to investigate whether the demographic characteristics of the respondents (age, marital status, level of education, level of income and occupation) influence practice of malaria prevention strategies.

Research Question

Does the demographic characteristics of the respondents (age, marital status, level of education, level of income and occupation) influence the practice of malaria prevention strategies?

Research Hypothesis

Age, marital status, level of education, level of income and occupation of the respondents will not significantly influence their practice of malaria prevention strategies.

Method and Materials

This study investigates the influence of demographic characteristics of registered ANC pregnant women on their practice of malaria prevention strategies in north-east zone, Nigeria. One thousand and two hundred (1200) copies of questionnaire were administered out of which one thousand and one hundred (1100) copies (91.7%), were found valid for the analysis. The instrument for data collection was a researcher-developed questionnaire which contains nine (9) items. The instrument was tested using Cronbach Alpha and a reliability index of 0.80 was obtained. The copies of the questionnaire were administered through systematic sampling approach during ANC clinic sessions. 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 and answered the research question while inferential statistics of regression analysis was used and tested the hypothesis postulated for the study.

Results and Discussions

Answer to Research Question

Does the demographic characteristics of the respondents (age, marital status, level of education, level of income and occupation) influence the practice of malaria prevention strategies?

Table 1: Mean scores of pregnant women's (ages, marital statuses, levels of education, levels of income and occupation) influence on practices of malaria prevention strategies

Age range	N	Mean	Std. Deviation
Within 18yrs	200	3.15	0.602
19 - 35yrs	523	3.03	0.760
Above 35yrs	377	3.11	0.622
Total	1100	3.08	0.689
Marital Status			
Married	715	3.03	0.682
Widowed	286	3.17	0.744
Divorced	99	3.20	0.515
Total	1100	3.08	0.689
Educational level			
Non-Formal	109	3.10	0.594
Primary	183	3.12	0.564
Secondary	321	2.96	0.928
Tertiary	424	3.14	0.561
Qur'anic	63	3.13	0.409
Total	1100	3.08	0.689
Income level			
Less than N10,000.00	553	3.06	0.752
N11,000 - N50,000.00	342	3.13	0.577
N51,000.00 and above	205	3.07	0.683
Total	1100	3.08	0.689
Occupation			
House-wife	403	2.94	0.778
Unemployed	155	3.19	0.703
Farmer	190	3.06	0.658
Self-employed	253	3.27	0.525
Civil-servant	99	3.04	0.569
Total	1100	3.08	0.689

Decision mean = 2.50

Table 1 showed that age influenced the practices of malaria prevention strategies by the pregnant women. Pregnant women who were within 18years (3.15) had the highest mean practices while those between 19 and 35years (3.03) had the least mean score with women above 35years (3.11) coming between. The mean scores were all above 2.50 used for the decision.

The table further shows that pregnant women who were divorced had the highest mean practices (3.20) and were followed by those who were widowed (3.17). The least mean practices, was by the married pregnant women with a mean score of 3.03 and a standard deviation of 0.682. All the mean scores were higher than the decision mean of 2.50, an indication that the variable had major influence on the practices of malaria prevention strategies by the pregnant women.

Furthermore, the table indicated the least practices (2.96) were among pregnant women with secondary school education. The highest score (3.14) was observed among those with tertiary education. All the groups had mean scores higher than the 2.50 used of decision on the variable. This observation

implies that the variable had a major influence on the practices of malaria prevention strategies by the pregnant women.

Also, the table reveals that the level of income had a major influence on the practices of malaria prevention strategies by the pregnant women as indicated with mean scores in Table 4.9. But the highest influence of the variable was obtained from pregnant women whose income levels were between ₦11,000 and ₦50,000.00 while the least was obtained from those whose income were less than ₦10,000.00.

Similarly, the table shows that the Housewives had the least mean practices of the malaria prevention strategies among the respondents as indicated by their mean score of 2.94 with a standard deviation of 0.778 in the table. The highest mean practices for malaria prevention strategies was obtained among pregnant self-employed women at (3.27) and those who were unemployed at (3.19). But the mean scores were all higher than the decision mean of 2.50. This observation revealed that the variable had a major influence on the practices of malaria prevention strategies by the pregnant women.

Age, marital status, level of education, level of income and occupation of the respondents will not significantly influence their practice of malaria prevention strategies.

Research Hypothesis

Table 2a: Regression Analysis on the influence of demographic characteristics of the respondents (age, marital status, level of education, level of income and occupation) on the practice of malaria prevention strategies among pregnant women

R	R-Square	Adjusted R Square	Std. Error of the Estimate
.155 ^a	.024	.019	6.140

Table 2b: ANOVA

Model		Sum of Squares	Df	Mean Square	F	p-value
1	Regression	1012.162	5	202.432	5.370	.000 ^b
	Residual	41239.823	1094	37.696		
	Total	42251.985	1099			

Table 2a indicates the influence of the demographic characteristics (age, marital status, level of education, level of income and occupation) of the respondents on the practice of malaria prevention by the pregnant women in the study areas. The table reveals that the predictors influenced significantly the practices of malaria prevention strategies by the pregnant women in the study areas at $f(5,1094) = 5.370$, $R=0.155$, $R^2 = 0.024$ and at Adjusted R Square = 0.019 ($p = 0.000$). Thus, the 2.4% (R Square) of the total variance observed in the pregnant women's practices of prevention strategies could be accounted for by their demographic characteristics, while the 97.6% could be explained by other factors.

