Sexually transmitted diseases seen in a Nigerian tertiary institution

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Summary

Background:- Surveillance of Sexually Transmitted Diseases (STDs) and Human Imunodeficiency Virus (HIV) infections among high risk groups is an important strategy for the control of the diseases which occurrence have been on the increase worldwide. The objective of this study is to provide a descriptive epidemiology of the pattern of STDs among clinic attendees at a Special Treatment Clinic (STC) of the University College Hospital (UCH), Ibadan.

Study design:- A retrospective review of records of all new patients presenting at the STC between 1st January 2000 and 31st December 2000 was carried out.

Results:- Clinic records were available for 336 new patients who visited the clinic in the year under review. The result showed that non-gonococcal urethritis (45.2%) and gonococcal urethritis (15.9%) were the most common STDs in men, while candidiasis (37.2%) and gardrellena vaginitis (31.8%) were the most common in women. Three 3(1.1%) of the patients had HIV infection, which had not been previously reported in the clinic.

Conclusion:- The findings indicate a change morbidity pattern in the STD clinic that suggests the need to include HIV/AIDS management and care in the services provided.

Keywords: *Pattern, Sexually Transmitted Diseases, Clinic attendees*

Résumé

La surveillance des Maladies Sexuellement transmissibles (STDs) et l'infection du Virus Immunodeficience Humaine chez le groupe à haut risque est une stratégies importante pour le contrôle de la maladie dont la fréquence était en augmentation dans le monde entire.

L'objet de cette étude est de donner une épidémiologie descriptive de la tendance de STDs chez les malades qui vont au clinique special pour traitement (STC) du Collège Hospitalier Universitaire (UCH), Ibadan.

Plan d'étude:- Un bilan rétrospectif des dossiers de tous les nouveaux patients qui vont au STC entre le 1 er janvier 2000 et 31 décembre 2000 a été effectué.

Résultats:- Dossiers cliniques étaient disponibles pour 336 nouveaux patients qui étaient venu au centre médical pendant l'année de réexamen, perpetuels. Le résultat a indiqué que l'urétrite non gonococcique 45,2% et urétrite gonococcique (15,9%) étaient les STDs le plus courant chez l'homme, tandis que la condidose 37,2 et le gardnerella vaginalis (31,8%) étaient le plus courant chez des femmes. Trois 3(1,1%) des patients étaient atteint de l'infection VIH, qui n' avait pas encore rapporté auparavant dans la clinique.

Conclusion:- À travers les résultats on peut noter un changement dans la tendance de la morbidité dans la clinique STD ce que sugère le besoin de compter la prise en charge et le traitement de SIDA dans les prestataire de services.

Introduction

There has been an increasing trend in the prevalence of Sexually Transmitted Diseases (STDs) and Human Immunodeficiency Virus (HIV) infections worldwide. The World Health Organization (WHO) estimated that at least 333 million cases of STDs other than HIV occurred in 1995[1]. In Nigeria, the National STD/AIDs Control team estimated the overall prevalence of STDs based on hospital data to be 9.3%, 26.3% for non-gonococcal urethritis, 18.3% and 9.7% for gonococcal urethritis and trichomona vaginitis respectively. The prevalence of HIV infections in the country is currently 5.4%[2]. Control efforts have also yielded little results because of failure to prevent unsafe sexual behaviour, identify and treat affected persons, obtain treatment or proper treatment for symptoms, and provide good health services for adequate treatment[1]. STDs are known to constitute one of the five leading causes of out patient visits by adult population[3]. Previous reports have recommended that the starting point for the control of STDs is the establishments of STD clinics, where all consultations, investigations, treatment, contact tracing and all relevant services are available[4]. However, because of the social stigma attached to STDs the clinics are sometimes underutilized. Many patients may seek alternative sources of medical care, including self-medication to maintain their privacy.

An ideal STD clinic provides services that are free, easily accessible and available for long hours everyday, with suitable arrangements for treating females and male patients separately.

A recent study in Ibadan has indicated a declining trend in the utilization of STD services provided in the STD clinic[3]. Therefore, the objective of the present study is to describe the epidemiology of clinic attendees as well as current pattern of STDs as seen in UCH, Ibadan.

