

Full Length Research Paper

Knowledge of sexually transmitted Infections among patients attending outpatient clinics at University Teaching Hospital, Ado-Ekiti, Nigeria

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The study was designed to assess the level of knowledge of sexually transmitted infections and possible factors associated with knowledge of patients attending outpatient clinic in University Teaching Hospital, Ado-Ekiti, Nigeria. This is to enable appropriate advocacy targeted on at risk population so as to control sexually transmitted infections and prevent its complications in this environment. A cross sectional descriptive study was carried out on patients attending outpatient clinics of the hospital from February to July, 2010. All volunteered participants were given a self-administered structured questionnaire. Out of the 592 interviewed, 242 (40.9%) were males and 350 (59.1%) were females. Although, knowledge of sexually transmitted infections was high in the general population, especially among those with postsecondary school education (85.4%) and the drivers (90.9%), it was relatively low among the adolescents and the youths who are the most vulnerable in this environment ($\chi^2 = 14.343$; $p < 0.05$). News media was the highest source of information about Sexually Transmitted Infections. Age, educational level and the type of occupation appear to be important factors affecting knowledge. Therefore, health education about Sexually transmitted infections targeted at this risk group may yield positive result.

Key words: Sexually transmitted infections (STI), knowledge, Ekiti, Nigeria, youths and adolescents.

INTRODUCTION

Sexually transmitted infections (STI) are spread primarily through person-to-person contact, although some of the pathogens that cause it, especially Human immunodeficiency virus (HIV) and syphilis, can be transmitted from mother to child during pregnancy and childbirth, and through blood products and tissue transfer (World Health Organization (WHO) Media centre, 2011; Nsuami et al., 2010). Sexually transmitted can be divided

into those caused by bacteria, viruses and parasites (WHO media centre, 2011). STI are most common in young sexually active people. It has been reported that the incidence declines with age and that adolescents and young adults experience the highest risk of exposure to STI (Richard and Jay; 2002; Mudassir et al., 2010).

According to 1999 WHO estimates, 340 million new cases of curable STIs (*Syphilis*, *Gonorrhoea*, *Chlamydia* and *Trichomoniasis*) occur annually throughout the world in adults aged 15 to 49 years. In the developing countries, STI and their complications rank in the top five disease categories for which adult seek health care (WHO

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media centre, 2011). Some of these STI when not controlled can lead to severe complications. In men, gonorrhoea and *Chlamydia trachomatis* can lead to epididymitis. Inflammatory urethral stricture may arise later from poorly treated gonococcal urethritis, which in turn may lead to urinary retention and possibly chronic renal failure if not properly managed. Some of the diseases may result to genital ulcers, with few cases developing severe sacral dysfunction resulting in urinary retention (Richard and Jay, 2002; Gerald and Steven, 2002). Consequences of these STI include AIDS, spontaneous abortions, stillbirths, perinatal and neonatal morbidities, chronic pelvic pains, dyspareunia, infertility, increased risk of ectopic pregnancy and even death (Whitfield, 1986; De Schryver and Meheus, 1990; Chamberlain, 1995; Westrom and Mardh, 1990; Rice, 1991; Robinson and Ridgeway, 1996; Otolorin, 1999).

Interestingly, STI are preventable diseases and their prevention is even a priority for World Health Organisation (WHO) (WHO media centre, 2011). For adequate prevention, sound knowledge of the disease is very crucial. Knowledge of STI complication may play an important role in encouraging safer sexual behaviours (Mmbaga et al., 2007). Historically, knowledge about STI had been very low in communities where there is high prevalence of STI. Some communities viewed STI as unavoidable or as an "initiation into adulthood". In Tanzania, the prevalence of STI knowledge is very low (22.0%) (Mudassir et al., 2010; Mmbaga et al., 2007). Also in Nepal, the knowledge about STI is low (about 40%) (Jaiswal et al., 2005).

In Nigeria, 62% of young women and 40% of young men lack knowledge of STIs (National Population Commission, 2004). More importantly, report on STIs knowledge in southwest Nigeria is scanty and that of Ekiti land is not available. The purpose of this study was to assess the level of knowledge of STIs and possible factors associated with the knowledge of patients attending outpatient clinics in the University Teaching Hospital, Ado-Ekiti, Nigeria. This will enable advocacy to be targeted on at risk population, in order to control STIs and prevent its possible sequelae.