Table 3: Regression Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	F	p-value
		B	Std. Error	Beta		
1	(Constant)	25.571	.891		28.710	.000
	Age	.012	.296	.001	.040	.968
	Marital Status	.759	.290	.080	2.620	.009
	Education	.011	.181	.002	.059	.953
	Income	-.272	.291	-.034	-.933	.351
	Occupation	.575	.149	.130	3.866	.000

Table 3 shows the contributions of each of the demographic characteristics of the pregnant women which are age, marital status, level of education, level of income and occupation to the

prediction model at 0.05 alpha level. However, two demographic characteristics: marital status and occupation with the p-values of 0.009 and 0.000 respectively influenced significantly to the practice of malaria prevention strategies by the pregnant women.

Discussion of Finding

The finding from this study on the influence of demographic characteristics of registered antenatal care pregnant women on their practice of malaria prevention strategies in north-east zone, Nigeria, reveals that two demographic characteristics: marital status and occupation had the p-values of 0.009 and 0.000 respectively; therefore, these variables influenced the practice of the respondents to the uptake of malaria prevention strategies. This finding is in line with the study of Araya *et al.* (2015), in Ethiopia, married pregnant women utilisation of mosquito nets was more than the unmarried women, marital status had a p-value of 0.31 in the study area. This result might be due to the cultural related position towards marriage, which indirectly influenced the distribution of mosquito nets freely to households rather than individuals. Tobin-West and Kanu (2016) showed an association between the marital status of the respondents and the use of larviciding at ($p=0.049$), mosquito repellants at ($p<0.001$), window and doors screens at a p-value of less than 0.05. However, there was no association between the marital status of the respondents and the use of IRS ($p=0.113$) and EM ($p=0.11$) because both of them had a p-value of more than 0.05. Therefore, they were not statistically significant. It has been reported that married women were 3 times more likely to use ITN than those not married (odds ratio (OR= 2.69), confidence interval (CI= 1.56 – 4.62). Again, women who had ever delivered babies were 2 times more likely to use ITN nulliparous women (OR= 2.42, CI= 1.42 - 4.14) (Ndwiga *et al.*, 2014).

This finding is also in line with the study of WHO (2014) and Yadav *et al.* (2014) which showed a significant association between women occupation and influences of how and where they could be infected by malaria carrying mosquitoes farming and fishing were the primary occupations of the majority of the respondents in the study area. Farming and fishing are occupations that can expose human to vector contact. This result was in line with the findings by Evidence from WHO (2013) report suggested that the occupation in agricultural sector expose people to greater risk of malaria infection and transmission. Similarly, in Zambia, many people in the Milenge district neglected malaria prevention and control measures while engaging in agricultural practices that put them at risk of malaria infection. Although, this study found out that, occupation of the respondents, 403 of the women, were full time house wives, while 253 of them were self-employed. One hundred and ninety, equals to 17.3% were engaged in farming. One hundred and fifty-five (155) were unemployed, while ninety-nine (99) were civil servants.

In a related study by Akaba *et al.* (2013) study at a booking clinic of the University of Abuja Teaching Hospital among 403 consenting pregnant women found that, IPTp-SP was used by 15.9% of the respondents, ITNs ownership was 42.8%, however its use declined from 28.5% to 24.6% during pregnancy. Omaka-Amari *et al.* (2015) explored malaria preventive practices among pregnant women in Ebonyi State, Nigeria and found out that pregnant women often ($xW=1.70-3.05$) adopted most of the malaria preventive practices. Similarly, showed that pregnant women in the study areas had adequate knowledge about ITN for malaria prevention. The above findings were in contrast with Mutagonda *et al.* (2012); Ossai, (2014) studies which claimed that most women are not aware of the use of SP for IPTp-SP in relationship with pregnancy age. Specifically, majority of pregnant women are not aware why SP was recommended and being given by health workers or the correct timing of IPTp-SP, and the number of SP doses are required for IPTp during pregnancy. Again, most pregnant women had the less knowledge on the usage and values of SP for IPTp and ALu for treatment of MiP.

Udu *et al.* (2017) reported that of the 289 respondents were married while 137 were single. The respondents who were mostly married women had the highest concern for malaria preventives uptake. Married women are more cautious of malaria prevalence than single respondents. Onyeneho (2014)

carried out a study among 720 women the result revealed that majority are having good knowledge of malaria in pregnancy and currently living with their partners used ITN every night during their last pregnancy. In contrast, in Ghana, Richard (2011) found that the coverage of ITN was still low at 32% compared to the Abuja Roll Back Malaria 2010 target of 60% in spite of the subsidies for pregnant women and children under five years of age. Meanwhile, there was relationship between possession and use of ITN ($p=0.12$, $\chi^2=2.47$).

Conclusion

On the findings from this study it was concluded that pregnant women's marital status and occupation influenced how they practiced malaria prevention strategies, while, age, education and income did not.

Recommendation

All categories of pregnant women should be provided with adequate information on malaria prevention strategies and adopt (ITN, use IPT-SP etc).

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ASSESSMENT OF AWARENESS OF TERTIARY INSTITUTION SOCIAL HEALTH INSURANCE PROGRAMME (TISHIP) AMONG STUDENTS OF TERTIARY INSTITUTIONS IN KADUNA STATE, NIGERIA

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Abstract

The Tertiary Institutions Social Health Insurance Programme (TISHIP) is a healthcare delivery scheme that is targeted at students of tertiary institutions to ensure that every student has access to quality healthcare while schooling. The benefit package of TISHIP are the various healthcare services that the students are entitled to access without any out of pocket implication. It is against this backdrop that this study assesses the level of awareness of TISHIP benefit package among students of tertiary institutions in Kaduna State.