Materials and Methods

This study was retrospectively carried out at the Sexually Transmitted Disease Clinic of the University College Hospital (UCH), Ibadan. As part of efforts to control STDs in Nigeria, special venerology clinics were established in different parts of the country in the last 30 years. The University College Hospital (UCH), Ibadan as the oldest teaching hospital in Nigeria established a Special Treatment Clinic (STC) which was officially opened in 1975[3].

The present retrospective study reviewed the case notes of all new patients presenting to the clinic between 1st January 2000 and 31st December 2000. The data collected consisted of information on the socio-demographic characteristics of each patient (such as age, sex, occupation and residence), diagnosis, outcome of visits and follow up records. The data was managed on a microcomputer using the EPI-INFO statistical package. Frequency distributions of all variables were examined and missing values due to non or

invalid recordings for extracted variables were treated by pairwise deletion (i.e. subject eliminated from the analysis for variables where no data are available). Simple statistics such as proportions, means and standard deviations were used to summarize the variables appropriately. The Student's t-test was used to assess the statistical significance of difference between two mean values, while chi-square test was used to assess the association between any two categorical variables.

Results

A total of three hundred and ninety-eight patients registered in the clinic between 1ˢᵗ January and 31ˢᵗ December 2000, out of whom three hundred and thirty-six case-notes

Table 3 Type of infection by marital distribution of patients attending STC UCH, in 2000 by final diagnosis.

Serial no	Diagnosis	Never Maried	Married	Widowed/ separated	Total
1.	Gonococcal urethritis	16(10.7)	12(9.0)	0	28
2.	Nongonococcal urethritis	48(32.2)	38(28.4)	1(33.3)	87
3.	Trichonomiasis	3(2.0)	3(2.2)	1(33.3)	7
4.	Syphilis	2(1.3)	3(2.2)	0	5
5.	Candidiasis	30(20.1)	20(14.9)	1(33.3)	51
6.	Genital herpes	5(3.4)	3(2.2)	0	8
7.	Haemophilus vaginitis	0	1(0.8)	0	1
8.	Scabies	1(0.7)	0	0	1
9.	Genital warts	6(4.0)	8(6.0)	0	14
10.	Chancroid	1(0.7)	2(1.5)	0	3
11.	Lymphogranuloma venereum	2(1.3)	2(1.5)	0	4
12.	Chlamydia	1(0.7)	0	0	1
13.	Gardrellena vaginalis	17(11.4)	25(18.7)	0	42
14.	HIV/AIDS	2(1.3)	1(0.8)	0	3
15.	Others	15(10.1)	16(11.9)	0	31
	Total	149	134	3	286

Table 1 The age, marital status, and occupation of patients attending UCH, STC Ibadan in the year 2000 by sex

Variables	Categories	Males (%)	Females (%)	Total	Chi-Sq. values df P-values
Age in years	0 - 9	3(1.6)	6(4.3)	9	t = 1.4
	10 - 19	13(7.1)	11(7.9)	24	df = 322
	20 - 29	84(45.7)	66(47.1)	150	p>0.05
	30 - 39	50(27.2)	37(26.4)	87	
	40 - 49	22(12.0)	15(10.7)	37	
	50 - 59	9(4.9)	3(2.1)	12	
	60 - 69	3(1.6)	2(1.4)	5	
	Total	184	140	324	
Marital	Non Married	107(55.4)	64(44.8)	171	Chi-sq
status	Married	84(43.5)	77(53.8)	161	4.350
	Widowed/separated	1(0.5)	2(1.4)	3	df = 2
	Total	192	143	335	p>0.05
Occupation	Students	69(38.1)	46(33.1)	115	
	Civil servants	37(20.4)	25(18.0)	62	Chi-sq
	Trading	42(23.2)	50(36.0)	92	21.4267
	Artisans	30(16.6)	7(5.0)	37	df = 4
	Unemployed	3(1.7)	11(7.9)	14	p<0.05
	Total	181	139	320	

Table 2 The type of infection by sex distribution of patients at final diagnosis at the UCH, STC, Ibadan in 2000 by rank.

