

BASIC EDUCATION TRAINEE TEACHERS KNOWLEDGE AND PERCEPTION OF CAUSES OF SEXUALLY TRANSMITTED INFECTIONS (STIS)

By

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ABSTRACT

The mandate of the teacher training programme at the Nigeria Certificate in Education (NCE) level is to produce quality teachers for the Basic Education subsector. The 2008, 2012 and 2020 editions of NCE Minimum Standards took cognisance of various developments and needs required to make a quality teacher. In this regard, courses like 'Family Life and Emerging Issues' were introduced to equip the teachers with necessary skills to effectively live a meaningful life and also guide their students / pupils. This report therefore present trainee teachers' knowledge and perception of causes and prevention of sexually transmissible infections (STIs). Using descriptive survey design, five questions were raised and four hypotheses were formulated and 280 students who were randomly selected responded to the research questionnaire. Results revealed that one social class was perceived to be more vulnerable to STIs and that sexuality is believed to be the major cause of STIs. It is recommended that more socially motivated programs coloured with STI related programs will further raise the level of trainee teachers' awareness of STI and also sustain the existing achievement level. Also, trainee teachers' involvement and participation in all matters of reproductive health should be encouraged in all higher institutions.

Key words: Sexually Transmitted Infection (STI), Sexually Transmitted Disease (STD)
Nigeria Certificate in Education (NCE)

Introduction.

Various curricula in Nigeria reflect the need for health awareness, hence, Health Education is part of the curriculum or Minimum Standards for Nigeria Certificate in Education (NCE) which is applied in the training of teachers for the Basic Education programme. Also, the General Studies Programme is designed to expose students to a variety of knowledge across disciplines. It aims to enable students appreciate the relationship among disciplines in an integrated world, which has become a big global village in large part due to advances in science and technology which have broken traditional boundaries in human knowledge and communication. The internet is also actively making obsolete the compartmentalization of human knowledge. General

Studies therefore offers the potential for bridging gaps in human knowledge, thereby preparing the students to meet the challenges of the changing world adequately.

Accordingly all first year NCE trainee teachers must offer GSE 124 titled FLEHI- family life & emerging issues as a compulsory course (NCCE, 2008, 2012, 2020). Considering the age of NCE trainees, there has been the need and concern for sensitivity on sexually transmissible infections in order to expose the students to variety of knowledge across disciplines.

Sexually transmissible infections (STI), previously referred to as sexually transmitted diseases(STD) and venereal diseases (VD), are illnesses that have significant probability of transmission between humans by means of human sexual behavior, including vaginal intercourse (straight), oral (fellacio) and or anal sex (gay and lesbianism). While in the past, these illnesses have mostly been referred to as STDs or VD, in recent years the term *sexually transmissible infections (STIs)* has been preferred, as it has a broader range of meaning. A person may be *infected*, and may potentially infect others, without having a *disease*. Some STIs can also be transmitted via the use of drug needles after its use by an infected person, as well as through childbirth or breastfeeding. (Wikipedia, 2021)

Some such infections can also be transmitted non-sexually, such as from mother to infant during pregnancy or childbirth, or through blood transfusions or shared needles. (mayoclinicstds /october,2019). It is important to realize that sexual contact includes more than just sexual intercourse (vaginal and anal). Sexual contact includes kissing, oral-genital contact, and the use of sexual "toys," such as vibrators. *STIs* probably have been around for thousands of years, but the most dangerous of these conditions, the acquired immunodeficiency syndrome AIDS or HIV disease, has only been recognized since 1984 (*William and Shiel Jr, 2012*). Sexually transmitted infections have been well known for hundreds of years, and venereology is the branch of medicine that studies these diseases. (Wikipedia, 2021)

STI incidence rates remain high in most of the world, despite diagnostic and therapeutic advances that can rapidly render patients with many STIs noninfectious and cure most. In many cultures, changing sexual morals and oral contraceptive use have eliminated traditional sexual restraints, especially for women, and both physicians and patients have difficulty dealing openly and candidly with sexual issues. Additionally, development and spread of drug-resistant bacteria (e.g., penicillin-resistant gonococci) makes some STIs harder to cure. The effect of travel is most dramatically illustrated by the rapid spread of the AIDS virus (HIV-1) from Africa to Europe and the Americas in the late 1970s. (Mary-Ann & Anna – Barbara, 2006).

