

SEXUALLY TRANSMITTED INFECTIONS IN OBAFEMI AWOLOWO UNIVERSITY TEACHING HOSPITAL, ILE-IFE, NIGERIA: A DECADE OF CLINIC EXPERIENCE

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Sexually transmitted infections (STIs) remain cosmopolitan in all societies of the world and in some cases assume epidemic proportions. These infections are common infectious diseases nowadays, with an annual incidence of more than 200 million cases a year. Venereal pathogens continue to increase in number and the spectrum of pathogens has limitless elasticity. While genital discharge and ulceration are common presenting symptoms, unusual findings on examination and investigation are not uncommon. We assessed our clinic experiences during the first ten years in an STI clinic. Salient findings are that 85% of all patients seen have an STI. The breakdown of infections revealed that *Candida albicans* was the most common venereal pathogen accounting for 24% while *Neisseria gonorrhoeae* accounted for about 18.0%. *Sarcoptes scabiei* and *Phthirus pubis* causing scabies and pediculosis accounted for 1.8% and 0.3% respectively. As commonly established, the age bracket 19 to 39 years was clearly the age group in which sexually transmitted infections were mostly diagnosed. In a control programme, this age group should be targeted, while there is the need to continue to stimulate awareness of both the general public and health workers at all levels on the problems of sexually transmitted infections, the scourge of all ages.

Keywords: Sexually transmitted infections, venereal pathogens, clinic experience, control awareness

INTRODUCTION

Sexually transmitted infections (STIs) remain cosmopolitan in all societies and in some cases assuming epidemic proportions (1-3). The WHO reported that STIs are the most commonly reported infectious diseases today. It has been estimated that more than 200 million cases occur each year (4, 5). The range of pathogens that are known to be spread by sex continues to increase. In recent years, there has been an increase in viral conditions particularly herpes simplex virus (HSV) and human papilloma virus but a seeming decrease in syphilis and gonorrhoea (6). The recognition of human immunodeficiency virus (HIV) and the acquired immune deficiency syndrome (AIDS) has increased awareness of STDs.

In a typical STI clinic, two of the most common presenting symptoms are genital discharge (urethral and vaginal) and

genital ulceration (7). Nevertheless, unusual findings on examination and investigations are not uncommon (8).

The dynamic factors in the spread of STIs are the acquisition of infection from one partner and its transmission to another. This depends on availability of partners which increases with population movement including migration from rural to urban areas, worldwide travel as well as relocation of whole populations due to wars and natural disasters. Social factors which promote the spread include affluence, alcohol, leisure, personal freedom, prostitution (commercial and clandestine) and ignorance (9). All socio-economic groups acquire STIs; even the unborn child is not spared (10).

Our experience in an STI clinic during a decade (June 1991-2001) are presented and discussed in this paper.

MATERIALS AND METHOD

The records of patients attending the STI clinic since its inception in June 1991 up to the end of June 2001 were retrieved and analyzed. The clinic is a referral clinic and patients are received from the various medical and surgical specialties especially the general outpatient department (GOPD). We collated demographic information on the patients which include age, sex, occupation, tribe and marital status and analyzed the results of laboratory investigations that were conducted. The aim was to determine the prevalence of venereal pathogens encountered as well as highlight the pattern of STIs.

Routinely in the clinic, general physical examination was done on each patient with special attention to the genital area. The routine laboratory investigations performed included microscopy, culture and sensitivity of urethral swabs from males, cervical and high vaginal swabs from females (occasionally urethral swabs were collected from female patients when indicated). Eye swabs were collected from patients with discharge from the eyes. Urine samples for microscopy were collected from both genders while the 3 urine test was performed only in male patients. All the patients attending the clinic for the first time had their blood collected and tested for antibodies to *Treponema pallidum*. All microbiological investigations were done according to standard procedures (11). Specialized investigations such as intravenous pyelography were performed when indicated.

Preliminary reports of smears of urethral, cervical and high vaginal specimen examinations (wet preparation and Gram

stain) were obtained on the first day of attending the clinic. The results were used to start treatment when indicated. Patients with acute gonococcal urethritis, gonococcal cervicitis and gonococcal ophthalmia neonatorum were reviewed in 72 hours (third day) with the culture results. Patients were thereafter followed up for 1, 2 and 3 weeks after the second visit to the clinic. The test of cure was performed in treated patients 2 weeks after completion of treatment.

RESULTS

During the period June 1991 to June 2001, a total of 1264 new patients were seen at the STI clinic. These were made up of 491 (38.8%) males and 773 (61.2%) females. The youngest patient was 2 years old while the oldest was 62 years (Table 1).

Table 1: Age and sex distribution

Age in year	No of attendees	Male	Female
Less than 10	5	1	4
10-14	2	2	-
15-19	84	23	61
20-24	383	80	302
25-29	228	122	106
30-34	249	99	150
35-39	186	92	94
40-44	55	30	25
45-49	24	13	11
50-54	15	7	8
55-59	18	10	8
60	16	12	4
Total	1264	491(38.8%)	773(61.2%)

The occupational distribution of the patients is as shown in Table 2.

