

Sexually transmitted disease in clinic patients in Salisbury, Zimbabwe

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SUMMARY During the three months between December 1979 and February 1980, 2867 patients attended a sexually transmitted diseases clinic. Of the 929 (32.4%) patients examined and interviewed clinical and laboratory findings showed that chancroid was the commonest disease (38.4%) and gonorrhoea almost as common (35.3%) in men. Pelvic inflammatory disease was the commonest disease (47.0%) and gonorrhoea the next commonest (22.7%) in women.

Introduction

Sexually transmitted diseases (STDs) are very prevalent in Zimbabwe. In Salisbury patients with STDs are treated at clinics run by the City Health Department, the outpatient department at Harare Central Hospital, and private general practitioner surgeries. The Bank Street Clinic, which is one of the City Health Department's busier clinics, is in the central area of Salisbury. It is attached to the primary care clinic and is staffed by a nursing sister and six medical assistants. Together the clinics deal with up to 100 new patients a day. Female patients with STDs are seen by the nursing sister, and male patients are seen by her and by two male medical assistants. A medical officer is present for about four hours each day to see cases of STD. The primary care clinic is attended by another doctor.

Facilities for the investigation of STDs are limited to Gram staining and microscopy, Microcult-GC (Ames Co, Elkhart, Indiana, USA), darkfield microscopy, the Venereal Disease Research Laboratory (VDRL) test, and microscopy for *Trichomonas vaginalis* and *Candida* species.

Patients and methods

Patients included in this study were those that were seen and examined by the author. Most patients attended voluntarily, although a small number were referred by their own general practitioners or by other clinics.

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LABORATORY INVESTIGATIONS

All patients had blood specimens taken for the VDRL test. Darkfield microscopy was performed on exudates where indicated. Smear specimens taken from the urethra were stained by Gram's method and examined for Gram-negative intracellular diplococci. In all women cervical smears were taken for Gram staining and for culture by the Microcult-GC method. If no gonococci were isolated and the patient had lower abdominal pain, dysuria, and vaginal discharge, she was diagnosed as having pelvic inflammatory disease (PID). Vaginal swabs were taken and sent to the Public Health Laboratory for identification of *Trichomonas vaginalis* and *Candida albicans*.

The diagnoses of chancroid, lymphogranuloma venereum (LGV), condylomata acuminata, genital herpes, molluscum contagiosum, PID, Reiter's syndrome, and balanitis xerotica obliterans (BXO) were made on their characteristic clinical findings. Facilities for carrying out complement-fixation tests for LGV, gonorrhoea, and herpes, as well as for the absorbed fluorescent treponemal antibody (FTA-ABS) test, Frei test, and cultures for *Haemophilus ducreyi* were not available.

Results

Of the 929 patients seen, 695 (74.8%) were men and 234 (25.2%) women. Most of the patients were aged between 20 and 25 years (men 49.8%; women 51.3%). Of the men and the women, 56.1% and 68.8% respectively were married.

DIAGNOSES

Of the men in the 20-25 age group, 138 (39.4%) had

chancroid and 127 (36.3%) gonorrhoea. In women in this age group, 53 (45.3%) had PID and 28 (24.0%) gonorrhoea. In patients with PID *Neisseria gonorrhoeae* was isolated in only 2%; in the remainder no organisms were isolated.

SOURCES OF INFECTION

The sources of infection are shown in tables I and II. Most of the men had paid money for the sexual contact that resulted in their present infection, whereas most married women (78.3%) were infected by their husbands. Of the unmarried women, 54.8% had received money for the sexual contact that had led to their present infection, while 41.1% had been infected by a regular boyfriend.

TABLE I *Source of infection in male patients*

Source	Married		Unmarried		Total	
	No	%	No	%	No	%
Wife	13	3.3			13	1.9
Casual (no money paid)	72	18.5	37	12.1	109	15.7
Casual (money paid)	271	69.5	202	66.2	473	68.1
Regular girlfriend	34	8.7	66	21.6	100	14.4
Total	390		305		695	

TABLE II *Source of infection in female patients*

Source	Married		Unmarried		Total	
	No	%	No	%	No	%
Husband	126	78.3			126	53.9
Casual (no money received)	27	16.8	3	4.1	30	12.8
Casual (money received)	4	2.5	40	54.8	44	18.8
Regular boyfriend	4	2.5	30	41.1	34	14.5
Total	161		73		234	