MATERIALS AND METHODS

Study site

University Teaching Hospital, Ado-Ekiti, was established in January, 2008. It is located in Ekiti State in the South-western part of Nigeria. It receives referral from Kogi, Osun, Ondo and Kwara States of Nigeria.

Study design

The study was a cross-sectional descriptive study conducted from February to July, 2010. The study was carried out at the General Outpatient, Urology, Antenatal and Adolescent clinics of the hospital.

Patients aged 10 years and above, that attended the above clinics (not necessarily for STIs), were enrolled for the study after obtaining voluntary written informed consent from each participant or their parent/guidance in patients less than 18 years. Those that did not give consent were excluded. In addition, ethical approval was also obtained from the Ethical and Research committee of the hospital. Participants were interviewed based on a pretested structured questionnaire with the assistance of trained and tested research assistants. In all, twenty-nine questions were administered (Appendix). Data were entered, checked and analysed using Statistical Package for Social Sciences for Windows 13.0 (2004). Frequency distributions of all categories of STI knowledge were computed. Chi square test was used to determine the strength of association of age group, educational level, occupational pattern, sources of information with STI knowledge.

RESULTS

Out of the 592 interviewed, 242 (40%) were males while 350 (59.1%) were females. The total number of respondents with knowledge of STIs was 481 (81.2%) while 111 (18.8%) had no knowledge of STI. Figure 1 shows the age-specific prevalence of knowledge of STIs. The highest prevalence was in the age range 25 to 54 years while the lowest was noted in the adolescents and youths (age group 10 to 24 years). ($\chi^2 = 14.343$; $P < 0.05$). Figure 2 is a chart showing the knowledge of STIs according to educational level. Respondents in post-secondary level have the highest knowledge of STIs with a prevalence of 85.4%, while the lowest was with respondents with no education with prevalence of 72.7%; ($\chi^2 = 9.572$, $P > 0.05$). Figure 4 is a chart showing the occupational pattern of knowledge of STIs. The drivers appeared to have the highest knowledge of STI with a prevalence of 90.9% while the lowest was the artisans with prevalence of 72.5%; ($\chi^2 = 10.188$, $P < 0.05$). Figure 5 shows a pie chart of the sources of information about STI. The highest source of information was through the news media followed by the hospital ($P > 0.05$).

DISCUSSION

Although this is an hospital based study, the finding of high prevalence of knowledge of STIs in this environment is quite encouraging, especially when compared with that of Tanzania and the report on Nigeria (National Population Commission, 2003). However, it is worrisome to note that the knowledge of STIs was relatively low in the adolescents and the youths which are the future of any nation. This observation might mean that the adolescents and the youths in this environment are more prone to STIs with their attendant complications ($P < 0.05$) (Richard and Jay, 2002; Gerald and Steven, 2002; Whitfield, 1986; De Schryver and Meheus, 1990; Chamberlain, 1995; Westrom and Mardh, 1990; Rice, 1991; Robinson and Ridgeway, 1996; Otolorin, 1999). The low prevalence recorded in this study is similar to the