In a cross-sectional study design, a total of four hundred (400) full-time students of Ahmadu Bello University, Zaria, Federal Polytechnic, Kaduna and Federal College of Education, Zaria who have assessed participated. The data were analysed using descriptive statistics, one-way ANOVA and chi-square to determine the level of awareness of the students and relationship between awareness and other variables.

The level of awareness of TISHIP benefit package among the students was (47.2%) and there was no significant difference in the level of awareness ($F = 0.061$; $p=0.941$) among students of the various tertiary institutions that participated in the study. The study also reveals that no difference in the level of awareness of TISHIP among the students based on their place of resident ($p=0.071$) or gender ($p=0.301$). However, this study shows that there is difference in the level of awareness of TISHIP among students based on their marital status ($p=0.021$) and length of stay in school ($p=0.000$), i.e. less than 2 years and more than two years stay in tertiary institutions in Kaduna State, Nigeria.

The study concludes that the level of awareness of TISHIP benefit package among students of tertiary institutions in Kaduna State, Nigeria is below average (47.2%). Therefore, stakeholders need to create awareness about the TISHIP among students of tertiary institutions in Kaduna State, Nigeria.

Keywords: Awareness, Students, Tertiary Institutions, Tertiary Institutions Social Health Insurance Programme.

Introduction

Health is considered as wealth, and to create wealth at individual or national level, citizens must be healthy and to enjoy wealth, such individual or nation must be healthy to certain extent (Sule, Ijadunola, Onayade, Fatusi, Soetan & Connel, 2008). This is why health care financing is gaining more prominence on the global health space. Developing countries face the challenges of providing for the health care provisions of their population due shrinking budgetary support for health care services, an overtly low quality of health services in the public domain, inefficiency in public health care and the resultant imposition of excessive user charges which are reflective of nation's inability to provide the health care needs of the less privilege (International Labour Organization, 2010). Health risks probably present the greatest threat to the lives and livelihoods of the people especially in Sub Sahara Africa. A health shock when it happens, leads to direct expenses on medications, transport and treatment, and also increase

indirect costs related to a reduction in academic performance, labour supply and productivity (Akande, Salaudeen & Babatunde, 2011).

The World Bank in 2013 introduces the concept of Universal Health Coverage (UHC) as a condition to achieving the health development goals of a country (Iloh, Ofoedu, Njoku, Okafor, Amadi & Godswill, 2013). It was further explained that out-of-pocket expenses constitute a major hitch to the accessibility of healthcare services. Therefore, UHC is enhanced in way that there is pre-payment and risk pooling for the purpose of healthcare provisions. It can be obtained that “health insurance is a policy that encourages pre-payment and risk pooling and the corollary is enhanced Universal Health Coverage” (Prasad, 2003). Hence, countries both developed and under-developed, across the globe presently consider health insurance schemes as means to ensuring access to quality health care provision and shielding patients from financial risks (Jane, Obinna, Benjamin & Ogochukwu, 2014).

The introduction of National Health Insurance Scheme (NHIS) by developing countries is expected to improve the quality and accessibility of healthcare services the general public and especially the poor. “Improved health conditions lead to increased productivity, educational performance, higher life expectancy, savings, investments, decreased debts and expenses on health care” - this would translate into greater economic return, equity, social and political progress (Yusufu & Gbadamosi 2009). These needs prompted the Federal Government of Nigeria to join other nations of the world to commence the search for other means of funding health care for proper national development (National Health Insurance Scheme Operational Guidelines, 2005). The National Health Insurance Scheme (NHIS) in Nigeria was so established in 2005 as a social security system that is based on social health insurance to ensure that enrollees have access to quality and effective healthcare.

The Federal Government of Nigeria through the NHIS has established and institutionalized the Tertiary Institutions Social Health Insurance Programme (TISHIP) with the hope to achieve a more flexible, more competitive and more innovative response to the health needs of students in tertiary institutions in the Nigeria (Ibiwoye & Adeleke, 2009). The TISHIP is a healthcare delivery scheme that is targeted for only students of tertiary institutions such as universities, polytechnics and colleges of education. This is to ensure that every students in tertiary institution have “access to quality healthcare while schooling, ensure equitable distribution of healthcare costs among different students, that parents and guardians are protected from the financial hardship of huge medical bills, ensure equitable distribution of healthcare facilities within the nation’s tertiary institutions of learning and to ensure the availability of funds to the health sector for improved service delivery (Operational Guidelines for Implementation of Tertiary Institutions Social Health Insurance Programme, 2014).

The TISHIP is a scheme where the healthcare of students in tertiary institutions is paid for from funds obtained by pooling together the contributions of students and Government. The programme is committed to ensuring access to qualitative healthcare service for students of tertiary institutions, thereby promoting the health of students with a view to creating conducive learning and studying environment (Precious Healthcare, 2012). An actual review has been carried out by TISHIP and ₦2,000:00 per annum was recommended as minimum premium to be paid by every student in tertiary institution (Operational Guidelines for Implementation of Tertiary Institutions Social Health Insurance Programme, 2014).

Students’ awareness of this scheme is as important as the scheme itself. The adequacy of the information available to the students determines the popularity and acceptance or otherwise of the scheme among students. Since the scheme is meant to take care of the healthcare services of students; for the scheme

to be successful. Healthy students are indispensable tools for rapid socio-economic and sustainable development the world over. Despite this undisputable fact, Nigeria tertiary institutions always have serious problem with the provision of quality, accessible and affordable healthcare services. This is because the health sector generally is perennially faced with gross shortage of personnel, inadequate and outdated medical equipment, poor funding, policies inconsistency and corruption (Yahaya, 2015). Other factors that impede quality healthcare services in tertiary institutions in Nigeria include inability of the students or their parents to pay for healthcare services. Many Nigerians students have lost their lives due to inability to meet their healthcare needs. However, with the high demand for health care services of good quality by the students and the extreme under-awareness of healthcare services available in the institutions, it has been argued that TISHIP may not have the awareness of its healthcare services.