Many STIs are treatable, but effective cures are lacking for others, such as HIV, HPV, and hepatitis B and hepatitis C. Even gonorrhea, once easily cured, has become resistant to many of the older traditional antibiotics. Many STIs can be present in, and spread by, people who do not have any symptoms of the condition and have not yet been

diagnosed with an STI. Therefore, public awareness and education about these infections and the methods of preventing them is important. (*William & Shiel Jr., 2012*) Control of sexually transmissible infections (STIs) is therefore an important factor in the prevention of sexual transmission of HIV infection. Despite a close link between the two disease entities, not enough data are however available on risk factors for HIV infection among STI clinic patients in Nigeria (Kehinde et al, 2004.)

Sexually transmitted infections (STIs) are very widely spread but poorly recognized among sexually active persons, in Nigeria in spite of the fact that it constitutes a major risk for the transmission of the diseases which include HIV-AID. So far a little is known about school age perception and management of the concept. This study is therefore to be carried out to ascertain the knowledge, perceptions and readiness of the teacher trainees for the management of STIs and to obtain relevant socio-demographic and reproductive health data associated with STIs. This information is needed for designing STIs control strategies especially among NCE students who are within the age group that is prone to STIs and are also trainee teachers. Basically, the thrust of the study was to investigate NCE students' knowledge, attitudes and beliefs on sexually transmissible infections (STI)

Related Literature

General Studies Education 124 (FLEHI, GSE 124) is a one credit compulsory course in the NCE Minimum Standards (curriculum) published by the National Commission for Colleges of Education in 2020.

The course is divided into 6 units. Human Development consists of Reproductive Anatomy and Physiology, Puberty, Reproduction, Pregnancy, Body image, Sexual Identity and Relationship; Relationship, Family and Family Life, Friendship, Love Dating and Courtship, Marriage Parenting. Personal Skills consists of Values, Self-esteem, Goal setting, Decision making communication, Negotiation, Assertiveness, Finding Help, Counselling. Sexuality Health /HIV Infection consists of Contraception, Abortion, Sexual Abuse, STIs /HIV, Drug Abuse, Health Promoting Behaviour. Sexuality, Society and Culture consists of Sexuality and Society, Gender Roles, Diversity Sexuality and the Law, Sexuality and Arts, Sexuality and the Media; and First Aid which consists of, Importance of First Aid, Objectives and Importance of Safety Education

STIs are infections that are spread primarily through person-to-person contact. More than 30 bacteria, viruses and parasites are transmitted sexually (WHO 2021.) The WHO estimates that 374 million new cases of chlamydia, gonorrhoea, syphilis, and trachomatis. More than a million curable STIs occur annually throughout the world in adults aged 15-49 years; and in developing countries, STIs and their complications rank among the top five disease categories for which adults seek health care. The presence of an untreated STI increases the risk of both acquisition and transmission of HIV by a

factor of up to 10 (WHO 2014). HIV and STIs prevalence among female sex workers in sub-Saharan Africa varies widely, but in some countries it is more than 20 times higher than the HIV prevalence of the general population. (Izugbara, 2013; UNAIDS/ WHO, 2009.) Thus, prevention and prompt treatment of STIs is important for preventing HIV in people at high risk, as well as in the general population.

The diseases on STI list are most commonly transmitted solely by sexual activity. Many infectious diseases, including the common cold, influenza, pneumonia, and most others that are transmitted person-to-person can also be transmitted during sexual contact, if one person is infected, due to the close contact involved. However, even though these diseases may be transmitted during sex, they are not considered STIs.

In 2021, the World Health Organization estimated that more than 1 million people were being infected daily. About 60% of these infections occur in young people <25 years of age, and of these 30% are <20 years. Between the ages of 14 and 19, STIs occur more frequently in girls than boys by a ratio of nearly 2:1; this equalizes by age 20. An estimated 374 million new cases of syphilis, gonorrhea, chlamydia and trichomoniasis occurred throughout the world in 2021.

Fox news (2015) reported that the study by CDC Shows among girls who admitted ever having sex, the rate was 40%. UNAID/WHO (2009) revealed AIDS is the single largest cause of mortality in present-day Sub-Saharan Africa. The majority of HIV infections are acquired through unprotected sexual relations between partners, one of whom has HIV. AIDS remains the leading cause of death among African American women between ages 25 and 34 CNN (2008) Hepatitis B is also classed as a sexually transmitted disease because it can be passed on sexually. The disease is found globally, with the highest rates in Asia and Africa and lower rates in the Americas and Europe. Worldwide, an estimated two billion people have been infected with the hepatitis B virus (WHO, 2020).