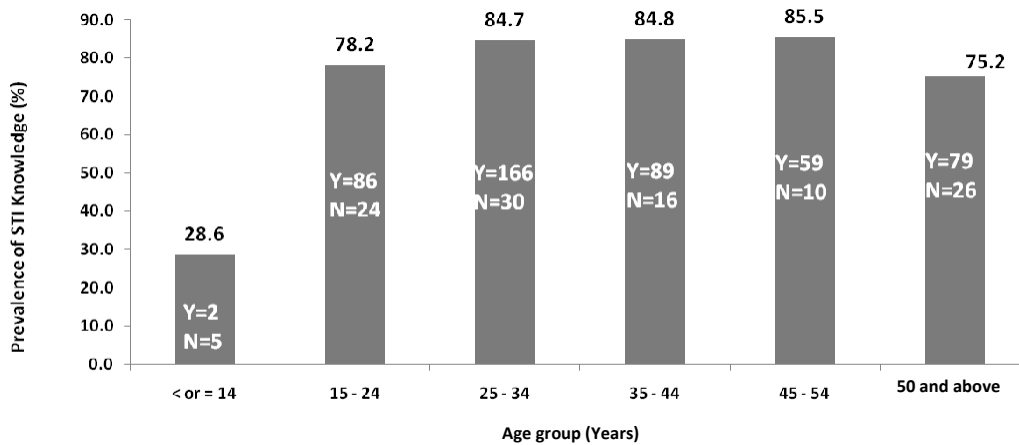


Figure 1. Age-specific prevalence of STI knowledge.

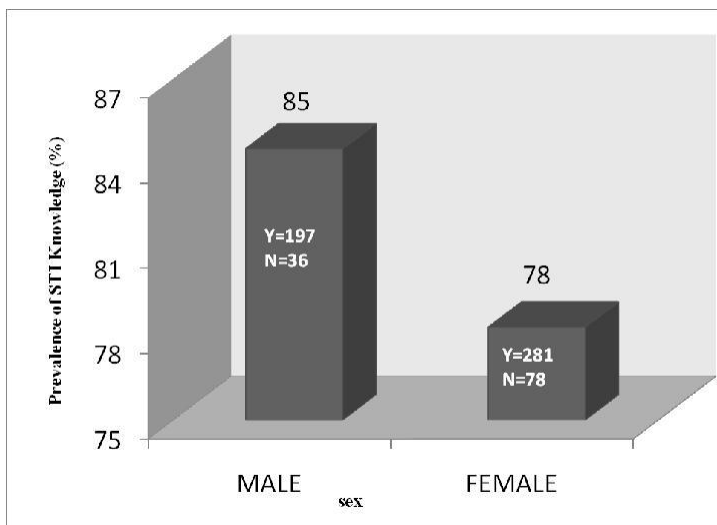


Figure 2. Prevalence of STI knowledge according to sex

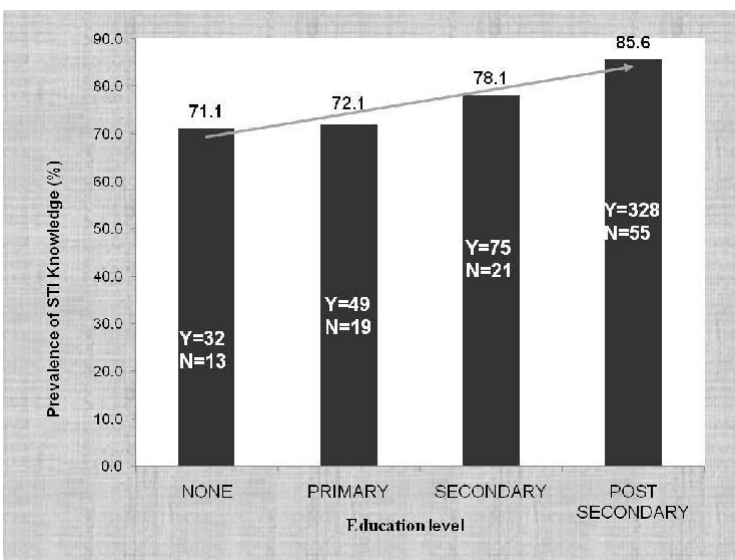


Figure 3. Prevalence of STI according to educational qualification.

findings in Malaysia which is a developing country like Nigeria (Mudassir et al., 2010). Therefore, awareness exercise must be targeted at the youths and the adolescents in this environment to control STIs.

This study has revealed that educational level is a key factor in acquiring knowledge of STIs because Figure 3 has shown that the higher the education, the higher the knowledge, even though not statistically significant; this is a similar trend observed in Ecuador (Nsuami et al., 2010; Solomon et al., 2007). The fact that our findings was not statistically significant ($p > 0.05$) may be due to the limited samples collected because the more educated one is, the more one is able to acquire knowledge, and poorer knowledge has been found to be associated with lower educational level (Solomon et al 2007).

