

EFFECT OF BIOCENTRIC COUNSELLING ON AWARENESS OF SEXUALLY TRANSMITTED INFECTIONS AMONG SECONDARY SCHOOL STUDENTS IN JALINGO EDUCATION ZONE.

Kenneth Grace Yahaya¹, Usman Bakari²

1,2 Department of counselling educational psychology and Human Development, Faculty of Education Taraba State University Jalingo

Abstract

This Research investigated the effect of Biocentric Counselling on awareness of sexually transmitted infections among secondary school students in Jalingo Education Zone. Two research Objectives guided the study and two Hypotheses were formulated and tested at 0.05 level of significance. The study adopted one group of non-randomized pre-test/post-test quasi experimental design. The population of the study was 3,116 secondary school students from the 45 Public Secondary Schools in Jalingo Education Zone. The sample size of the study was fifty (50) SS II students selected from senior secondary schools in Jalingo Education Zone, consisting of 25 male and 25 female drawn purposively from one (1) secondary school. The instrument for data collection was a self-developed structured questionnaire, titled 'Awareness on Sexually Transmitted Infection Questionnaire (ASTIQ). It was arranged in two sections A and B, comprising of thirty items. Section A elicited information on the bio data of the respondents. Section B contained items of the research questions variables and it was divided in to four cluster 1,2,3 and 4. The ASTIQ was duly validated by three experts in the Faculty of Education, Taraba State University, Jalingo. The reliability of the ASTIQ was obtained by subjecting the ASTIQ to a pilot test and it yielded a reliability coefficient of 0.779. The data collected were analysed. Inferential statistics of paired-sample t-test was used to test the hypotheses at 0.05 level of significance. The findings of the study findings revealed that after the treatment participant appear to be more aware of sexually transmitted infections. The counselling appears to have a similar impact on awareness of sexually transmitted infections across gender. It was recommended that Government should encourage the training of more counsellors to handle problems relating to awareness of sexually transmitted infections, workshops and seminars in counselling should be organized often, in order to acquaint both the teachers and students on awareness of sexually transmitted infections and Counsellors, psychologists and other professionals working in school settings should create special programmes for students with problem on the awareness of sexually transmitted infections.

Keywords: Biocentric Counselling, awareness, sexually transmitted

infections. Introduction

Sexually transmitted infections (STIs) are those diseases that are contracted mainly through sexual intercourse. They include curable ones like gonorrhoea, trichomoniasis, syphilis, and chlamydia infections as well as incurable but modified ones like HIV, herpes simplex, human

papilloma virus (HPV), and hepatitis B virus (Kaidal, 2021). STIs are spread predominantly by sexual contact, including vaginal, anal and oral sex. More than 1 million people are infected with sexually transmitted infections (STIs) every day worldwide according to World Health Organization on STI's (WHO, 2023). Meanwhile, Kaidal (2021) revealed that each year, there are an estimated 376 million new infections with 1 of 4 sexually transmitted infections: chlamydia, gonorrhea, syphilis and trichomoniasis. Nearly more than seven of these sexually transmitted diseases are epidemic proportion in Nigeria. These are HIV, HBV, HPV, Genital herpes, syphilis, gonorrhea, and trichomoniasis.

The prevalence rate for HIV in Taraba state ranged from 7.0 to 5.2% (Fidelis, 2017 and Taraba state HIV/AIDS Strategic Plan, 2017). Going by the 5.2% HIV/AIDS prevalence rate in Taraba state as at 2018, it could be estimated that about 127,167 people were living with the virus in the state. As at 2017, only 2,541 infected people in the state were known to be placed on the antiretroviral therapy (ART) programme in the state. A rapid assessment survey of HIV/AIDS prevalence carried out by the Family Health International (FHI) (2020) shows that the state has local government areas (LGAs) with high risk settings. Some of these LGAs include Zing LGA (Sabon Layi area), Gassol LGA (Mutum Biyu, Tella, Kwararafa area), Jalingo (Sabon Layi, Gidin-Dorowa and the city center), Wukari and Sardauna (Gembu area). However, just because a cure has been found, this doesn't mean that the dangers of STIs have disappeared. Importantly, literatures on the awareness of STIs in Jalingo Education Zone are quite scanty if any.