The purpose of TISHIP is to cater for the health care needs of Nigerian students in tertiary institutions who due to their studentship status cannot benefit under other health insurance programmes. This population constitutes a very large percentage of the institutions' population. By virtue of their age and their status as students, most of them cannot benefit from the public sector programme as either enrollees or dependants of enrollees. This necessitates a programme designed to meet their needs (Operational Guidelines for Implementation of Tertiary Institutions Social Health Insurance Programme, 2014).

Providing students access to qualitative and affordable healthcare is not only important to the achievement of universal health coverage and access to healthcare services for all Nigerians and legal residents but also to the overall development of our nation. The ultimate goal of TISHIP is to ensure that the health and well-being of this critical population with a view to creating a conducive learning environment and contributing to the overall development of the country (Operational Guidelines for Implementation of Tertiary Institutions Social Health Insurance Programme, 2014). The objectives of this Tertiary Institutions Social Health Insurance programme are: (i) To ensure that every student in tertiary institutions has access to good health services; (ii) To protect students and families from the financial hardships of huge medical bills; (iii) To maintain high standard of health care delivery services within tertiary institutions; (iv) to ensure availability of funds to the tertiary institution health centres for improved services and (v) to take cognizance of the peculiar health needs of students in the design of the programme, including access to periodic health education and outreaches.

The awareness of TISHIP benefit package among the students is crucial to assuring the continuous attractiveness of the scheme and active participation of students. It is against this backdrop that this research seeks to determine the level of awareness of TISHIP benefit package among students of tertiary institutions in Kaduna State, Nigeria.

Methods and Material

A cross-sectional study was carried out amongst students of Ahmadu Bello University, Zaria, Federal Polytechnic, Kaduna and Federal College of Education, Zaria in Kaduna State. The study population was made up 123,651 full-time, on and off- campus students from the three tertiary institutions. Yamane's equation was used to determine the minimum sample size for this study. Purposive sampling technique was used to assessed proportionately allocated numbers of students from the selected Federal tertiary institutions. The instrument for data collection in this study was adapted questionnaire based on TISHIP benefit package outlined in the TISHIP operational guideline. The responses are in five-points Likert format to show degree of agreement or disagreement with the level of awareness. The data

obtained from the field were analyzed using both descriptive and inferential statistical tools. The descriptive statistics that were used are mean, standard deviations and percentage to summarize the level of awareness. The inferential statistical analysis used were one-way ANOVA and chi square to analyze and test the hypotheses. Statistical Package for Social Scientist (SPSS version 22) software was used for the analysis while confidence interval level of 95% and $p\text{-value} \leq 0.05$ were set for the study.

Results and Discussion

In determining the level of awareness of TISHIP benefit package among students of the tertiary institutions, the means scores and percentages are used find out whether the students are aware and the extent of their awareness.

Table 1: Mean scores, percentages and standard deviations of level of awareness of TISHIP among students

	Mean score	Percentage (%)	Std. Deviation	N
Ahmadu Bello University, Zaria	2.39	47.8	0.91	203
Federal Polytechnic, Kaduna	2.38	47.6	1.05	74
Federal College of Education, Zaria	2.30	46.0	0.81	123
Aggregate Scores	2.36	47.2	0.92	400

Source: Field Survey, (2020)

Table 1 shows the mean of the level of awareness of TISHIP among students of Ahmadu Bello University, Zaria, Federal Polytechnic, Kaduna and Federal College of Education, Zaria. The mean level of awareness of TISHIP among students of Ahmadu Bello University, Zaria, Federal Polytechnic, Kaduna and Federal College of Education, Zaria are ($M=2.39$, $SD=0.91$), ($M=2.38$, $SD=1.05$) and ($M=2.30$, $SD=0.81$) respectively. The mean scores of the institutions and consequently the aggregate mean score of 2.36 ± 0.92 reveals that there is a low level of awareness among the students. In summary, the level of awareness of TISHIP benefit package among students of tertiary institutions in Kaduna State is below average, about forty seven percent (47.2%).

Table 2: Summary of analysis of variance on levels of awareness among students based on school type

Statistics	Sum of Squares	F	Df	P
Tukey's test	17.234	0.061 ^a	35	0.941
Ahmadu Bello University, Zaria,				
Federal Polytechnic, Kaduna				
Federal College of Education, Zaria				

a. Exact statistic

Table 2 shows a one-way ANOVA calculated to examine the significance difference between the levels of awareness among students of tertiary institutions in Kaduna State based on school type. No significant difference was found ($F = 0.061$; $p=0.941$) between the level of awareness among students of tertiary institutions in Kaduna State. The null hypothesis which stated no significant difference was retained. This indicates that there is no significant difference between the level of awareness of TISHIP benefit package among students of Ahmadu Bello University, Zaria, Federal Polytechnic, Kaduna and Federal College of Education, Zaria.

