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# A statistical survey on awareness and knowledge of sexually transmitted infections [stis] in northeastern Nigeria

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#### **Abstract**

Sexually transmitted infections (STIs) constitute a significant public health problem affecting hundreds of millions of people globally and causing farreaching health and socio-economic consequences. Hospital-based studies show high levels of prevalence of various types of STIs including AIDS, gonorrhea, syphilis, chlamydia, genital herpes and trichomoniasis in Nigeria. Consequences of STIs include female and male infertility, spontaneous abortions, ectopic pregnancies, stillbirths, chronic lower abdominal pain, cervical cancer, and death. There are many problems associated with the diagnosis of STIs because many are asymptomatic and may require sophisticated equipment for diagnosis. The control of STIs is an essential element of reproductive health. There are indications that in Nigeria many people self-medicate or patronize traditional healers. Because the presence of STIs can increase the likelihood of HIV transmission, proper education, and control of STIs are essential strategies for preventing the spread of HIV. This study elicited information on the awareness and knowledge of respondents on sexually transmitted infections in North-Eastern Nigeria. The data is from National HIV & AIDS, and Reproductive Health Survey (NARHS plus II,

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2012) conducted by Federal Ministry of health, Abuja Nigeria' Statistical methods and techniques used in analyzing the data and presented in tables and charts for easy comprehension.

**Keywords**: STIs, Awareness, HIV, North-Eastern Nigeria.

## 1 Introduction

STIs (Sexually Transmitted Infections) are public health problems which have affected many people in the world causing far-reaching health and socio-economic consequences. Some of the major STIs includes AIDS, gonorrhea, syphilis, chlamydia, genital herpes and trichomoniasis and some of the effects include female and male infertility, spontaneous abortions, ectopic pregnancies, stillbirths, chronic lower abdominal pain, cervical cancer, and death. It is imperative to know how aware people are of these infections to take the right measure(s) to control the spread of the diseases; this is to improve their health and consequently to improve their productivity.

An International Conference on Population and Development (ICPD) held on 1994 in Cairo. The theme of the conference was to recognize that Reproductive Health (RH) is a critical part of an individual's well-being and is central and vital to human development. After the conference, many countries including Nigeria shifted the focus of their population and development programmes to reproductive health. Reproductive Health can define as, "a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity, in all matters and process" (UN, 1994). The components of RH as adopted by Nigeria include:

- Safe motherhood comprising prenatal care, safe delivery, essential obstetric care, post-partum care, neonatal care, and breastfeeding;
- Family planning information and services required;
- Prevention and management of infertility and sexual dysfunction in both men and women;
- Prevention and control of complications of abortion;
- Prevention and management of reproductive tract infections, especially sexually transmitted infections (STIs), cause of HIV infections and AIDs;
- Promotion of healthy sexual maturation from pre-adolescence, responsible and safe sex throughout life and gender equality;

- Elimination of harmful practices, such as female gender mutilation (FGM), child marriage domestic and gender violence against women; and
- Management of non-infectious conditions of the reproductive system, such
  as genital fistula, cervical cancer, complications of FGM and reproductive
  health problems associated with menopause. Available statistics show that
  the reproductive health status of men, women, and adolescents has
  remained poor in Nigeria.

Adolescents and young adults, of aged 15–24 years, are more at risk for STIs than matures. The World Health Organization estimated in the reports, 20% of persons who have HIV/AIDS are in their age twenty or out of twenty adolescents contract STI each year [3]. The Youths are usually practice unprotected sex, as they have multiple sexual partners, who are affected with transgenerational and transactional sex disease. The cervical lining in female adolescents and young women makes them more predisposed to STIS. Also, they may have problems getting the required information, services, and supplies they need to avoid STIs. They may also experience difficulties in accessing STIs 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 [4].