The greatest incidence of STDs in Nigeria is more prevalent in the populations of young adult ages between 15 to 35 according to world Health Organization (WHO, 2023); this age group is least likely to seek counseling and guidance on prevention strategies, treatment and control sexuality health education and reproductive health. Increased sexual urged by young adult and multiple sexual partners make these important sexually transmitted diseases particularly more difficult to prevent and control (Fape (2021). Similar findings have shown that more than 500 million people within the age bracket of 15–49 years are estimated to have a genital infection with herpes simplex virus (HSV or herpes) (1). STIs therefore, have a direct impact on sexual and reproductive health through stigmatization, infertility, cancers and pregnancy complications and can increase the risk of HIV (WHO, 2023). According to Kadiri (2022) sexually transmitted disease is a public health, social problem that affects adolescents all over the world including sub-

Saharan Africa. Sexually transmitted infections (STDs) are a major health problem affecting mostly young people, not only in developing but also in developed countries (Zeeb, 2021).

Biocentric counselling is a cognitive-experiential approach to problems of development, personal growth, and self-actualization (Branden, 2016). The in-depth form of it developed around a perspective that sees students first and foremost as living organisms whose primary task is to exercise their capacities effectively to satisfy their needs and thereby preserve and enhance their well-being. This implies that enhancing students' well-being will require a Biocentric counselling among students of secondary school on awareness and preventive strategies of sexually transmitted infections. The way in which an individual deals with this task is seen as the key to his psychology. According to Woodhall (2019) if a person is to act effectively, if he is to maintain and further his life he requires knowledge of his environment, of his own state of external and internal reality of the world and of self. Thus, Biocentric counselling sees a students' mental functioning as being psychologically maladaptive to the extent that the functioning of his consciousness is impeded by blocks, his psychology is biologically maladaptive to the extent that blocks obstruct the functioning of consciousness. Thus, a central goal of counselling is to remove obstructions to awareness and restore the integrated power of the mind. Biocentric counselling tends to see "symptoms" as representing undesirable "solutions" to real problems arising in the course of the individual's development. The blocking or disowning of feelings, for example, can have obvious short-term functional utility for a child struggling to survive in a terrifying and painful environment even though there are very real long-term dangers in learning this strategy (Branden, 2016).

The focus on the integration of mind and emotion is perhaps the most distinctive aspect of Biocentric Therapy. Unlike traditional cognitive therapies that often prioritize the modification of thought patterns, Biocentric Therapy seeks to harmonize cognitive and emotional processes. This holistic approach acknowledges that emotions provide valuable information about our needs, desires, and values, and that emotional intelligence is crucial for adaptive functioning and personal growth (Goleman, 2016). By fostering emotional self-awareness, clients can develop a more nuanced understanding of their inner experiences, leading to greater self-acceptance. This acceptance is not passive but an active engagement with one's emotional life, promoting resilience and a more robust sense of self. The process of integrating mind and emotion can lead to profound

personal transformation, enabling individuals to live more authentic and fulfilling lives (Branden, 2019).

Statement of the Problem

STIs have a profound impact on sexual and reproductive health worldwide. In 2020, WHO estimated 374 million new infections with 1 of 4 STIs: chlamydia (129 million), gonorrhea (82 million), syphilis (7.1 million) and trichomoniasis (156 million). More than 490 million people were estimated to be living with genital herpes in 2016, and an estimated 300 million women have an HPV infection, the primary cause of cervical cancer and anal cancer among men who have sex with men. STIs can have serious consequences beyond the immediate impact of the infection itself. STIs like herpes, gonorrhea and syphilis can increase the risk of HIV acquisition. Mother-to-child transmission of STIs can result in stillbirth, neonatal death, low-birth weight and prematurity, sepsis, neonatal conjunctivitis and congenital deformities. HPV infection causes cervical and other cancers. Hepatitis B resulted in just over 1 million deaths in 2022, mostly from cirrhosis and hepatocellular carcinoma. STIs such as gonorrhea and chlamydia are major causes of pelvic inflammatory disease and infertility in women.

SS II Students (adolescents) who are in their stage of growth and development having increased sexual urge predisposes them to indiscriminate sexual activity with multiple sexual partners that increased their vulnerability to STIs acquisition which has future complications in life such as Pelvic Inflammatory Diseases, infertility, cancers of different types, HIV, HBV and even death. Sexually transmitted infections (STIs) continue to pose significant public health challenges worldwide, particularly among adolescents who often lack adequate knowledge and resources to protect themselves. In Nigeria, the prevalence of STIs among secondary school students is a growing concern, exacerbated by insufficient awareness and preventive measures. Despite efforts to incorporate sexual health education into school curricula, many students in the Jalingo Education Zone remain inadequately informed about STIs, their transmission, and prevention methods. This lack of awareness contributes to risky sexual behaviors and increased vulnerability to STIs. However, there is limited research on the effectiveness of biocentric counselling in improving STI awareness and prevention among secondary school students in this Zone.