Table 3: Summary of chi square on level of awareness among students based on Gender

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	43.581 ^a	399	0.071**
Likelihood Ratio	124.251		0.231
N of Valid Cases	400		

Source: SPSS output (Research Survey, 2020)

From the table 3, the chi-square analysis presented reveals that asymptotic significant is 0.071 (i.e. $p > 0.05$) which means that the null hypothesis is accepted at 5% level of significance. This is an indication that there is no significant difference in the level of awareness of TISHIP between male and female students of tertiary institutions in Kaduna State, Nigeria. In addition, the likelihood ratio of 124.251 is large (larger than Pearson chi-square value of 43.581) which is an indication that the null hypothesis is likely to be assumed.

Table 4: Summary of chi square on level of awareness between students residing off campus and on campus

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	98.162 ^a	399	0.301**
Likelihood Ratio	134.897		0.434
N of Valid Cases	400		

Source: SPSS output (Research Survey, 2020)

From the table 4, the chi-square analysis presented reveals that asymptotic significant is 0.301 (i.e. $p > 0.05$) which means that the null hypothesis is accepted at 5% level of significance. This is an indication that there is no significant difference in the level of awareness of TISHIP between students residing off campus and on campus. In addition, the likelihood ratio of 134.897 is high (higher than Pearson chi-square value of 98.162) which is an indication that the null hypothesis is likely to be assumed.

Table 5: Summary of chi square on level of awareness between married and unmarried students

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	154.121 ^a	399	0.021**
Likelihood Ratio	45.871		0.02
N of Valid Cases	400		

Source: SPSS output (Research Survey, 2020)

From the table 5, the chi-square analysis presented reveals that asymptotic significant is 0.021 (i.e. $p < 0.05$) which means that the null hypothesis is rejected at 5% level of significance. This is an indication that there is a significant difference in the level of awareness of TISHIP between married and unmarried

students of tertiary institutions in Kaduna State, Nigeria. In addition, the likelihood ratio of 45.871 is small (smaller than Pearson chi-square value of 154.121) which shows that the null hypothesis is not likely to be assumed.

Table 6: Summary of chi square on levels of awareness among students based on the years spent in school

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	209.667 ^a	399	0.000**
Likelihood Ratio	58.983		0.002
N of Valid Cases	400		

Source: SPSS output (Research Survey, 2020)

From the table 6, the chi-square analysis presented reveals that asymptotic significant is 0.000 (i.e. $p < 0.05$) which means that the null hypothesis is rejected at 5% level of significance. This is an indication that there is a significant difference in the level of awareness of TISHIP between students with less than 2 years and those with more than two years stay in tertiary institutions in Kaduna State, Nigeria. In addition, the likelihood ratio of 58.983 is small (smaller than Pearson chi-square value of 209.667) which is indication that the null hypothesis is not likely to be assumed.

Discussion

This study revealed that the level of awareness of TISHIP benefit package among students of tertiary institutions in Kaduna State is below average, that is, 47.2%. This finding is slightly lower than 50% found in the study by Ndie (2013) who assessed the awareness of National Health Insurance Scheme (NHIS) by civil servants in Enugu and Abakaliki and 60% found by Chikwe (2011) in Imo state and in Ghana by Naseem, Muzamil, Talal and Jacob, (2013). The level of awareness in this study is far less than 87.4% found in Oyo State by Sanusi (2009) and 92% by Andrew *et al.* (2007) on awareness of NHIS in Asaba Delta state. However, the finding is higher than less than 40% found by Mohammed (2008) in the same study area from his study on perceptions of formal-sector employees on the health insurance scheme in Nigeria: The Case study of Ahmadu Bello University Staff, Zaria-Nigeria.

Based on the findings of Andrew *et al.* (2007) and Jolie and Robert (2009), it was revealed that the level of exposure, education and media campaign account for the level of awareness. Although the participants in this study are literate and have post-secondary education however, there is far less publicity and public enlightenment campaigns by all the stakeholders (NHIS, HMO, Media, healthcare workers, student union, school authorities etc) for TISHIP compare to formal sector NHIS programme for civil servants which was the focus of other studies.

This study also found no significant difference between the levels of awareness between male and female students of tertiary institutions in Kaduna State. This indicates that gender has no role in the level of awareness among students of Ahmadu Bello University, Zaria, Federal Polytechnic, Kaduna and Federal College of Education, Zaria. This may be due to the fact that the participants across all the three institutions have comparably same level of education and similar low level of publicity for TISHIP by the stakeholders despite fact that there are differences in the structure, premium, scope, coverage and benefit packages of TISHIP compare to the civil servants NHIS programme.

This study also reveals that there is no significant difference in the level of awareness of TISHIP between students residing off campus and on campus. This may be due to the fact that there are no additional information or awareness creation as well as health post and more importantly services of health education officers within the students' hostels. However, it is observed that there is a difference in the level of awareness of TISHIP between married and unmarried students of tertiary institutions in Kaduna State, Nigeria. This may be due to fact that married students often have reason to be more financially constrained and/or more healthcare needs especially the female married students because of motherhood.

Finally, this study reveals that there is difference in the level of awareness of TISHIP between students with less than 2 years and those with more than two years stay in tertiary institutions in Kaduna State, Nigeria. It is expected that the longer the students stay in the institution, the more likely they become exposed to various information, programmes and activities in the school. Moreover, it's possible that the longer the students spent in the school the higher the likelihood of developing health related challenges which may necessitate the need to seek for healthcare services and information within the institutions.

Conclusion

The findings in this study revealed a low level of awareness of TISHIP benefit package among students across all the Federal tertiary Institution in the study area (Ahmadu Bello University, Zaria, Federal Polytechnic, Kaduna and Federal College of Education, Zaria). The level of awareness among the students was not affected by their gender or the place of resident in school (on-campus or off-campus). However, the marital status the students and their length of years spent in their various institutions affected their level of awareness of the TISHIP benefit package.