Rank	Diagnosis	Males% (n = 157)	Females% (n = 129)	Total (n = 286)
1	Non-gonococcal urethritis/cervicitis	71(45.2)	16(12.4)	87
2.	Candidiasis	3(1.9)	48(37.2)	51
3.	Gardrenella vaginalis	1(0.6)	41(31.8)	42
4.	Others	27(17.2)	4(3.0)	31
5.	Gonococcal urethritis/cervicitis	25(15.9)	3(2.3)	28
6.	Genital warts	6(3.8)	8(6.2)	14
7.	Genital herpes	7(4.5)	1(0.8)	8
8.	Trichonomiasis	2(1.3)	5(3.9)	7
9.	Syphilis	4(2.6)	1(0.8)	5
10.	Lymphogranuloma venereum	4(2.6)	0	4
11.	HIV/AIDS	2(1.3)	1(0.8)	3
12.	Chancroid	3(1.9)	0	3
13.	Haemophilus vaginitis	0	1(0.8)	1
14.	Scabies	1(0.6)	0	1
15.	Chlamydia	1(0.6)	0	1

could be traced for review. This represents 85% of the total registered patients. More than half (57.4%) of the attendees in the year under review were males. There was no significant difference between the mean ages of males 30.1 years (SD=10.5) and females 28.4 years (SD=10.9) (P>0.05). A high proportion (73.2%) of the attendees was in the age range 20 to 39 years. The minimum age recorded was 6 days while the maximum age was 67 years. The age distribution is presented in panel 1 of table 1.

About half (51%) of the attendees were never married and marital status was statistically not significantly related to sex (P>0.05). In terms of occupation the majority of males were students (35.8%), followed by civil servants (19.2%) and artisans (16.6%), while females were more of traders (23.2%) and unemployed housewives (7.9%). There was a statistically significant association between occupation and sex (P<0.05). (Table 1, panel 3). Christianity (69.3%) was the dominant religion reported by the attendees.

Table 2, shows the type of STDs in the two sexes. The type differs significantly from one sex to the other. Among the males, non-gonococcal urethritis occurred most frequently with a proportional incidence of 45.2% followed by gonococcal urethritis with a frequency of 25 (15.9%), genital herpes 7(4.5%), lymphogranuloma venereum 4 (2.6%) and chancroid 3(1.9%). There were two patients with HIV infections (1.3%) one of whom is married. Among

Table 4 Occupational distribution of patients attending STC, UCH, Ibadan in 2000 by final diagnosis.

Serial no	Diagnosis	Student	Civil servants	Trading/Business	Artisan	Unemployed	Total
1.	Gonococcal urethritis/cervicitis	11(10.7)	5(9.4)	4(5.6)	6(17.6)	1(9.1)	27
2.	Non gonococcal urethritis/cervicitis	29(28.2)	15(28.3)	21(29.2)	14(41.2)	5(45.5)	84
3.	Trichonomiasis	1(1.0)	1(1.9)	2(2.8)	2(5.9)	1(9.1)	7
4.	Syphilis	1(1.0)	1(1.9)	1(1.4)	1(2.9)	0	4
5.	Candidiasis	22(21.4)	7(13.2)	17(23.6)	3(8.8)	1(9.1)	50
6.	Genital herpes	4(3.9)	2(3.8)	0	0	0	6
7.	Haemophilus vaginitis	0	1(1.9)	0	0	0	1
8.	Scabies	1(1.0)	2(3.8)	0	0	0	3
9.	Genital warts	4(3.9)	2(3.8)	6(8.3)	0	1(9.1)	13
10.	Chancroid	1(1.0)	1(1.9)	0	1(2.9)	0	3
11.	Lymphogranuloma venereum	2(1.9)	1(1.9)	0	0	0	3
12.	Chlamydia	0	0	1(1.4)	0	0	1
13.	Gardrenella vaginitis	14(13.6)	9(17.0)	15(20.8)	0	2(18.2)	40
14.	HIV	1(1.0)	0	0	2(5.9)	0	3
15.	Others	12(11.7)	6(11.3)	5(6.9)	5(14.7)	0	28
	Total	103	53	72	34	11	273

the females, candidiasis 48 (37.2%) occurred most frequently, followed by gardrellena vaginitis 41 (31.8%), trichonomiasis 5 (3.9%) and gonococcal cervicitis 3 (2.3%). One case of HIV infection (0.8%) was diagnosed among the females.