Untreated or poorly treated STIS, associated with a lot of complications. In males, gonorrhea, as well as chlamydia trachomatis infection, causes epididymitis which can result in infertility in the future. Also, the inflammatory urethral stricture may arise from poorly treated gonococcal urethritis in the future. It may lead to urinary retention and possibly chronic renal failure if not adequately 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 competences [5].

Knowledge of STI and their complications is vital for adequate prevention and treatment, as people who are not aware about the symptoms may fail to recognize their need and so may not seek help.

# 2 Methodology

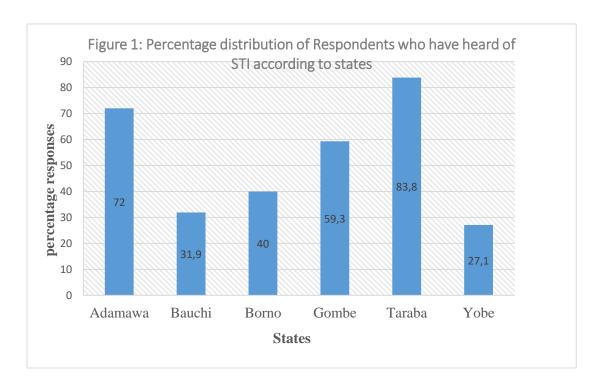
#### 2.1 Study Design

The investigators have collected data from various sources from different organizations in particularly from Federal Ministry of health in Nigeria. In this study, we used secondary data from the Federal Ministry of health survey on NARSHS Plus carried out in 2012. The data are tabulated according to various parameters and reasons/ facts which really need for analysis. The Statistical methods and techniques used analysis and conclusions. The results are presented in tables and chart for easy understanding.

## 3 Main Results

Table1: Percentage Distribution of Respondents who have Ever Heard of STIs by State; FMoH, Nigeria.

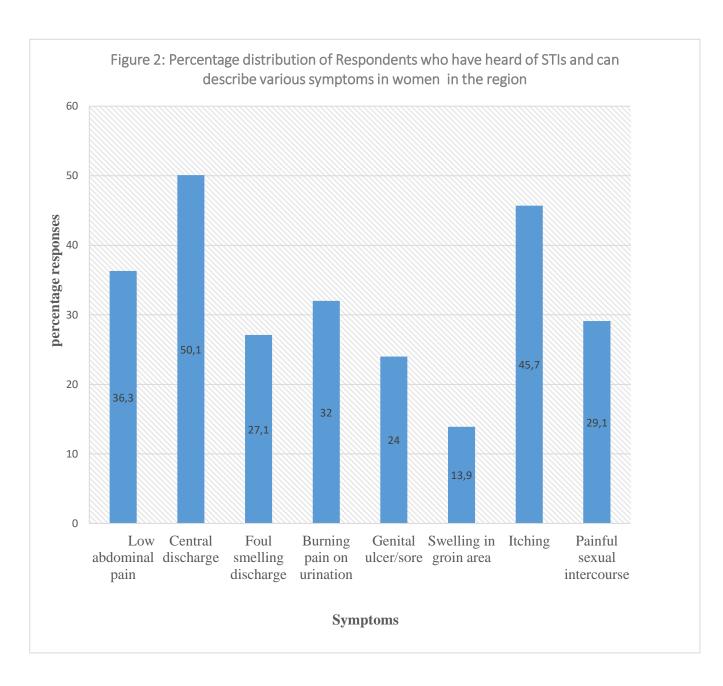
S/N	States	Respondents who have heard of STI	Number of women & men		
1	Adamawa	72.0	938		
2	Bauchi	31.9	763		
3	Borno	40.0	791		
4	Gombe	59.3	875		
5	Taraba	83.8	943		
6	Yobe	27.1	565		
	•	52.4	4,875		



Respondents asked whether they have heard of STIS. The results presented in Table 1 and figure 1. The results have shown that Taraba state has the highest percentage of respondents (83.8%) that have heard of STI, followed by Adamawa state with (72%). The average for the region has shown that over fifty percent of the respondents in the region have heard of STI.