Further more, the commonest source of information in this environment was found to be through the news media. This is not surprising because apart from the fact that many people possess small transistor radio all over the community, the advent of information and communication technology (ICT) has made information easier to acquire any where as a result of the in-built radio in the telephone handsets, which are commonly available in this community. This finding is in keeping with the result of the study conducted in southeast Nigeria (Obiechina et al., 2001). Since the next source of information is the hospital, health workers should find a way of giving information to their patient, especially on STIs, so as to improve the patient's knowledge. This may be done through regular health talks or distribution of literatures.

In addition, awareness may be created also by the health workers disseminating information to the rural populace through the churches, mosques or the markets. It is important for health workers to note that studies have shown that educating patients about STIs, which may be by mere explaining literature on it in a simple and direct manner, may foster a trusting patient/provider relationship throughout the health-seeking encounter (Johnson-

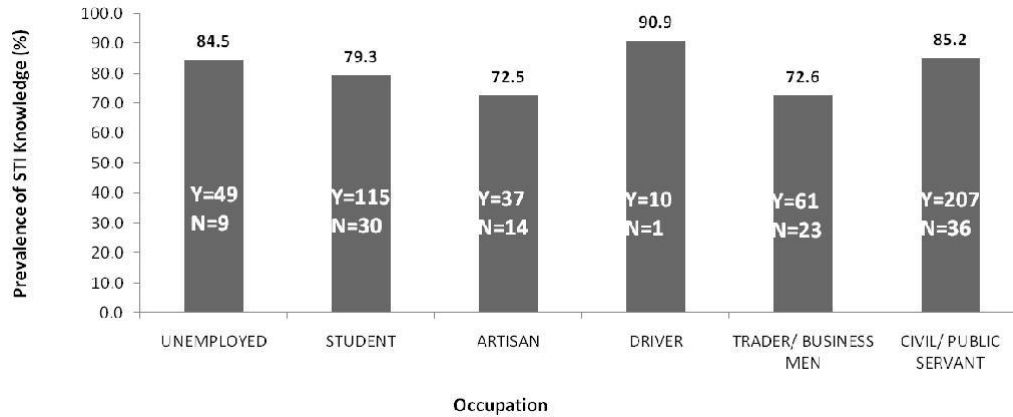


Figure 4. Prevalence of STI according to occupation.

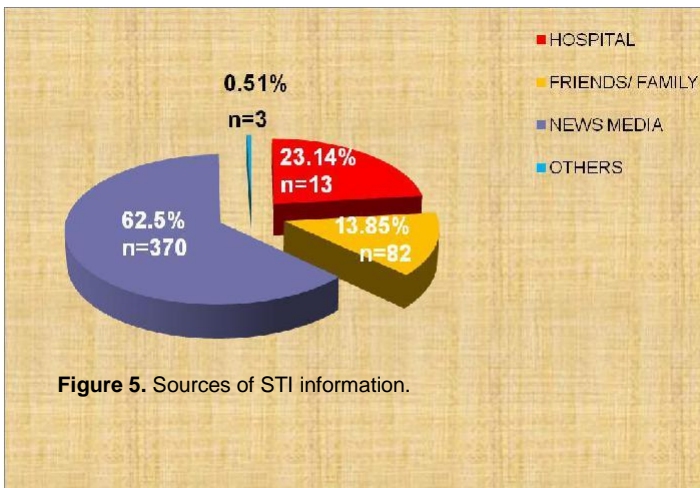


Figure 5. Sources of STI information.

Mallard et al., 2007). However, a study on how effective health education may be on the prevalence of STIs in this environment is highly desirable.

Finally, this study has shown that the drivers have more knowledge about STIs than any other occupation. This may not be unconnected with the easy access they have to car or handset radio, as many of them move within the state and outside the state wherefore they have opportunity to listen to news. A study to actually determine the reason for this high prevalence would be undertaken in a future study. It is therefore not out of place to target advocacy at various occupational group for effective control of STIs.

Conclusion

The prevalence of knowledge of STIs is high (81.2%) among patients attending Outpatient clinics of University Teaching Hospital, Ado-Ekiti, Nigeria, especially among the age group 25 to 54. However, the prevalence among the adolescents who are the most vulnerable is relatively low. Age, educational level and sources of information are important factors affecting the knowledge of STIs.

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