Therefore, it's pertinent that to ensure success of this laudable programme stakeholders (NHIS, HMO, student Unions, School authorities as well as media) must create awareness among the students about TISHIP. School authorities need to take advantage of lecturers who are health education experts to sensitize and create awareness among students not only on TISHIP but all relevant health related programmes.

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COHABITATION AS A CORRELATE OF SELF-ESTEEM AMONG UNDERGRADUATE STUDENTS OF ADEKUNLE AJASIN UNIVERSITY AKUNGBA-AKOKO

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Abstract

The study examined cohabitation as a correlate of self-esteem among undergraduate students of Adekunle Ajasin University Akungba-Akoko (AAUA). Three research questions and three hypotheses were formulated. Descriptive survey research design was adopted for the study. The subject of the study was two hundred (200) students both male and female which was randomly selected from the six faculties in AAUA. Self-modified self-esteem questionnaire, validated and approved by the researcher supervisor was used for data collection. The obtained data was analyzed using SPSS application for descriptive statistics and linear regression to test the research questions and hypotheses respectively at 0.05 significant level. All the null hypotheses were rejected, Self-esteem has a significant correlation among male undergraduate students of Adekunle Ajasin University Akungba-Akoko who cohabit. Self-esteem has a significant correlation among female undergraduate students of Adekunle Ajasin University Akungba-Akoko who cohabit. Self-esteem has a significant composite correlation among male and female undergraduate students of Adekunle Ajasin University Akungba-Akoko who cohabit. This act of cohabitation should be discouraged by parents by giving close monitoring to their wards. Well organised counseling and a good orientation programme will help many of these innocent students find their bearing not to misbehave and be misdirected. The hostel accommodation provided by the university should be conducive and affordable for all the student, this may help to discourage cohabitation as most students who cohabit are off campus students.

Introduction

The over-bloated population of tertiary education students in contemporary time and the inability of the institution's managements and government to adequately provide the needed social amenities (such as hostel accommodation) and attentions have led to students trying to overuse their freedoms. University education is one that gives student full freedom to socialized and associate with different environments. This, therefore exposes the students to all forms of risk and harm as they continue to cohabit. Students who live together with their partners lack both family and the university's protection and support (Unachukwu and Iloakasia 2018).

Cohabitation is defined by social scientists as two adults of the opposite sex living together in an intimate, non-marital relationship. There has been an eight-fold increase in the number of cohabiting households since 1970, the growth of which has been accelerating (Seltzer 2004). As stated by Unachukwu and Iloakasia (2018) quoting Kennedy and Bumpass (2007) "Young people approve of cohabitation at much higher rates than their older counterparts, so it is likely that cohabitation rates will continue to rise." Cohabitation results in two independent people, almost like roommates, who have sex, instead of a commitment to one another for the rest of their lives (Rena 2011).

According to Aina (2018) quoting Arisukwu, (2013) who positioned that; "Cohabitation has serious health effect on the female students who may indulge in the use of oral contraceptive in order to avoid unwanted pregnancy which may truncate their educational aspirations. Should pregnancy

occur, such female students are more likely to seek abortion as an alternative. This has serious health challenges for such students who may visit quack doctors and medical practitioners without adequate experiences and qualifications. Some may frown at abortion and thus give birth to unwanted babies who may not be properly catered for by these students. Cohabitation among university students has led to moral decadence in the society.”

Cohabitation was obscure and even a taboo throughout the nineteenth century and until the 1970s. Non-marital unions have become common because the meaning of the family has been altered by individualistic social value have progressively matured since the late 1940s. Sociologists treat cohabitation as a distinct occurrence not just because it has displaced marriage, but also because it represents a structural change in family relationships (Ogadimma 2013). Cohabitation is totally against the norms and values of African society. Allowing young unmarried couple live together especially where they do not have family affinity is often regarded as an albatross. Whereas, some students cohabit without allowing their parents to know about it, some parents are the ones encouraging their children to do so due to their inability to meet their basic needs.

Many of these students are exposed to risk and harm as they cohabit. Students who cohabit are vulnerable and susceptible to attack and abuse by both outsiders and even their partners. Formerly, the culture of premarital sexual behaviours used to be a taboo in Nigeria. Unfortunately however, the contemporary youths have abandoned this valued tradition for inglorious culture of premarital sexual activities. Age is an important factor that could influence cohabitation among university students. Now, there are many students that entered the university being very young, hence many of them are naïve (Aina 2018).

Self-esteem is an individual's subjective evaluation of his or her worth as a person (Donnellan, Trzesniewski, & Robins, 2005)—typically increases during late adolescence and young adulthood, but that individuals differ substantially in the particular self-esteem trajectory they follow (Orth & Robins, 2014; Trzesniewski, Donnellan, & Robins, 2013). Self-concept is the perception that individuals have of their own worth. This includes a composite of their feelings, a generalized view of their social acceptance, and their personal feelings about themselves (Belmore & Cillessen, 2006). High self-esteem was defined by Walz (1991) as appreciating oneself and acknowledging self-worth, self-control, and competence, with a corresponding positive attitude and high self-evaluation. Opposite to this, Brendgen (2002) defined low self-esteem as having low self-evaluations, self-criticism, and feelings of hopelessness. Both self-concept and self-esteem are fluid through a child's development and can be influenced by positive parental involvement.

