EFFECT OF GROUP COUNSELLING ON HEPATITIS AWARENESS AND PREVENTIVE STRATEGIES AMONG SECONDARY SCHOOL STUDENTS IN DONGA EDUCATION ZONE, TARABA STATE, NIGERIA

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ABSTRACT

The study investigated the Effects of Group Counselling on Hepatitis Awareness and Preventive Strategies among Secondary School Students in Donga Education Zone, Taraba State, Nigeria. Three specific objectives with corresponding research questions and one research hypothesis guided the study. Quasi-Experimental research design was used for this study. The population of the study consisted of 2,363 Senior Secondary School Students in Donga Education Zone. The sample size of the study was 84Senior Secondary School Students in Donga Education Zone. The researchers adopted a simple random sampling technique in selecting the sample size. An instrument titled "Hepatitis Awareness and Prevention Strategies Questionnaire" (HAPSQ) was developed by the researchers for the purpose of this study. HAPSQ comprising of 42 items was divided into three sections. Section "A" comprising of 2 items solicited respondents' personal information such as age and gender. Sections "B" have 20 items and Sections "C" have 20 items that solicited information on Hepatitis awareness and preventive strategies. To ascertain the reliability of the instrument, a reliability coefficient of 0.73 was obtained. Data collected, were analyzed using descriptive statistics of means and standard deviations to answer the research questions, while an inferential statistics of Analysis of Covariance (ANCOVA) was used in testing the hypothesis at 0.05 level of significance. The result of the findings revealed that there is significant effect of treatment among experimental group on Hepatitis prevention strategies against the control group, that group counselling is effective in creating preventive strategies among secondary school students. Based on the findings of the study, the study recommended few among others that

Health education on risk factors and prevention of hepatitis B infections through awareness programs for all should be carried out at regular interval in our school in order to improve awareness of this disease among students. Effective referral systems for the care of hepatitis B infected patients should be established since most of the laboratory tests and treatment require experts.

Keywords: *Group Counselling, Hepatitis, Awareness, Preventive Strategies.*

INTRODUCTION

One of the leading causes of premature death in the last twenty years has been the scourge of hepatitis. The disease was first heard of in 1981, Adams (2012). Within twenty years, it spreads to all continents of the world and remains a great killer. According to Adams, in 1988 alone, about 5.8 million new cases occurred, bringing the total number of people living with hepatitis by December, 1998 to approximately 33.4 million. The Joint United Nations Programme on Hepatitis JUNPH (2007) estimates that there are now 40 million people living with hepatitis worldwide. According to JUNPH, since the beginning of the epidemic, the disease has killed more than 25 million people worldwide. It has replaced malaria and tuberculosis as one of the world's deadliest infectious diseases among secondary school students and it is the fourth leading cause of death worldwide. The term 'hepatitis' simply means inflammation of the liver. Hepatitis may be caused by a variety of viruses or other infections, medications, or toxins such as herbs and alcohol, Okon, (2014). Hepatitis viruses that can cause injury to liver cells in addition to hepatitis B include the hepatitis A and hepatitis C viruses. These viruses are not related to each other or to the hepatitis B virus, and they differ in their structure, the ways they are spread among individuals, the severity of symptoms they can cause, the way they are treated, and the outcome of the infection Okonofua, (2011). Other hepatitis viruses (hepatitis D, hepatitis E, and hepatitis G) cause disease much less commonly. It is no longer news that the hepatitis virus is now common in Nigeria. Although the virus was first identified in Nigeria in 1988, over 4 million Nigerians were estimated to have contacted the virus by the end of 1998 (Grunseit 2013).

This, according to Grunseit, Nigeria is the second country in Africa with the heaviest burden of the disease, in terms of absolute number of those

affected, second only to South Africa. The disease has now permeated the entire Nigerian society. It affects Nigerian secondary school students in urban and rural areas, commercial sex workers, traders, high profile politicians and socialites, servicemen and women as well as truck drivers. Indeed, everyone must feel vulnerable to the disease, which is fast rampaging the most productive age groups in the Nigerian population. Several thousands have died from the disease, and this has brought untold hardship and disorganization to many Nigerian families.