Health workers in Nigeria screened 551 patients attending the Special Treatment Clinic of the University College Hospital in Ibadan for common sexually transmitted infections (STIs). 55.8% of patients were males and 44.2% were females. 65.3% of patients were 21-30 years old. 76.4% were 16-30 years old. 69.6% (384) had at least one STI, with the most common STIs being gonococcal infections (25.6%), non-specific urethritis or cervicitis (17.8%), and genital ulcer diseases (12%). 5.1% tested positive for HIV infection (2.9% for HIV-1 and 2.2% for HIV-2). This HIV prevalence rate among STI clinic attendees in Ibadan was much higher than that among blood donors in Ibadan. 27 of the 28 HIV-positive patients also had another STI, particularly gonococcal infections and non-specific urethritis and cervicitis (Ekweozor, Olaleye, Tomori and Saliu,1994).

Aladeniyi, Bodunwa and Sonde, M. (2017) reported significant relationship between the type of STD reported and the survival. They also found that male gender has a greater chance of surviving any STD regardless of his age. Thairu, Shehu & Egenti (2015) found out that STDs is common phenomena among the youth who are sexually

active. Candidiasis was the commonest presentation among females while more male students harbor gonorrhoea than female students.

Research Questions

The study addressed the following research questions;-

1. How does age affect the awareness of NCE students on STIs?
2. Which of the social class is more vulnerable to STIs?
3. How does religion of NCE students, determine their awareness of STIs?
4. What are causes of STIs from NCE student's belief?
5. What is the respondent's belief about STIs as a disease?

Hypotheses

1. Age of NCE students does not significantly determine the level of their awareness of STIs.
2. NCE students believe that, no social class is significantly vulnerable to STIs than another.
3. NCE students' awareness of STIs is significantly independent of their religious inclination
4. None of the causes of STIs advanced by NCE students is significantly believed to be the main cause of STIs.

Methodology.

The study was descriptive survey type and people were studied at each of several age level by seeking their opinion on issues as they relate to STIs.

The study population comprised of 600 students of Federal College of Education (Technical) (FCE{T}) Bichi, Kano State who had offered the course (FLEHI) at NCE 1 level under the researcher. A simple random sampling method was employed to identify 280 students who constituted the sample for the study.

Instrumentation

The data was collected by the lead researcher who is a Medical Director of the College and part time instructor of the course with the assistance of research associates who administered a validated questionnaire. The instrument used was the *Perception to Sexuality Transmitted Infection Questionnaire (PSTIQ)* (which was validated by co researcher who is a test and measurement expert and other colleague. It contains four sections which covered socio demographic variables, knowledge, perception, causes and risk factors and prevention of STIs. Through a pilot study, its test retest reliability (0.85) was adjudged good enough for use. Data collected was analysed 5% level of significance.

Hypothesis 1

Age of NCE students does not significantly determine the level of their awareness of STIs.

Table I: Relationship between age of the respondents and knowledge of STIs.

Age	Good Knowledge	Fair knowledge	Poor knowledge	χ^2 obs	df	p	Decision
<17	2	8	9	71.91	2	.001	Reject H_o
>17	226	11	24				
Total	228	19	33				

$\chi^2(2, N=280)=71.9$ $p<.05$

From table II, $\chi^2(2, N=280)=71.9$ $p<.05$ hence, the null hypothesis was rejected. This implies that age of NCE students significantly determine their level of awareness of STIs. Also, Eighty one percent of the respondents had good knowledge of STIs while ninety nine percent of the respondents who had good knowledge of STIs were more than 17 years old (Table II).

Hypothesis 2

NCE students believe that, no social class is significantly vulnerable to STIs than another.

Table II: The social class mostly affected by STIs

Social class	Freq Obs (%)	Freq Exp	χ^2 obs	df	p	Decision
The Rich	98(35)					
The Poor	132(47)	93.33	36.37	2	.001	Reject H_o
Average (middle)	50(18)					
Total	280(100)					

$\chi^2(2, N=280)=93.33$, $p, <.05$

From table III, $\chi^2(2, N=280)=93.33$, $p, <.05$ the hypothesis is rejected. This means that based on the students perception, there is significant differences in the students belief on the inclination of STI vulnerability among NCE students of varying social class. Furthermore, the result shows that the poor and the rich are more vulnerable than the middle or average class.

Hypothesis 3.

The nature of NCE student's awareness of STIs is significantly independent of their religious inclination.

Table III: Relationship between religion and knowledge of modern STIs

<i>Religion</i>	<i>Good knowledge</i>	<i>Fair knowledge</i>	<i>Poor Knowledge</i>	χ^2_{obs}	<i>d</i>	<i>p</i>	<i>Decision</i>
<i>Faith A</i>	69	41	111	10.60	2	.001	<i>Reject Ho</i>
<i>Faith B</i>	31	11	17				
<i>Total</i>	<i>100</i>	<i>52</i>	<i>128</i>				

$\chi^2(2, N=280) = 10.60, p < .05$

Table 1 shows that $\chi^2(2, N=280) = 10.60, p < .05$. There is significant difference in level of awareness of STIs and religious inclinations. Hence the null hypothesis was rejected. The result implies that the nature of NCE student's awareness of STIs depends on their religious inclination. Also thirty one percent of faith A had a good knowledge about Modern STIs as compared to 52% of Faith B (Table I).