The purpose of this study was to determine the effect of Biocentric Counselling on awareness of sexually transmitted infections among secondary school students in Jalingo Education Zone. Specifically, the study intends to:

1. Determine the effect of Biocentric counselling on awareness of sexually transmitted infections among secondary school students in Jalingo education zone.
2. Determine the effect of Biocentric counselling on awareness of sexually transmitted infections according to gender among Secondary School students of in Jalingo Education Zone

Hypotheses

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

H₀₁: there is no significant effect of Biocentric Counselling on awareness of sexually transmitted infections among secondary school students in Jalingo Education Zone

H₀₂: there is no significant effect of Biocentric Counselling on awareness of sexually transmitted infections according to gender among Secondary School students in Jalingo Education Zone

Methodology

The paper adopted one group of a non-randomized pre-test/post-test Quasi experimental design, as per Emaikwu (2015), is the most potent and valid design that can be utilized to confidently identify the cause of any given effect. The reason for adopting the quasi-experimental design in this study is that it was not feasible for the researcher to fulfil all the prerequisites of the true experiment. The population of the study consists of 3,116 secondary school students from the 45 Public Secondary Schools in Jalingo Education Zone. Source: Annual school census Post Primary School Management Board (PPSMB, 2024). The sample size of the study was fifty (50) SS II students from senior secondary schools in Jalingo Education Zone, consisting of 25 male and 25 female drawn up from one (1) secondary school. The instrument for data collection was a self-developed structured questionnaire, titled ‘Awareness on Sexually Transmitted Infection Questionnaire (ASTIQ). It was arranged in two sections A and B, comprising of thirty items. Three experts from the Faculty of Education, Taraba State University, Jalingo vetted the instruments, their corrections and moderations were noted and formed part of the instrument for use in the study. They were specifically requested to assess the items based on, the quality of its language and the logicity of its arrangement and the relevance of the items in addressing the

purpose of the research. The validated instrument was administered to a sample of forty (40) respondents drawn outside the study area. The school selected for pilot testing is outside the sampled school for the main study but have some degree of similarities with the sampled school. The scores obtained from the pilot testing were subjected to Cronbach Alpha method to determine the internal consistency of the ASTIQ. The reliability coefficient of 0.779 was obtained which was esteemed to be reliable. The data collected were analysed using mean (\bar{x}) and standard deviation (sd) while inferential statistics of paired sample T-test was used to test the hypotheses at 0.05 level of significant.

Result

Hypotheses

HO1: there is no significant effect of Biocentric Counselling on awareness of sexually transmitted infections among secondary school students in Jalingo Education Zone

Table 1: Paired Sample t-test on the effect of Biocentric Counselling on awareness of sexually transmitted infections among secondary school students in Jalingo Education Zone

Variable	Test	N	Mean	SD	Df	t-cal	Sig (p)
Awareness	Pre-test	50	17.98	0.65	49	4.75	.000
	Post-test	50	18.70	0.83			

Table 1 presents the results of a paired sample t-test that examines the effect of Biocentric counselling on awareness of sexually transmitted infections (STIs) among secondary school students in Jalingo Education Zone. Here's an interpretation of the results in relation to the hypothesis. Pre-test Mean = 17.98, Post-test Mean = 18.70: The mean awareness score increased from 17.98 before the intervention to 18.70 after the counselling, indicating an improvement in students' awareness on STIs following the Biocentric counselling. Standard Deviation (SD): The standard deviation is 0.65 for the pretest and 0.83 for the post-test, suggesting slightly more variability in awareness scores after the counselling. Degrees of Freedom (df) = 49: This is based on the sample size of 50 (N - 1). t-calculated (t-cal) = 4.75, p = .000: The calculated t-value is 4.75, and the significance level (p-value) is .000.

Since the p-value (.000) is less than the conventional significance level (0.05), we reject the null hypothesis (H_{01}). This means that there is a significant effect of Biocentric counselling on the awareness of sexually transmitted infections among secondary school students in the Jalingo Education Zone. The positive change in the mean scores from the pretest to the post-test supports the conclusion that Biocentric counselling effectively improved students' awareness of STIs.