Based on what the researcher has observed over the years, Donga Education Zone in particular, burden of hepatitis among students is alarming. Statistics on the spread of the disease shows that Donga and Taraba by May 2020, they recorded 991 and 15,034 cases of hepatitis infection respectively (Taraba State Center for Surveillance and Disease Control 2020). While Nigeria records about 1,400 new infections every day. This figure represents one new infection per minute. By October 1998, it is believed that Nigeria records about 571,036 cases of hepatitis infection. The spread of the disease up till now has not been prevented among secondary school students despite many years of drug and vaccine research activities (Wrenn, 2012). Although few drugs are now available that could prolong the lives of infected persons through reduction of the load of the virus and improvement in the number of white blood cells. Such drugs are, however, very expensive, globally, and quite scarce in Nigeria. Good nutrition and prompt treatment of disease can also prolong the life of an infected person.

One of the possible means of controlling this deathly disease is to create awareness to the populace. Therefore, the role of counsellors in the creation of awareness against the acquisition and spread of hepatitis among secondary school students cannot be over-emphasized. How counsellors react to a counselee and how they communicate these feelings are of critical importance in counselling. Counselling is a process of helping individuals or group of people to gain self-understanding in order to be themselves. Hence counselor is trained to create awareness to his clients following the lay down rules which will likely to lead to behavioral change and avoidance of any behaboiur that may lead to positive changes. The school counsellor is to support educational efforts related to the creating awareness of hepatitis and other sexually transmitted infections (STIs), including human immunodeficiency virus (HIV) and acquired immunodeficiency syndrome (AIDS). The purpose of creating awareness

is that the client should change from his former negative behavior so that to adopt the desirable behavior. This can be done only if an individual perceived himself of not worthy of his existed behavior. The parameter for an individual to assess that the individual is duly change can be determined via his ration through what is called preventive strategies, such as use of condom during sex, screening of blood before transmission, use of sterile equipment and periodical medical checkup against Hepatitis (Peters 2013). Hence preventive strategy is needed.

Adeniyi (2012) opines that school counsellors are indispensable in the prevention of the spread of diseases among secondary school students in Nigeria. He further described counsellors as health educators saddled with the responsibility of offering health education to students. Sommer and Sommer (2015), Moronkola, (2013) and Gbefwi (2014) summarily defined prevention as the act of stopping; effectual hindrance of hepatitis among students.

Current research suggests that formal sex education and health education related topics such as the prevention of hepatitis has been in decline since 2011, (Lindberg, Kugler, Jacob, Münch, Mäding, von Lindeman, 2016). Yet, we know that lack of information about hepatitis and other STIs may put adolescents' health at risk as they explore multiple facets of their identities. As a part of a student support services team, school counsellors have the opportunity and responsibility to provide students with developmentally appropriate, accurate and current health information regarding hepatitis and other STIs and to help them develop healthy attitudes and habits. Risk can be reduced among secondary school students when they understand the causes. This can be done through sensitization, orientation, seminar, among others. Potential consequences of sexual behaviours experimentation and learn multiple ways to prevent acquiring and spreading of hepatitis. School counsellors are poised within the schools to provide this education and preventive information to students and their families. Students and families affected by hepatitis have a right to confidentiality and equitable treatment in schools.

School counsellors are to collaborate with school health personnel (e.g., school nurse, health instructors, physical education instructors and life science instructors) to come together in unison to create awareness and preventive strategies among secondary school students so as to change the behavior of students from these deadly diseases like Hepatitis, STDs among others (Adeniyi 2012).The school counsellor is alert to any

behavioural changes on the basis of students' hepatitis status. The school counsellor will advocate on behalf of students and families affected by hepatitis for equity and access to educational opportunities and health care, maintenance of confidentiality and referrals to available resources to assist them. Donga Education Zone is considered appropriate for the study because the larger proportion of the population are farmers who either have little or no knowledge of Hepatitis and other communicable diseases. Most parents are far from knowing the means by which hepatitis can be contacted as well as the prevention strategies let alone, teaching their children. This situation makes most students in the area to be more vulnerable to hepatitis infection. Hence the need for this presents study.