Luciano and Orth (2017), opined that self-esteem increases during late adolescence and young adulthood, but that there is large inter-individual variability in this development. In late adolescence and young adulthood, individuals are faced with several important developmental transitions, which involve the adoption of new social roles. One of these transitions is the establishment of a committed romantic relationship (Hutteman, Hennecke, Orth, Reitz, & Specht, 2014). Romantic relationships are an important life domain because research suggests that relationships influence a wide range of personality and well-being outcomes (Diener, Gohm, Suh, & Oishi, 2000; Dush & Amato, 2005; Neyer & Lehnart, 2007; Wagner, Becker, Lüdtke, & Trautwein, 2015).

Self-esteem can be defined in numerous ways. Most commonly, self-esteem is defined on the basis of two psychological processes: evaluation and affect (Mruk, 2006). Evaluation accentuates the role of cognition, while affect emphasizes the role of feelings as they pertain to self-esteem. Many studies had correlated the relationship between cohabitation and academic performance, but little or no research had tried to link psychological variables to establish if students that cohabit have high or low self-esteem. It's on this ground the researcher wants to investigate cohabitation as a correlate of self-esteem among undergraduate students of Adekunle Ajasin University Akungba-Akoko.

Cohabitation among undergraduates has become a contemporary issue plaguing many higher institutions of learning. Many students tend to lose sight of why they are in school and are preoccupied with the unessential issues. This tends to cause lots of distraction for many students. The purpose why they are in school is forgotten to other responsibilities not related to learning. This tends to make many students to perform below expectations, since often times these students are never in the school/class for any serious academic work. The culture of chastity and purity is no longer promoted and encouraged among these youths. Some had argued that, those students that cohabit may have low self-esteem while some argued that these set of students have high self-esteem. Many studies had linked social vices to low self-esteem and lack of good parental care but none had linked cohabitation to self-esteem, therefore the researcher wants to investigate cohabitation as a correlate of self-esteem among undergraduate students of Adekunle Ajasin University Akungba-Akoko.

Objectives

The specific objectives for the study were;

5. To establish if relationship exist between cohabitation and self-esteem
6. To establish the male students who cohabit have high or low self esteem
7. To establish the male students who cohabit have high or low self esteem
8. To establish the male and female students who cohabit have high or low self esteem

Methods and Material

The research design to be used for this research will be correlational research design. The population of the study will comprise the entire undergraduate students of AAUA who do not stay in the University hostels. Sample and Sampling Technique(s) Sample is a proportion of population that shares all the general characteristics of the population (William, 2006).

A random sampling technique was used to select five (5) faculties in AAUA whereas, purposive sampling technique was used to select forty (40) undergraduate students from each faculty from 100-500 levels to be selected totaling to two hundred (200) undergraduate students serving as the respondents for the study. These respondents are one hundred male and female each. A standardized questionnaire prepared by the researcher was used in collecting data for this research, the questionnaire was a closed-ended type, it comprised section A and B., the section A comprised demographic information of the respondents while section B contained the items that ask for the opinion of the respondents on the subject matter, this gave them a restricted response on a four-point modified Likert format scale type of SA-strongly agree, A-agree, D-disagree, SD-strongly disagree. A letter of introduction that was duly signed by the Head of the Department of Human Kinetics and Health Education. This letter was used for the purpose of instrument administration for the selected respondents for the study. Ethical consideration for the professional integrity of the researcher was carried out using ethical consent form. The right and dignity of participants and privacy was considered. The researcher was made clear to respondents that, they are free to decide on whatever information they wish to share with the researcher and that they are under no pressure or obligation to discuss matter that they do not wish to discuss.

Then, with the help of two trained research assistants, the instrument were administered to the respondents and on the spot collection will be done where possible. The data collected was coded and analyzed with the use of descriptive statistics of frequency count and simple percentages for the demographic information of the respondents and analysis of research questions while inferential statistics of linear regression was used to test research hypotheses formulated and the alpha level will be set at 0.05 level of significance.

Results and Discussion

Table 1: Sex of Respondents

		Frequency	Percent
	MALE	217	41.7
	FEMALE	303	58.3
	Total	520	100.0

Out of 520 respondents 217 of them are males while 303 are females

Table 2: Age of respondents

		Frequency	Percent
	16-21	163	31.3
	22-27	303	58.3
	28 and above	54	10.4
	Total	520	100.0

The table showed that over 31% of the respondents are within the age bracket 16-21 years, 58.3% were within 22-27 years while a little above 10% were 28 years and above.

Table 3: Religion of respondents

		Frequency	Percent
	Christianity	444	85.4
	Islam	64	12.3
	Traditional	12	2.3
	Total	520	100.0

The Christians (85.4%) are the most populous study respondents, followed by the Muslims (12.3%) and Traditional worshippers (2%).

Table 4: Family of Respondents

	Frequency	Percent
Monogamy	352	67.7
Polygamy	108	20.8
One parent	58	11.2
Orphan	2	.4
Total	520	100.0

Table four showed that over 67% of the respondents are from a monogamy family, 20.08% from polygamous homes, 11.2% from single-parent families while 0.4% are orphans.

Table 5: Faculty of respondents

	Frequency	Percent
Arts	7	1.3
Education	178	34.2
Social & Management Sciences	155	29.8
Science	180	34.6
Total	520	100.0

Respondents with highest frequency are from Faculty of Science (34.6%), followed by Faculty of Education (34.2%), followed by respondents from the Faculty of Social and Management Sciences (29.8%) and the Faculty of Arts (1.3%).

Hypotheses Testing

Hypothesis 1: Self-esteem is not a significant correlation among male undergraduate students of Adekunle Ajasin University Akungba-Akoko who cohabit.