Table 2: Occupational distribution

Occupational grouping	Frequency	Percentage
Skilled	186	14.72
Unskilled	266	21.04
Professional	793	62.74
Unspecified	19	1.50
Total	1264	100

Majority of the clinic attendees were professionals (62.7%), followed by unskilled workers (21.04%) and skilled workers (14.72%) while 1.50% of the patients did not have any specific occupation. Tribal distribution revealed a mixed population with a Yoruba majority 73.6%, followed by Hausa/Fulani 11.8%, and Igbo and other Nigerian tribes and a few non-Nigerians, made up the remaining 14.6%.

A total of 978 diagnoses were recorded, 3 of these were by direct observation of the ectoparasite (*Phthirus pubis*) (Table 3). Two hundred and eighty six (23%) patients did not have specific STI, among who were 252 without a proven STI and 31 cases of venerophobia. The breakdown of the diagnoses revealed that candidal infections were in the majority (24.3%) while gonorrhoea ranked second with 17.59%. Non-specific urethritis (NSU) and non-specific genital infections (NSGI) accounted for 14.93%, pediculosis had the lowest prevalence of 0.3% (Table 3).

Table 3: Disease Frequency

Diagnosis	No of patients		Total	%
	Male	Female		
Candidiasis	6	232	238	24.33
Gonorrhoea	143	29	172	17.59
NSU/NSGI	130	16	146	14.93
Trichomoniasis	1	67	68	6.95
Genital warts	33	24	57	5.83
Wart and HIV	-	4	4	0.41
Bacteria vaginosis	-	51	51	5.21
Herpes genitalis	32	16	48	4.91
Tinea cruris	20	5	25	2.56
LGV	17	6	23	2.35
Chancroid	17	5	22	2.25
Scabies	18		18	1.84
HIV	5	14	19	1.94
Pediculosis	1	2	3	0.31
Venereophobia	27	4	31	3.17
Others	12	41	53	5.42
Total	462	516	978	100

DISCUSSION AND CONCLUSION

Vaginal candidal infection is the most prevalent STI in this study (24.3%) followed by gonorrhoea, NSU/NSGI and trichomoniasis with prevalence rates of 17.6%, 15% and 6.9% respectively. Pediculosis had the lowest prevalence of 0.3%. This pattern of distribution of cases of STIs is similar to that reported by other workers (12, 13) here in Nigeria. Odugbemi *et al* (13) in their series in Ilorin, North Central Nigeria, reported NSGI as the commonest condition encountered in the STD clinic, accounting for 21.8% of cases, followed by candidiasis 19%, gonorrhoea 14.3% and trichomoniasis 8.7%. Outside Nigeria, other workers (14-16) have reported similar distribution of STIs. Fonck *et al* in their study to determine the prevalence of STDs and cervical dysplasia in Nairobi, Kenya found that candidiasis was the predominant infection, accounting for 35% of all STIs.

Significantly, no case of syphilis was seen at the clinic. This is not surprising as others have also reported low incidence for this spirochaetal infection. Nagot *et al* (17) in Burkina Faso observed in their study that there is an important decline in classic bacterial STIs such as syphilis. Outside Africa, Claeys *et al* (18) reported 0.7% of 1185 women being seropositive for syphilis. The low prevalence observed could be due to the fact that the majority of STI cases receive treatment either at the primary health care level or in the private clinics or procure off-counter prescription before attending the STI specialist clinic. *Treponema pallidum*, the causative agent of syphilis is highly susceptible to a variety of drugs such as penicillins and macrolides,

which are readily available without a physician's prescription.

Scabies and pediculosis have prevalence rates of 1.9% and 0.3% respectively. Though these rates appear low, association between these organisms and STIs is emphasized. Infact, the United Kingdom national guidelines (19) on STIs have recommended screening for other STIs in patients with scabies attending the 'genitourinary medicine' clinic.

It is interesting to note that 31 (3.2%) of all the patients seen at our clinic had venereophobia. The majority of these patients, because of their unusual fear of STD, use various self-prescribed antimicrobial drugs including gentamicin, tetracycline, chloramphenicol, ciprofloxacin, penicillins and some cephalosporins. The widespread practice of indiscriminate use of antimicrobial agents only enhances the chances of survival of resistant pathogens in the communities. It was also observed that laboratory reports, which should only be used as a guide for prescribing drugs by physicians, now serve as a shopping list for drugs by patients especially those with venereophobia.

High incidence and prevalence of STIs has usually been reported in prostitutes or commercial sex workers (CSW). Though more females were seen during the period reviewed, none admitted to being a CSW. There is a strong stigma on prostitution in the local African community. It was also noted that none of the men admitted to being a homosexual. The level of sexual permissiveness in the society is not high enough to encourage a male Nigerian to admit being a homosexual. The reported cases of HIV with genital warts were low

0.4%, which might be due to the fact that management of HIV/AIDS patients is multidisciplinary.

Attendance at the clinic appears generally low and this could be attributed to two major factors, which include stigma and fear of loss of dignity. However, the study has again affirmed that STIs are prevalent in the sexually active population in any given community. Eighty two point seven percent of all cases of STI in this study were diagnosed in the age bracket 19-39 years, a pattern that is consistent with report of other workers (13, 16).

In conclusion, the problem of sexually transmitted infection is ever present and there is need to continue to stimulate the awareness of both the general public and health workers at all levels of health care delivery as a sure means of achieving control.

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