Inadequate counselling strategies, professional counsellors and social workers could be the reasons of the spread of Hepatitis among secondary school students. This therefore, could be as a result of lack of awareness about Hepatitis and its preventive strategies. Therefore, the study intends to examine the Effect of Group Counselling on Hepatitis Awareness and Preventive Strategies among Secondary School Students in Donga Education Zone.

STATEMENT OF THE PROBLEM
Despite the introduction of counselling services in Nigerian secondary schools as a panacea to achieving good school health education, many secondary school students are yet to be aware of the ways through which hepatitis can be transmitted and prevented. As such, the spread of hepatitis among secondary school students is on the increase, especially Donga Education zone where over the years Hepatitis is been reporting by the community Health workers in both the local Government, wards, Headquarters and the villages levels (Taraba State Centre for Surveillance and Disease Control 2020). Many studies had previously been conducted regarding hepatitis. Most of them had concentrated on the causes and effects of hepatitis. None of those studies had attempted to examine the Effect of Group Counselling on Hepatitis Awareness and Preventive Strategies among Secondary School Students. Therefore, it is in cognizance of this gap in literatures that this study is designed to examine the Effect of Group Counselling on Hepatitis Awareness and Preventive Strategies among Secondary School Students in Donga Education Zone with the view to bridging the gap in the literature.

Purpose of the Study

The purpose of the study was to examine the effects of Group Counselling on Hepatitis Awareness and Preventive Strategies among Secondary School Students in Donga Education Zone of Taraba State, Nigeria. Specifically, the study intended to:

1. determine the effect of Group Counselling on Hepatitis awareness among secondary school students in Donga Education Zone.
2. determine the gender difference in the effect of Group Counselling on hepatitis awareness among secondary school students in Donga Education Zone.

3. determine the effect of group Counselling on Hepatitis Prevention strategies among secondary school students in Donga Education Zone.

Research Questions

Based on the specific objectives of the study, the following research questions were formulated to guide the study:

1. What is the effect of Group Counselling on Hepatitis awareness among secondary school students in Donga Education Zone?
2. Is there gender difference in the effect of group Counselling on hepatitis awareness among secondary school students in Donga Education Zone?
3. What is the effect of group Counselling on Hepatitis Prevention strategies among secondary school students in Donga Education Zone?
4.

Hypothesis

In order to achieve the purpose of this study, one research hypothesis was postulated and tested at 0.05 level of significance.

HO$_1$: There is no significant effect of group counselling on Hepatitis prevention strategies among secondary school students in Donga Education Zone.

Significance of the Study

The findings of this study will be beneficial to Counsellors, Principals, educational policy makers, students, NGO, members of the public, parents, teachers, Ministries of Education and Health, and researchers. The findings of the study will be beneficial to counsellors as it will promote their effectiveness in the direction of rendering counselling services in schools. It

will equally help them to discover the significant gender difference in the effect of Group Counselling on Hepatitis Prevention among secondary school students. This can be achieved by way of adherence to the recommendations of the study.

Materials and Methods
Research Design
Quasi-Experimental research design was used for this study. A quasi-experimental design aims to establish a cause-and-effect relationship between an independent and dependent variable (Thomas, 2020). However, a quasi-experiment does not rely on random assignment. Instead, subjects are assigned to groups based on non-random criteria. Quasi-experimental design is a useful tool in situations where true experiments cannot be used for ethical or practical reasons. The choice of the quasi experimental design is based on the fact that sometimes it would be unethical to provide or withhold a treatment on a random basis. In this case, a quasi-experiment can allow the researcher to study the same causal relationship without the ethical issues. This design was appropriate for this study because intact classes were used.

Area of Study
This study was conducted in Donga Education Zone which covered only Donga Local Government Area. The zone is located in southern part of Taraba State. The area of the study is an educationally disadvantaged area, there are 16 public secondary schools distributed across the local government area. The need for quality education is inculcated into the establishment of secondary schools whose proprietorship cuts across governmental and non-governmental agencies, communities as well as individuals.

Population
The population of the study comprised of 2,363 senior secondary school students out of which 981 are females and 1382 are males in Donga Education Zone and it cuts across all genders. There are sixteen (16) public secondary schools in the area. The choice of SS 2 is based on the fact that they are exposed to the Hepatitis infection.

