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Original Research Article

Epidemiological Assessment of the Rising Incidence of Sexually Transmitted Infections among Women in Urban Communities of South-South Nigeria

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Abstract: Sexually transmitted infections (STIs) remain a major public health concern, particularly in developing countries. Sexually transmitted infections (STIs) among women is on the increase. This growing trend may be linked to changing sexual behaviors, limited access to reproductive health services, and poor awareness of preventive and early treatment options. This study is aim to evaluate the Epidemiological Assessment of The Rising Incidence of Sexually Transmitted Infections among Women in Urban Communities of South-South Nigeria. This is a cross-sectional study involving 250 women who are within their reproductive age with age range 18-22, 23-27, 28-32, 38-42, 38-42, and 43-47years. A well - structured self-administered questionnaire was issued to each participant. The study lasted for 2 months (May to June ending). Statistical analysis of data was done using SPSS Version 26. P value < 0.05 was considered significant for data. The results shows that the participants were between 18 and 47 years of age, 64% had tertiary level of education, 60% were single, 64% civil servants, 60% were aware of STI, 68% had knowledge about STI, 76% enjoyed raw sex without condom, 60% are not faithful to one partner, 76% were infected with STI, 80% use herbal medication as choice of treatment, and 80% had complications such as difficulty in passing urine (20%), painful urination (24%), vaginal itching (24%), and vaginal itching (32%).

Keywords: Epidemiological, Assessment, Rising, Incidence, Sexually Transmitted Infections.

INTRODUCTION

Sexually transmitted infection is an infection acquired during sexual intercourse (oral, vaginal, and anal), especially when having unprotected sex (Gbaranor, *et al*., 2023). This infection is easily spread in the rural areas where protective device is not patronized. Sexually transmitted infection (STI) is spread when the man or the woman involves in multiple sex partners and without putting on protective device (Gbaranor, *et al*., 2023). Sexually transmitted infections (STIs), previously known as sexually transmitted diseases, involve the transmission of an organism between sexual partners through different routes of sexual contact, either oral, anal, or vaginal (Smith and Angarone, 2015). STIs become a concern and burden on healthcare systems, as many infections go untreated and lead to potentially serious complications. The natural history and patterns of spread of the most common sexually transmitted infections are discussed as well as disease prevention, evaluation, diagnosis, and treatment (Wagenlehner, *et al*., 2016). STI rates are high in most countries, especially between the ages of 15 and 50 (De Schryver and Meheus, 1990). Undiagnosed STIs are responsible for an estimated 20,000 cases of infertility in women annually in the US. Sexually transmitted infections are infections caused by bacteria, viruses and parasites that are transferred mainly via sexual contact, be it vaginal, anal, oral or in some instances via non-sexual means, i.e. by means of blood or blood products. Mother-to-child transmission of e.g. chlamydia, gonorrhoea, syphilis, hepatitis B and HIV can also occur during pregnancy and childbirth (WHO, 2016).A large number of factors, including socio economic and gender inequalities as well as preventative program failure and inaccessibility to adequate health services have contributed to the epidemic of classic STIs (Altin and Coetzee, 2005)Sexually transmitted infections (STIs) constitute a huge health and economic burden for developing countries:75–85% of the estimated 340 million annual new cases of curable STIs occur in these countries, and STIs account for 17% economic losses because of ill health. Interventions that may decrease the incidence and prevalence of STIs are primary prevention (information, education and communication campaigns, condom promotion, use of safe microbicides, and vaccines), screening and case finding among vulnerable groups (Mayaud and Mabey 2004). More than 340 million new cases of curable sexually transmitted infections occur worldwide every year and there are more than 30 bacterial, viral and parasitic pathogens which are sexually transmissible, Treponema pallidum (syphilis), Neisseria gonorrhoeae, Chlamydia trachomatis and Trichomonas vaginalis are responsible for most of the sexually transmitted infections (STIs) (WHO, 2007). South and Southeast Asia have the highest rates of STIs, followed by sub-Saharan Africa, Latin American and the Caribbean (World Health Organization, 2007). Also, viral sexually transmitted infections most frequently consist of the human immunodeficiency virus (HIV), human herpes viruses, human papilloma and hepatitis B viruses (WHO, 2007). The high incidence of STDs in Nigeria, has been attributed to factors such as poverty, polygyny, absence of nationwide network of clinics, early age of sexual debut, lack of awareness, dense commercial sex networks and poor gender empowerment (UNDP 2006; Ogunbanjo 1989; http://www.NigeriaHIVinfo.com. 2006). Following some of the factors highlighted (poverty and lack of access to modern health facility), many people in Nigeria, especially those living in the rural communities (constituting 75-80% of the Nigerian population), rely on traditional medical practitioners (TMPs) for the treatment of STDs and other ailments (Catterall 1980; Sofowora 1993).

MATERIALS AND METHOD

A cross-sectional study was carried out among women of reproductive age in Port Harcourt. The study lasted for eight weeks and 250 women participated with age ranges between 18-22, 23-27, 28-32, 38-42, 38-42, and 43-47years. The questionnaires were well structured and each participant were given a questionnaire to respond to questions on it after a well- informed consent was granted. The study lasted for 2 months (May to June ending). Statistical analysis of data was done using SPSS Version 26. P value < 0.05 was considered significant for data.

RESULTS

The results shows that the participants were between 18 and 47 years of age(Table 1), 64% had tertiary level of education (Table 2), 60% were single (Table 3), 64% civil servants, 60% were aware of STI (Table 4), 68% had knowledge about STI (Table 5), 76% enjoyed raw sex without condom, 60% are not faithful to one partner(Table 6), 76% were infected with STI (Table 7), 80% use herbal medication as choice of treatment, and 80% had complications such as difficulty in passing urine (20%), painful urination (24%), vaginal itching (24%), and vaginal itching (32%).