Table 2: Percentage Distribution of Respondents who have Heard of STIs and can Describe Various Symptoms of STIs in Women by State; FMoH, Nigeria,

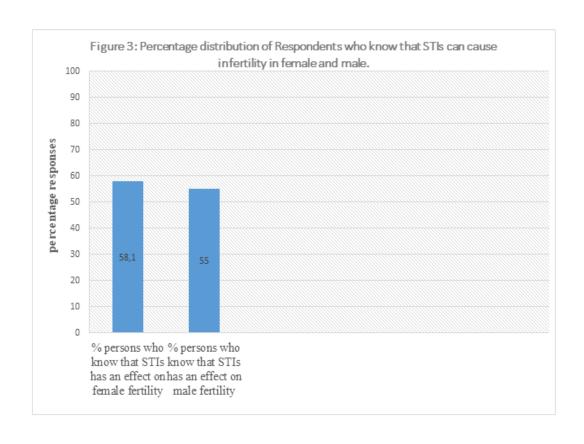
States	Low	Central	Foul	Burning	Genit	Swelli	Itchi	Painful	Men
	abdom	dischar	smelling	pain on	al	ng in	ng	sexual	and
	inal	ge	discharg	urinatio	ulcer/	groin		interco	Women
	pain		e	n	sore	area		urse	
Adamawa	49.8	56.9	38.1	38.4	31.4	18.8	68.4	30.2	675
Bauchi	31.1	53.1	36.6	34.4	20.1	12.0	37.7	22.3	243
Borno	43.1	63.1	32.8	41.0	57.7	31.5	69.4	56.6	317
Gombe	18.9	34.3	11.9	17.8	11.5	3.2	39.9	11.9	519
Taraba	43.2	35.3	17.9	23.8	4.8	5.1	30.0	20.8	790
Yobe	31.7	57.6	25.4	36.5	18.3	12.7	28.6	32.5	153
	36.3	50.1	27.1	32.0	24.0	13.9	45.7	29.1	2,697



The results in table 2. and figure 2. has shown that high percentage of the respondents can describe only some of the symptoms of STIs specifically central discharge and itching while the data has shown a low interest for the remaining symptoms. A lot of enlightenment and training is needed to raise the awareness of the people in the region by individuals, experts, Non-governmental organization, government, etc. to control sexually transmitted infections.

Table 3: Percentage Distribution of Respondents who Know that STIs can Cause Infertility in Males and Females by states. FMoH, Nigeria.

S/N	States	% persons who know that STIs affects female fertility	% persons who know that STIs affects male fertility	Respondents who ever heard of STIs
1	Adamawa	67.3	55.1	675
2	Bauchi	62.6	60.4	243
3	Borno	52.6	52.8	317
4	Gombe	58.6	60.0	519
5	Taraba	66.2	63.0	790
6	Yobe	41.3	38.9	153
	•	58.1	55.0	2,697



The analysis of the data on the knowledge of causes of infertility by STIs in the region is about Sixty percent by both male and female which is a high percentage. Still, a lot needs to be done to improve the rate. It can do by enlightenment and training of various personnel in the health sector. (See table 3. And figure 3).

# 4 Conclusion

The study concludes that there is a relatively high level of awareness on sexually transmitted infections among the people of North- Eastern Nigeria, especially for HIV infection. However, in-depth knowledge regarding mode of transmission of the STIs and their preventive measures were sub-optimal. The concerted efforts should be made to ensure that an all-encompassing education regarding other STIs – not just HIV infection – is incorporated into the secondary school curriculum, in addition to regular mass media campaigns already being done for HIV infection Comprehensive health education about other sexually transmitted diseases (apart from HIV/AIDS) should be intensified for the people. Media enlightenment campaigns about these diseases should also be emphasized. The enlightenment can also be achieved by involving our traditional rulers, Mosque and church leaders, market leaders, school leader, etc. Consultation centers should be established both in urban and rural areas for easy access by the people.

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