Sample and Sampling
The sample of the study is made up of 84 subjects randomly selected after the administration of pretest representing 3.6% of the entire population. The sample for this study was drawn from two schools in Donga education zone.

The sampling technique is multi-stage sampling. Random sampling was first used to select two schools. Random sampling was used to select one intact class from each school giving a total of 2 intact classes. Finally, treatment was randomly assigned to each intact class, that is, one class was assigned group counseling on Hepatitis awareness and preventive strategies and the other group without Hepatitis awareness and preventive strategies in SS 2.

Instrument for Data Collection
An instrument titled "Hepatitis Awareness and Prevention Strategies Questionnaire" (HAPSQ) was developed by the researcher for the purpose of data collection. HAPSQ comprises of 42 items; divided into three sections. Section "A" comprises of 2 items that centered on respondents' personal background information such as gender, section "B" comprises of 20 items that is mainly on Hepatitis awareness among Secondary School students and section C contain 20 items on the Hepatitis prevention strategies among secondary school students' in Donga Education Zone.

Validity of the Instrument
The instrument was validated by three experts in the area of Guidance and Counselling and from Measurement and Evaluation in Taraba State University. The experts were requested to ensure that the instrument covers the variables of the study. The validators recommended that some of the items in the questionnaire to be recast and the repeated items be expunged. It was also observed that items of awareness that could be strongly disagreed or agreed should be clearly corrected in section C to effect of hepatitis prevention strategies. The change was done before pilot testing the instrument. These observations helped to ensure that the content of the instrument covers all the variables of the study.

Reliability of the Instrument
The data obtained from the pilot test was analyzed using Cronbach Alpha correlation co-efficient to determine the internal consistency of the instrument. The choice of the Cronbach's Alpha is based on the reason that it provides a unique estimate of the internal consistency or reliability of a scale rather than being a range of possible reliability, (Eldieah, 2014).Therefore, the reliability co-efficient was estimated at 0.73 which justified that the instrument is reliable for the current study

Method of Data Collection
The procedure for data collection was carried out in the following phases:

Phase I: Pre-test Phase, Phase II: Treatment Phase, and Phase III: post-test phase

Phase I Pre-test

The researcher first visited the schools for the purpose of meeting the principals of the schools. Request was made to the school for permission to meet with all senior secondary school students in the respective schools. At this stage, the researcher interacts with the respondents. The stage serves as an introductory stage where the respondents are to be informed about the mission and intention of the researcher. This interaction lasted for 40 minutes.

Hepatitis Awareness and Prevention Strategies questionnaire was used for pre-test to serve as a baseline for selection of subjects to experimental and control groups respectively. Hepatitis Awareness and Prevention Strategies questionnaire comprising of 42 items were administered to the participants of the study with a total of 42 respondents engaged in the experimental group and 42 engaged in the control group. After the administration of the pre-test, the researcher scored the test in preparation for his return to the school the following week to commence the sessions which were conducted once in a week for the periods of another 7 weeks.

Phase II: Treatment Phase

The treatment was conducted in sessions. The therapy was conducted once a week for eight weeks.

Method of Data Analysis

Means and standard deviations were used for answering research question 1-3 while analysis of covariance (ANCOVA) was used to test the null hypothesis.

Results

Research Question One

What is the effect of group counselling on Hepatitis awareness among secondary school students in Donga Education Zone?

Table 1.Means and Standard Deviations on Experimental and Control Groups after Treatment

Groups	N	Pre-test $\bar{x}$ (S.D)	Post-test $\bar{x}$ (S.D)	Mean difference
Experimental Group	42	30.7619 (6.18736)	62.2143(6.16258)	31.4524
Control Group	42	30.9048 (7.64393)	32.4762 (5.93147)	1.5714
Mean difference		-0.1429	29.7381	29.881

From Table 1, it shows that the post-test mean Hepatitis awareness scores of experimental group students is 62.21 with standard deviation of 6.16, while that of the control group is 32.47 with standard deviation of 5.93. The difference between the pre-test and post-test mean scores of the experimental group is 31.45 and that of the control group is 1.57. The difference between post-test mean scores of the two groups is 29.88. While, this difference (29.88) is in favour of experimental group, the difference between the pre-test and post-test of the two groups is significant. This shows that there is significant difference between the scores of experimental group and control groups. Meaning, group counselling is significant in increasing hepatitis awareness among secondary school students. The difference indicates that group counselling is effective in creating awareness among secondary school students. In table 2 below, Analysis of Covariance (ANCOVA) was conducted to ascertain whether the difference was effective.