Hypothesis two

H_{02} : there is no significant effect of Biocentric Counselling on awareness of sexually transmitted infections according to gender among Secondary School students in Jalingo Education Zone

Table 2: Independent samples t-test on Gender Difference in the effect of Biocentric Counselling on awareness of sexually transmitted infections among Secondary School students in Jalingo Education Zone

Variable	Gender	N	Mean	SD	df	t-cal	Sig (p)
BCT	Male	25	18.62	0.83	48	-.840	.405
	Female	25	18.83	0.85			

Table 2 presents the results of an independent samples t-test that examines the effect of Biocentric counselling on awareness of sexually transmitted infections (STIs) according to gender among secondary school students in the Jalingo Education Zone. Here's an interpretation of the results in relation to the hypothesis. Mean Awareness Scores: Male Students: Mean = 18.62, SD = 0.83 (N = 25). Female Students: Mean = 18.83, SD = 0.85 (N = 25). Degrees of Freedom (df) = 48: t-calculated (t-cal) = -0.840, p = .405: The calculated t-value is -0.840, and the significance level (p-value) is .405.

Since the p-value (.405) is greater than the conventional significance level (0.05), we fail to reject the null hypothesis (H_{02}). This means that there is no significant difference in the effect of Biocentric counselling on awareness of sexually transmitted infections between male and female students. In other words, both male and female students experienced an increase in awareness, the difference in their mean scores (18.62 for males and 18.83 for females) is not statistically significant. The counselling appears to have a similar impact on awareness of STIs across genders.

Discussions

Table 1 presents the means of pre-test and post-test of the effect of Biocentric counselling on awareness of sexually transmitted infections among secondary school students in Jalingo Education Zone. The data shows that the mean and standard deviation of students' awareness of sexually transmitted infections (STIs) before and after receiving Biocentric counselling (BCT). Before receiving Biocentric counselling, the average awareness score of students low with a relatively low variability in scores after the intervention, the average awareness score increased this shows that the increase in the mean score from 17.98 (pre-test) to 18.70 (post-test) suggests that Biocentric counselling had a positive effect on the awareness of STIs among the students. The results of the hypothesis tested using a paired samples t-test also shows that the p-value (.000) was less than the conventional significance level (0.05), This means that there was a significant effect of Biocentric counselling on the awareness of sexually transmitted infections among secondary school students in the Jalingo Education Zone. The positive change in the mean scores from the pre-test to the post-test supports the conclusion that Biocentric counselling effectively improved students' awareness of STIs.

The finding was in agreement with that of Du (2019) who investigated the effectiveness of school-based education on HIV/AIDS knowledge attitudes and behavior among secondary school students in Wuhan China. After the intervention, all of the students had significant improvements in knowledge and attitude about HIV/AIDS ($P < .05$), indicating that educational intervention increased the students' knowledge significantly and changed their attitudes positively. Logistic regression analyses indicated that before the intervention the students' level of knowledge about HIV/AIDS was significantly associated with grade, economic status of the family, and attitudes toward participation in HIV/AIDS health information campaigns.

The findings of the study support that of Mbu (2013) explored the effect of biocentric counselling on HIV/AIDS awareness among secondary school students' in Zambia the findings indicate that biocentric counselling was effective on HIV/AIDS awareness among secondary school students even though students do have access to counselling services. However, the majority of the respondents expressed their lack of basic information on the relevance of the counsellor in their education.

Nevertheless, the findings are in agreement with the work of Biro (2015) who investigated the impact of health education counselling on rate of sexually transmitted infections in adolescents in USA. Findings of the study indicated that Health education counselling in an urban adolescent clinic is effective in reducing recurrent infection at 12-month follow-up and can serve as an important component in reducing STI recidivism.

Effect of Biocentric counselling on awareness of sexually transmitted infections according to gender among Secondary School students, Table 2 presents mean and standard deviation of the effect of Biocentric counselling on awareness of sexually transmitted infections (STIs) among male and female secondary school students in the Jalingo Education Zone. It shows that, the average awareness score among male students after receiving Biocentric counselling was indicating moderate variability in their awareness scores. Female Students was slightly higher showing a similar level of variability in scores as observed among male students. The mean scores suggest that both male and female students experienced a positive effect from Biocentric counselling on their awareness of STIs, with female students having a marginally higher average awareness compared to male students. However, the difference between the means was small, suggesting that the effect of the counselling was fairly consistent across genders. Also the tested hypothesis using independent samples t-test to examines the effect of Biocentric counselling on awareness of sexually transmitted infections (STIs) according to gender shows significant difference in the effect of Biocentric counselling on awareness of sexually transmitted infections between male and female students.