Hypothesis 4

None of the causes of STIs advanced by NCE students is significantly believed to be the main cause of STIs.

Table IV: Causes of sexually transmissible infections

<i>Causes</i>	<i>Frequency Obs (%)</i>	<i>Frequency Expected</i>	<i>df</i>	χ^2_{obs}	<i>p</i>	<i>Decision</i>
<i>Divine Spirit</i>	8(3)	70	3	279.68	.05	<i>Reject Ho</i>
<i>Inherited</i>	31(11)					
<i>Sexuality</i>	53(19)					
<i>Total</i>	188(67)					
	280(100)					

$\chi^2(3, N=280) = 279.68, p < .05$

From table IV, $\chi^2(3, N=280) = 279.68, p < .05$ revealed that there was significant difference in the perceived causes of transmission of STI, hence the null hypothesis was rejected. Consequently the result implies sexuality is believed to be the main cause of STIs. Inheritance is the next main cause while divine reasons are the least possible cause.

Research Question 5

What is the respondent's belief about STIs as a disease?

Table V: Respondents belief that STIs are diseases;-

Rating of belief frequency	Agree Strongly	Agree Slightly	Disagree Slightly	Disagree Strongly	Total
	171(61)	31(11)	11(4)	67(24)	280(100)

From table V seventy two percent of the students (72%) were aware of the existence of STIs as diseases. 61% of them believed strongly while 11% slightly believed. About a quarter of them (28%) strongly disagree. Prior to the exposure to the course, students believe that STIs are diseases.

Findings

The following are the major findings of the research:

- 1.Age of NCE students significantly determines their knowledge of STIs.
2. The poor and the rich are more vulnerable to STI than the middle or average class.
- 3.The nature of NCE student's awareness of STIs depends on their religious inclination.
4. Sexuality is believed to be the main cause of STIs. Inheritance is the next main cause while divine reasons are the least possible cause.
- 5.More than half of the students (75%) were aware of the existence of STIs as a disease but about a quarter of them strongly disagree.

Discussion

Since good knowledge depends on adequate and functional education, perhaps the faith and some pre school impartations could be a barrier to the impact of sexuality education. However, majority of the respondents showed preferred opinion on the belief that STIs are diseases In this study, the respondent's age ranged from 15 - 34 years, with the mean and standard deviation of 28 and 14.74 years respectively. Majority of the respondents were within the age 25-34 with a percentage of 60.36%. This is in keeping with the population pyramid of the developing countries of which Nigeria is a typical example and the finding that the age of respondents determine their knowledge of STIs is in agreement with WHO observation that 60% STIs occur in young people.

Seventy nine percent of the respondents were Faith A, and 21% were Faith B, which is typical of northern Nigerian setting, particularly far northern states where over 95% of the population are Faith A while some of Faith B are immigrants from the Southern part of the country. The same explains the tribe constitution where the indigenous Hausa and Fulani account for 62.86% and 23.14% respectively. Yoruba 4.8%, Igbo 2.5% while other minorities constitute 6.6%. This is also in keeping with the above study.

Sexuality is believed to be the main cause of STIs. Inheritance is the next main cause while divine reasons are the least possible cause. This is in agreement with WHO (2007) assertion.

The findings on the determination of opinion by faith shows that some other factors needs to be examined in order to explain the findings despite the population distribution of the respondents. However, attitude towards STIs prevention is a variable that is rather affected more by culture, and religion, among others. Faith B were found to have more positive attitude to STIs prevention than Faith A.

Recommendations

STIs awareness programmes and services needs expansion and improvement to provide all available Knowledge for pre tertiary education training.

Student's involvement and participation in all matters of reproductive health should be encouraged Colleges of Educations in Nigeria.

The use of electronic media and social networks to educate the students on the importance and benefits of preventive measures and appropriate management of STIs needs improvement.

Results and conclusion in the study suggests that more socially motivated programs coloured with STI related programs will further raise the level of student's awareness of STI and also sustain the existing achievement level.

The Medical Council have a role to play in financial sponsorship, curriculum development and review and moral support for NCE programs as it affects necessary health related courses such as family life education.

There is the need for The Medical Council and State Ministries of health to intensify efforts on heath education at the grass root especially to religious groups that needed more attention as per the findings of this study.

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