Research Question Two

Is there any gender difference in the effect of group counselling on Hepatitis awareness among secondary school students in Donga Education Zone?

Table 2. Means and Standard Deviations on gender among experimental and control group.

Gender	N	Pre-test $\bar{x}$ (δ)	Post-test $\bar{x}$ (δ)	Mean difference
Male	25	31.0800(5.95063)	62.2400(6.95390)	31.16
Female	17	30.2941(6.67799)	62.1765(4.97789)	31.8824
Mean difference		0.7859	0.0635	-0.72

Key:X **= mean scores,** δ **= standard deviation scores(SD)**

From Table 2, it shows that the post-test mean of hepatitis awareness scores of the male students is 62.24 with standard deviation of 6.95, while that of the female is 62.17 with standard deviation of 4.97. The difference between the pre-test and post-test mean scores of the male students' is31.16 and that of the female students is 31.88. The difference between post-test mean scores of the two sexes is -0.72. While, this difference (-0.72) is in favour of female students, the difference between the pre-test and post-test of the two sexes is almost the same. This shows that there is no any significant difference between the scores of male and female students in the experimental group in hepatitis awareness. In table 3 above, Analysis of Covariance (ANCOVA) was conducted to ascertain whether the difference was effective. Below is the explanation on gender according to hypothesis two.

Research Question three

What is the effect of group counselling on Hepatitis prevention strategies among secondary school students in Donga Education Zone?

Table 3.Means and Standard Deviations on Experimental and Control Groups after Treatment

Groups	N	Pre-test $\bar{x}$ (S.D)	Post-test $\bar{x}$ (S.D)	Mean difference
Experimental Group	42	22.5476 (2.58704)	61.1667 (7.57698)	38.6191
Control Group Mean difference	42	22.6905 (2.00594)	30.9048 (7.20707)	8.2143
		-0.1429	30.2619	30.4048

From Table 3, it shows that the post-test mean prevention strategies scores of experimental group students is 61.16 with standard deviation of 7.57, while that of the control group is 30.90 with standard deviation of 7.20. The difference between the pre-test and post-test mean scores of the experimental group is 38.61 and that of the control group is 8.21. The difference between post-test mean scores of the two group is 30.40. While, this difference (30.40) is in favor of experimental group, the difference between the pre-test and post-test of the two group is significant. This shows that there is significant difference between the scores of experimental group and control groups. Meaning, group counselling is significant in increasing prevention strategies of hepatitis among secondary school students. The difference indicates that group

counselling is effective in creating preventive strategies among secondary school students.

HO$_1$: There is no significant effect of group counselling on Hepatitis prevention strategies among secondary school students in Donga Education Zone.

Table 4: Analysis of Covariance (ANCOVA) on Hepatitis Prevention Strategies among Experimental and Control Group

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	197.614[a]	4	49.404	5.816	.000	.227
Intercept	2138.966	1	2138.966	251.798	.000	.761
Pre-test Prevention	.044	1	.044	.005	.943	.000
Group	179.223	1	179.223	21.098	.000	.211
Gender	19.302	1	19.302	2.272	.136	.028
group * gender	10.081	1	10.081	1.187	.279	.015
Error	671.088	79	8.495			
Total	41745.000	84				
Corrected Total	868.702	83				
a. R Squared = .227 (Adjusted R Squared = .188)						

Table 5 presents Analysis of Covariance on the effect of group counselling on Hepatitis prevention strategies among secondary school students in Donga Education Zone. The covariate was used as pre-test scores of both treatment and control groups. After the analysis, the finding shows that, there is significant effect of treatment among experimental group on Hepatitis prevention strategies against the control group: thus scores F=21.098, P=.000.This indicates that group counselling is effective in creating preventive strategies among secondary school students. Therefore, the null hypothesis which states that there is no significant effect of group counselling on Hepatitis awareness among secondary school students in Donga Education Zone is rejected.