Table 1: Age Distribution of Participants

Age Group	Frequency	Percentage (%)
18-22 years	20	8.00
23-27 years	50	20.00
28-32 years	70	28.00
33-37 years	60	24.00
38-42 years	30	12.00
43-47 years	20	8.00
Total	**250**	**100**

Table 2: Educational Distribution of Respondents

Education	Frequency	Percentage (%)
Primary	20	8.00
Secondary	70	28.00
Tertiary	160	64.00
Total	**250**	**100.00**

Table 3: Marital Distribution of Respondents

Marital Status	Frequency	Percentage (%)
Married	40	32.00
Single	150	60.00
Total	**250**	**100.00**

Table 4: Awareness of STI

Response	Frequency	Percentage (%)
Participants who are aware of STI	150	60.00
Participants who are not aware of STI	100	40.00
Total	**250**	**100.0**

Table 5: Participants who have knowledge about STI

Response	Frequency	Percentage (%)
Participants who have knowledge about STI	170	68.00
Participants who do not have knowledge about STI	80	32.00
Total	**250**	**100.0**

Table 6: Participants who are not faithful to one partner

Response	Frequency	Percentage (%)
Participants who are not faithful to one partner	170	60.00
Participants who are faithful to one partner	80	40.00
Total	**250**	**100.0**

Table 7: Participants who were infected with STI

Response	Frequency	Percentage (%)
Participants who were infected with STI	60	24.00
Participants who were not infected with STI	190	76.00
Total	**250**	**100.0**

DISCUSSION

Sexually Transmitted Infections (STIs) remain a major public health concern globally, particularly among women in urban communities of developing countries. Urbanization brings unique challenges that contribute to the increased incidence and spread of STIs in these settings. Sexually transmitted infections (STIs) among women is on the increase. This growing trend may be linked to changing sexual behaviors, limited access to reproductive health services, and poor awareness of preventive and early treatment options.

The study shows that the participants were between 18 and 47 years of age and young women (15–24 years) are mostly affected. The research revealed that 64% of the participants had tertiary level of education. Inspite of their level of education STI is still on the increase. Majority of the participants were single and this could lead to the higher rates of STI. Single women (particularly those who are yet to married, divorced, or separated) have a higher incidence of STIs compared to married or cohabiting women. This could be due to multiple sexual partners and single women are more likely to have multiple or new partners, increasing exposure risk. Single women may feel stigmatized or judged when seeking STI care, particularly in the urban communities. Again, it could be that, these single women engage in transactional sex, raising STI risk due to low-income. Transactional sex refers to sexual activity that occurs with the expectation of receiving something in return, this can be money, gifts, services, protection, or other benefits. Unlike formal sex work or prostitution, which typically involves an explicit agreement or payment, transactional sex often takes place in informal or non-commercial settings and can occur within relationships that appear consensual or romantic. However, majority of these women were civil servants. It could be that their remuneration was poor and could meet up their needs, thus the need for multiple partners to catch up their demand.

The study revealed that majority (60%) of the participants were aware of STI and 68% had knowledge about STI. This is because the participants embrace education but could not practice or follow the knowledge acquired to prevent themselves from contacting the STI. Majority (76%) of the participants were infected with the STI and this is on the increase. This increase may be due to several factors such as demographic, social and psychological factors including high population density which may lead increased social mixing and partner change, migration & mobility which may also lead to unstable relationships, poverty & unemployment which may lead to transactional sex, in many cultures, being single and sexually active is still taboo, discouraging women from accessing care or discussing symptoms, single women often lack the negotiation power to insist on protection, especially in casual relationships, some women in relationships with new or multiple partners may avoid condoms due to pressure or desire to prove trust; Behavioral Factors including early sexual debut, multiple concurrent sexual partners, low or inconsistent condom use, substance use (alcohol, drugs) increasing risky behavior; Health System Barriers including poor access to youth-friendly and gender-sensitive health services, reliance on syndromic management which misses asymptomatic cases, limited routine screening programs, particularly for unmarried women; Sociocultural Factors including stigma and shame around STIs and sexual health, gender power imbalance which may lead to difficulty negotiating condom use, poor health-seeking behavior among women due to fear or discrimination. However, many (76%) enjoyed raw sex without condom, and this could be reason why there is an increase in STI among women. Most participants enjoyed sexual intercourse when their male counterpart does not put on condom and some men refused to put on condom during sex. Again, 60% of the participants are not faithful to one partner due to multiple concurrent sexual partners.

Most (80%) of the participants use herbal medication as choice of treatment for the STI, and thus many had complications such as difficulty in passing urine, painful urination, vaginal itching, and vaginal itching. Women face uniquely severe and long-term complications from STIs, particularly when untreated which may lead to infertility (e.g. from untreated chlamydia, gonorrhoea leading to PID), ectopic pregnancies, adverse pregnancy outcomes (stillbirths, congenital infections), increased risk of acquiring HIV in presence of some STIs, psychological, and social consequences (stigmatization, relationship issues). These consequences increase both individual health burden and societal cost.

CONCLUSION

The rising burden of STIs among women in urban communities reflects a complex interplay of social, behavioral, and structural factors. Reducing this burden requires coordinated, context-specific interventions that empower women, strengthen health systems, and address urban inequalities. The study revealed that STI is on the increase among women in urban centres and this is due to several factors.

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