TABLE III *Analysis of diagnoses*

Diagnosis	Men		Women		Total	
	No	%	No	%	No	%
Chancroid	267	38.4	36	15.4	303	32.6
Gonorrhoea	245	35.3	53	22.7	298	32.1
Pelvic inflammatory disease			110	47.0	110	11.8
Lymphogranuloma venereum	47	6.8	10	4.3	57	6.1
Genital herpes	26	3.7			26	2.8
Syphilis	22	3.2	11	4.7	33	3.6
Candidosis	22	3.2	6	2.6	28	3.0
Nongonococcal urethritis	23	3.3			23	2.5
Trichomoniasis	6	0.9	2	0.9	8	0.9
Condylomata acuminata	13	1.9	1	0.4	14	1.5
Balanitis xerotica obliterans	2	0.3			2	0.2
Reiter's syndrome			1	0.4	1	0.1
Mixed infection	22	3.2	4	1.7	26	2.8
Total	695		234		929	100

DISTRIBUTION OF DISEASES

Twenty-two (3.2%) men had a mixed infection; of these, 13 had gonorrhoea and chancroid, two gonorrhoea and LGV, two gonorrhoea and condylomata acuminata, two syphilis and chancroid, one genital herpes and nongonococcal urethritis, one gonorrhoea and candidosis, and one trichomonal urethritis and molluscum contagiosum (table III). Four (1.7%) women had a mixed infection; one each had a combination of gonorrhoea and LGV, gonorrhoea and candidosis, gonorrhoea and chancroid, and LGV and syphilis.

Thirty-three patients had syphilis; most had either primary or secondary syphilis. Two men and one woman had latent syphilis. No case of late syphilis was encountered during the present study. Non-venereal treponematoses are very uncommon in the Salisbury area and no cases were seen during the present study.

PREVIOUS ATTENDANCES

Ninety-six (13.8%) men had been treated at the Bank Street Clinic for some form of STD during the preceding year; all had cards issued by the clinic during their previous attendances. More than half (54.2%) were in the 20-25 age group. Similarly, 27 (11.5%) of the female patients had been treated at the clinic during the previous year. Again, most of these women (44.4%) were aged between 20 and 25 years. All the women who had a recurrent infection admitted to having received money for the sexual contact that led to their present infection.

Discussion

STDs are very commonly seen in Salisbury. In most parts of the world nongonococcal urethritis is the commonest form of STD.^{1,2} In the present study

gonococcal urethritis was the commonest form of STD seen in men; other investigators³ have reported similar findings in Zimbabwe.

Syphilis, which is the most serious of all STDs, was not often seen (men 3·2%; women 4·7%). This may be a falsely low finding as an experienced microscopist was not always available to perform darkfield microscopy on genital ulcers, and facilities for specific tests for syphilis, such as the FTA-ABS test and the *Treponema pallidum* haemagglutination assay (TPHA), were not available. As a result of these limitations I believe that a considerable number of patients with latent syphilis remain undiagnosed. However, Gelfand *et al*⁴ found that neurosyphilis was uncommon in Zimbabwe; they found 3·3 cases of neurosyphilis per 10 000 total discharges from the Harare Central Hospital in Salisbury.

The VDRL test is performed routinely on all pregnant women attending for antenatal care at the City Health Department polyclinics. Of 18 470 women tested at the Highfield, Mabvuku, and Edith Opperman maternity clinics during the year ending in March 1980, 96 (0·5%) women had a positive VDRL result.

Another reason for the small number of cases of early syphilis may be that early syphilitic lesions cause little discomfort to the patient, whereas chancroid and LGV are often extremely painful and may be associated with large painful buboes. Patients with the latter two conditions usually seek medical attention early in the course of the disease.

Genital herpes is quite commonly seen at our STD clinics, the diagnosis being made entirely on the clinical appearance. Genital scabies is also very common in Salisbury but no cases were seen during the period of this study. Most cases of scabies are diagnosed and treated at the primary care clinics.

PID was the commonest disease seen among the women who attended during the present study. However, because of a lack of adequate laboratory facilities, the causative agents have not been identified.

Willcox⁵ carried out a comprehensive study of the prevalence of STD in this country in 1949. The pattern of STDs has not changed greatly since then except for an apparent slight decrease in the incidence of syphilis.

Prostitution plays an important role in the transmission of STD, and many aspects of society predispose to promiscuity.⁶ Promiscuity is encouraged by the present war, mobility, migrant labour, and separation of families. In this country a large number of men seek employment in the cities and only visit their womenfolk during the holiday seasons. Of the 390 married men in this study, 81·4% had been separated from their wives for periods of over six weeks. It would appear, therefore, that prolonged separation of families encourages promiscuity.

In a developing country like Zimbabwe the control of STDs poses a major problem. What is necessary is a well-designed, fully equipped, fully staffed STD clinic, which should have access to a modern and efficient laboratory. Numerous peripheral clinics should be set up, which could refer difficult cases and send specimens for pathological tests to the central clinic. The latter should be used to train nursing sisters and medical assistants in venereology. Medical students in the final year of their training at present spend about 15 hours at the Bank Street Clinic. When the "model clinic" is set up more intensive instruction could be offered to them. Finally, an efficient contact-tracing service is vital if any attempt is to be made to control STD.

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