DISCUSSION
Based on the findings of each hypothesis. The findings of the present study are discussed in the following manner. From the analysis of the data in table 1 it was found that the experimental group has gained more awareness after been exposed to treatment against the participants in control group. The difference indicates that group counselling is effective

in creating awareness among secondary school students. In table 3 the finding shows that, there is significant effect of treatment among experimental group on Hepatitis awareness against the control group: thus scores F=605.193, P=.000. This indicates that group counselling is effective in creating awareness among secondary school students. These findings were in line with Bruss (2007) who explained that adequate awareness of the dangers associated with chronic stage of hepatitis will reduce the spread of the disease.

Shankargouda, Roopa, Rao and Anveeta (2013) also stated that adequate awareness, precaution and protection should be advocated in order to prevent the nosocomial spread of HBI. It was also found out that health education has significant effect on the knowledge of students on causes, mode of transmission, sign/symptoms and prevention of Hepatitis B infection this was supported by Young (2008) emphasized the name of virus that cause HBV as hepatitis B virus and its virulence thereby compared and contrast HIV and HBV as the leading cause of sexually related viral infections, Busari and Danesy (2014) reported that HBV is transmitted the exact way HIV/AIDS is transmitted and the knowledge of route of transmission of the infection has provided an escape route to avoid being infected by the adolescents. Kaplan (2003) explained that adolescents who were exposed to information on the sign and symptoms of hepatitis B were able to differentiate hepatitis B infection from mere flu, he explained further that adolescents who were exposed to information on prevention of STI e.g. Hepatitis B is likely to live a life that is free of sexually transmitted infection

Furthermore, the present study in table 3 found out that female participants in experimental and control groups have gained more means compare to males after the experiment, in table 5 the finding shows that, there is no significant effect of group counselling on Hepatitis awareness among experimental and control groups according to gender. Thus, result shows that treatment scores are F=2.272, P= .136. This indicates that group counselling has no significant effect on Hepatitis awareness among experimental and control groups according to gender. However, an additional result yielded by the analysis of the data of the present study in table 4 indicated that the means and standard deviations scores of students on Hepatitis prevention strategies among experimental and control; the experimental group has in pre-test means/standard deviations of 22.5476 (2.58704) also, in post-test the means/standard deviations of

61.1667 (7.57698) were realized. While, the control group has the means/standard deviations in pre-test as 22.6905 (2.00594) in post-test the means/standard deviations are 30.9048 (7.20707). These show that the experimental group has gained more knowledge of prevention strategies after been exposed to treatment against the participants in control group. The difference indicates that group counselling is effective in creating preventive strategies among secondary school students. This finding agrees with that of Chavez (2015) findings which reported that counseling of students helps in awareness creation and help to prevent hepatitis infection.

The test results further indicated that there is significant effect of treatment among experimental group on Hepatitis prevention strategies against the control group: thus scores F=21.098, P=.000. This indicates that group counselling is effective in creating preventive strategies among secondary school students. An additional result yielded by the analysis of the data in the present study in table 5 indicated that treatment scores are F=2.272, P= .136. This indicates that group counselling has no significant effect on Hepatitis prevention strategies among experimental and control groups according to gender. This finding disagree with the findings of Taha and Bella (2012) which reported that there was no significant difference in the knowledge of risk factors and preventive measures of hepatitis between males and females. Similarly, Zhang, Minmin, Hassan, Jian, Shengchun, Tao and Xing (2008) reported that men showed low knowledge of risk factors of hepatitis and awareness. Furthermore, this finding disagrees with the findings reported by Hamdan, Saeed, Kutbi, Choudhry and Nooh (2010) which revealed that hepatitis was not significantly associated with gender.

CONCLUSION

Based on the findings of the study it was concluded that, group counseling is effective in creating awareness and preventive strategies against hepatitis among secondary school students.

RECOMMENDATIONS

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

1. Government should use group counselling in secondary schools so that awareness on Hepatitis will reach many students.

2. Government should use group counselling in secondary school so that preventive strategies on   Hepatitis will reach many students.

3**.** Workshops/seminars on students' participation in the hepatitis prevention should be organized for the in-service teachers. This will allow them learn how to use the strategy in the creation of Hepatitis preventive strategies.

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