There were no statistically significant differences in the pattern observed between STDs and marital status (P> 0.05), STDs and age (P>0.05), STDs and occupation (P> 0.05) as shown in tables 3 and 4. However, a higher proportion of non-married patients, had non-gonoccocal urethritis (32.2% Vs 28.4%), candidiasis (20.1% Vs 14.9%), and gonococcal urethritis (10.7% Vs 9.0%). Gardrellena vaginitis was more common in married patients than non married (18.7% Vs 11.4%), and the only case of haemophilus vaginitis was in the married. The largest proportion of patients (48.2%) were aged 20 to 29 years, and the most common STDs among them was non-gonococcal urethritis (29.3%) followed by candidiasis (20.3%) and gardrenella vaginitis. The same pattern was observed in all other age groups. Students constituted the highest proportion of patients diagnosed as gonococcal urethritis (40.7%) and non-gonococcal urethritis (34.5%). However, the students were in the majority (37.7%) of patients patronizing the clinic.

The first case of the HIV infections presented to the clinic in May of the year under review, a female, single and aged 32 years. She was an artisan-sewing mistress from Okeado area of Ibadan. She presented with 2 months history of vaginal discharges. There was a record of previous history of related infections. The second and the third cases were recorded in September and December of the year respectively. They were both males. One a 27-year-old student from Idiape area of Ibadan presented with a 5-month history of recurrent genital rash and the other, a 52- year old driver from Okeare area of Ibadan came with history of scrotal itching of undisclosed duration.

Discussion

In this study, 398 patients registered newly for treatment in the year 2000 compared to 735 in 1997, accounting for 45.9% decrease. This is lower than the 67% decline reported in 1993[3]. There was a rise in 1995 before the current decline. It is interesting to note that factors such as user fees, social strife, and reduced quality of services (as a result of depressed economy) earlier identified were still operating in the year 2000, and could serve as plausible explanation for the observed trend.

The fact that most of the clinic attendees were aged between 20 and 39 years is not surprising as this age-range coincides with the period of greatest sexual activity. The finding is similar to what was reported in the same clinic by Alausa and Osoba in 1978[5], Asuzu in 1984[6] and Taha in 1979[7].

The finding that more than half (57.4%), of the clinic attendees in this study were males, is consistent with patterns observed in most places[8]. This observed pattern may be due to ascertainment bias, in that the clinical manifestations of infection are frequently more obvious in men than in women. Hence men tend to present earlier and more frequently to health facilities. However, the severity of disease is generally greater for women than for men.

The finding that the majority (69.3%) of the attendees in this study were christians could not be taken as suggesting that religion is a major demographic variable associated with STDs. The pattern observed might be due to accessibility and utilization of services rather than religion. It could also reflect the population distribution by religion in the catchment area of the clinic.

The frequency of sexually transmitted infections has been reported to be higher generally among single, divorced and separated persons than among married couples[8]. However, this study did not find any marital status differential in the patients as the married to non-married ratio were almost equal (48.5% vs 51%). That less than 1% of this study population are widowed divorced or separated, appears contrary to reports from social studies that have indicated promiscuous women as usually drawn from broken homes either due to death of one or both parents or their separation[4].

The distribution of the attendees that showed students followed by traders and civil servants, as the leading occupation is likely to have resulted from the location of the clinic. The fact that none of the attendee laid claim to prostitution may be due to the stigma attached to it or because it might just be a part time engagement to make money.

Another important factor associated with STDs is the

place of residence. The prevalence of disease has been found to be higher in urban populations than in rural communities[8,9,10]. Unfortunately, it was not possible to demonstrate this relationships in this study. However, the majority of the patients are from Ibadan metropolis, an urban centre.

The finding that non-gonococcal urethritis was the most common STD in men, followed by gonococcal urethritis is consistent with the pattern reported by Fawole and Asuzu in 1997 at the same clinic in an 18-year record review[3]. Among females, candidiasis occurred most frequent, followed by gardrellena vaginitis. This is in consonance with the report by Fawole in 1997 except that candidiasis was followed by nonspecific vaginitis. The possible reason for this slight difference may be attributed to the fact that gardrellena vaginalis is currently being identified through the presence of clue cells in the microscopic smear of high vaginal or endocervical swab. It is also of interest to note that 3 cases of HIV infections were reported during the period under review. The reasons for their being sent for HIV screening test was not stated by the attending Physicians, as this is not a routine investigation carried out on all patients. This therefore suggests that many other cases could have been missed as a result of lack of routine screening for HIV infections in the clinic. The pattern of STDs observed in this study was also not quite different from that observed in Lagos Teaching Hospital by Somorin in 1981[11] and in Zaria by Bello in 1983[12].

In conclusion, this study has described the characteristics of attendees to the STD clinic of UCH Ibadan in the year 2000 and demonstrated a changing pattern in the type of STDs in the clinic over the years.

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