Table 6: Regression summary showing relative contribution of independent variables to the prediction on the dependent variable

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	16.205	.490		33.069	.000
	Male	1.359	.057	.724	23.879	.000

a. Dependent Variable: Self-esteem

Since the t-calculated value of 33.069 at alpha level of 0.05 is greater than t-table value of 23.879. Hence, the null hypothesis which states that Self-esteem will not have a significant correlation among male undergraduate students of Adekunle Ajasin University Akungba-Akoko who cohabit is rejected. It means that Self-esteem has a significant correlation among male undergraduate students of Adekunle Ajasin University Akungba-Akoko who cohabit.

Hypothesis 2: Self-esteem is not a significant correlation among female undergraduate students of Adekunle Ajasin University Akungba-Akoko who cohabit.

Table 7: Regression summary showing relative contribution of independent variables to the prediction on the dependent variable

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	16.735	.489		34.232	.000
	Female	1.454	.064	.709	22.855	.000

a. Dependent Variable: Self-esteem

Since the t-calculated value of 34.232 at alpha level of 0.05 is greater than t-table value of 22.855. Hence, the null hypothesis which states that self-esteem will not have a significant correlation among female undergraduate students of Adekunle Ajasin University Akungba-Akoko who cohabit is rejected. It means that Self-esteem has a significant correlation among female undergraduate students of Adekunle Ajasin University Akungba-Akoko who cohabit.

Hypothesis 3: Self-esteem is not a significant composite correlation among male and female undergraduate students of Adekunle Ajasin University Akungba-Akoko who cohabit.

Table 8: Regression summary showing joint contribution of independent variables to the prediction on the dependent variable

R=.580					
R Square=.336			Standard Error= 2.98214		
Adjusted R Square=.335					
Model	Sum of square	Df	Mean of square	F	Sig
Regression	2331.749	1	2331.749	262.197	.000
Residual	4606.643	518	8.893		
Total	6938.392	519			

Table 8 reveals that self-esteem has a significant composite correlation among male and female undergraduate students of Adekunle Ajasin University Akungba-Akoko who cohabit; $F(1, 518) = 262.197$, $P < 0.05$. Hence, the null hypothesis which states that Self-esteem will not have a significant composite correlation among male and female undergraduate students of Adekunle Ajasin University Akungba-Akoko who cohabit is rejected. It means that Self-esteem has a significant composite correlation among male and female undergraduate students of Adekunle Ajasin University Akungba-Akoko who cohabit.

Discussion of findings

Hypothesis one states that, Self-esteem will not have a significant correlation among male undergraduate students of Adekunle Ajasin University Akungba-Akoko who cohabit. Since the t-calculated value of 33.069 at alpha level of 0.05 is greater than t-table value of 23.879. Hence, the null hypothesis which states that Self-esteem will not have a significant correlation among male undergraduate students of Adekunle Ajasin University Akungba-Akoko who cohabit is rejected. It means that Self-esteem has a significant correlation among male undergraduate students of Adekunle Ajasin University Akungba-Akoko who cohabit. The male undergraduates, Hypothesis two also states that, Self-esteem will not have a significant correlation among female undergraduate students of Adekunle Ajasin University Akungba-Akoko who cohabit. Since the t-calculated value of 34.232 at alpha level of 0.05 is greater than t-table value of 22.855. Hence, the null hypothesis which states that self-esteem will not have a significant correlation among female undergraduate students of Adekunle Ajasin University Akungba-Akoko who cohabit is rejected. It means that Self-esteem has a significant correlation among female undergraduate students of Adekunle Ajasin University Akungba-Akoko who cohabit. Hypothesis three states that, Self-esteem will not have a significant composite correlation among male and female undergraduate students of Adekunle Ajasin University Akungba-Akoko who cohabit. Table 8 reveals that self-esteem has a significant composite correlation among male and female undergraduate students of Adekunle Ajasin University Akungba-Akoko who cohabit; $F(1, 518) = 262.197, P < 0.05$. Hence, the null hypothesis which states that Self-esteem will not have a significant composite correlation among male and female undergraduate students of Adekunle Ajasin University Akungba-Akoko who cohabit is rejected. It means that Self-esteem has a significant composite correlation among male and female undergraduate students of Adekunle Ajasin University Akungba-Akoko who cohabit. This means undergraduate students that are engaged in cohabitation have low self-esteem. In a study by Sharma and Agarwala (2015), they submitted that low self-esteem is linked to anti-social behaviors. These undergraduates may believe cohabitation is not socially acceptable and this may adversely affect their self-esteem. This study was in contradiction of the study conducted by Onuoha, Ilevbare & Idemudia (2018), who submitted that female undergraduates who cohabit have high self-esteem. The study further gave reasons that, high self-esteem and positive attitudes towards abortion are important predictors of cohabitation.

Conclusion

Based on the findings of this study, the study concluded that;

- iv. Self-esteem has a significant correlation among male undergraduate students of Adekunle Ajasin University Akungba-Akoko who cohabit.
- v. Self-esteem has a significant correlation among female undergraduate students of Adekunle Ajasin University Akungba-Akoko who cohabit.
- vi. Self-esteem has a significant composite correlation among male and female undergraduate students of Adekunle Ajasin University Akungba-Akoko who cohabit.

Recommendations

Based on the conclusion of this study, the study recommends that;

1. This act of cohabitation should be discouraged by parents by giving close monitoring to their wards.

2. Well organised counseling and a good orientation programme will help many of these innocent students find their bearing not to misbehave and be misdirected.
3. The hostel accommodation provided by the university should be conducive and affordable for all the student, this may help to discourage cohabitation as most students who cohabits are off campus students.

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