The findings of the study was in agreement with the study conducted by Khan (2020) who investigated on the awareness of school students on sexually transmitted infections (STIs) and their sexual behavior and found that Sexual experience was significantly associated with gender, ethnicity and education level. However, multiple partner behaviour was significantly associated only with gender and knowledge level was significantly associated with religion.

The findings of this study was in line with that of Zeeb (2021) who conducted a study on Awareness and knowledge of sexually transmitted diseases (STDs) among school-going adolescents in Europe the findings shows that generally, awareness and knowledge varied among the adolescents depending on gender. For syphilis, gonorrhoea and herpes only awareness was assessed.

The findings of this study is in agreement with that of Bakari (2017) who conducted a study on effect of didactic counselling on HIV/AIDS awareness among senior secondary school students. The results of the study showed that there was increase awareness of HIV/AIDS among senior secondary school students in four schools. The result also revealed that, didactic counselling has significant effect on HIV/AIDS awareness among senior secondary school students in Ado, Nigeria. Furthermore, Didactic counselling has significant gender difference on HIV/AIDS among senior secondary school students in Ado, Nigeria. It was recommended that, Didactic counselling should be used in creating HIV/AIDS awareness to students in senior secondary schools, since students who were exposed to the treatment gained more awareness about HIV/AIDS.

The findings of this study was in support with that of william (2019) who investigated on effect of biocentric counselling on HIV/AIDS awareness among senior secondary school students. Findings of the study revealed that biocentric counselling has a positive effect on the awareness of sexually transmitted infections among secondary school students; biocentric counselling has a positive effect on the awareness of sexually transmitted infections by gender.

Conclusions

Based on the analyses of the data and the findings revealed, It was concluded that Biocentric counselling was effective in creating and enhancing awareness on sexually transmitted infections among secondary school students and it is gender friendly.

References

- Akpeji, J.(2018). The prevalence of sexually transmitted diseases among young adults in Nigeria. *Journal of Public Health and Epidemiology*, 13 (2), 121-129
- Braddock, B.(2021). Impact of health education counselling on rate of sexually transmitted infections in adolescents in USA. *Journal of Adolescent Health*, 57(1), S7-S12.
- Branden, G.(2016). Epidemiology of sexually transmitted infections in Nigeria. *African Journal of Infectious Diseases, 15*(1), 45-54.
- Chukwu, H.(2014). Factors influencing the screening for sexually transmitted diseases among adults in Maiduguri metropolis of Borno State North-Eastern, Nigeria. *International Journal of Health Sciences and Research*, 11(1), 45-54.

- Dlamini,U. (2017). Factors influencing the screening and counselling on sexually transmitted infections among adults in Maiduguri Metropolis of Borno State, North- Eastern, and Nigeria. *Medical Mycology Open Access Journal* 7 (6),1-6
- Fape, M. (2021). History of public health responses to sexually transmitted infections in the UK. *Sexually Transmitted Infections*, 97 (6), 389-394.
- Kadiri, H. (2015). Awareness and practice preventive of measures regarding (STDs) among students of demonstration secondary school Maiduguri, Borno State. *Journal of Health Education Research and Development* 6 (3),1-6
- Kaidal, A.(2021). Health Belief Model in Theory at a Glance: A Guide for Health Promotion Practice U.S Department of Health and Human Services
- Mbu, H.(2013). Herpes simplex virus: global infection prevalence and incidence estimates, 2016. *Bulletin of the World Health Organization* 98 (5), 315-259.
- Oruonye,I.(2021). Determinants of comprehensive knowledge of HIV/AIDS among undergraduates in a medical school in South-Western Nigeria. *Nigerian Journal of Clinical Practice*, 19(1), 22-28.
- Samkange-Zeeb, Spallek Zeeb, N. (2021). Adolescent sexual and reproductive health in the Niger Delta region of Nigeria—issues and challenges. *African Journal of Reproductive Health*, 11(1), 113-124.
- Scottts, Y.(2012). Adolescent sexual and reproductive health in the Niger Delta region of Nigeria —Issues and challenges. *African Journal of Reproductive Health*, 11 (1), 113-124.
- WHO, (2023). Global health sector strategy on sexually transmitted infections 2016-2021
- William, U. (2019). William, E. (2019). Effect of biocentric counselling on HIV/AIDS awareness among senior secondary school students in Goronyo Local Government Area of Sokoto State. *International Journal of Adolescent Medicine and Health*, 31(2).
- Zeeb, Y.(2021). Understanding the impact of biocentric counselling on student awareness. **Journal of Counselling Psychology*, 27*(3), 233-245.