Sexually transmitted disease in clinic patients in Salisbury, Zimbabwe

A S LATIF
From the City Health Department and the Department of Medicine, Godfrey Huggins School of Medicine, University of Zimbabwe, Salisbury, Zimbabwe

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, Microcuit-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.

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 Microcuit-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**

<table>
<thead>
<tr>
<th>Source</th>
<th>Married</th>
<th>Unmarried</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wife</td>
<td>13</td>
<td>9</td>
<td>22</td>
</tr>
<tr>
<td>Casual (no money paid)</td>
<td>72</td>
<td>39</td>
<td>111</td>
</tr>
<tr>
<td>Casual (money paid)</td>
<td>271</td>
<td>305</td>
<td>576</td>
</tr>
<tr>
<td>Regular girlfriend</td>
<td>34</td>
<td>8·7</td>
<td>100</td>
</tr>
<tr>
<td>Total</td>
<td>390</td>
<td>305</td>
<td>695</td>
</tr>
</tbody>
</table>

**TABLE II**  **Source of infection in female patients**

<table>
<thead>
<tr>
<th>Source</th>
<th>Married</th>
<th>Unmarried</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Husband</td>
<td>126</td>
<td>78·3</td>
<td>126</td>
</tr>
<tr>
<td>Casual (no money received)</td>
<td>27</td>
<td>3-0</td>
<td>30</td>
</tr>
<tr>
<td>Casual (money received)</td>
<td>4</td>
<td>4·2</td>
<td>4</td>
</tr>
<tr>
<td>Regular boyfriend</td>
<td>4</td>
<td>2·5</td>
<td>4</td>
</tr>
<tr>
<td>Total</td>
<td>161</td>
<td>73</td>
<td>234</td>
</tr>
</tbody>
</table>

**TABLE III**  **Analysis of diagnoses**

<table>
<thead>
<tr>
<th>Diagnosis</th>
<th>Men</th>
<th>Women</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chancroid</td>
<td>267</td>
<td>38·4</td>
<td>36</td>
</tr>
<tr>
<td>Gonorrhoea</td>
<td>245</td>
<td>35·3</td>
<td>53</td>
</tr>
<tr>
<td>Pelvic inflammatory disease</td>
<td>47</td>
<td>6·8</td>
<td>10</td>
</tr>
<tr>
<td>Genital herpes</td>
<td>26</td>
<td>3·7</td>
<td>6</td>
</tr>
<tr>
<td>Syphilis</td>
<td>22</td>
<td>3·2</td>
<td>11</td>
</tr>
<tr>
<td>Candidiasis</td>
<td>22</td>
<td>3·2</td>
<td>6</td>
</tr>
<tr>
<td>Nongonococcal urethritis</td>
<td>23</td>
<td>3·3</td>
<td>2</td>
</tr>
<tr>
<td>Trichomoniasis</td>
<td>6</td>
<td>0·9</td>
<td>2</td>
</tr>
<tr>
<td>Condylomata acuminata</td>
<td>13</td>
<td>1·9</td>
<td>1</td>
</tr>
<tr>
<td>Balanitis xeroticus obliterans</td>
<td>2</td>
<td>0·3</td>
<td>1</td>
</tr>
<tr>
<td>Reiter’s syndrome</td>
<td>1</td>
<td>0·4</td>
<td>1</td>
</tr>
<tr>
<td>Mixed infection</td>
<td>22</td>
<td>3·2</td>
<td>4</td>
</tr>
<tr>
<td>Total</td>
<td>695</td>
<td>234</td>
<td>929</td>
</tr>
</tbody>
</table>

**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 for 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 were 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. In the present study...
Sexually transmitted disease in clinic patients in Salisbury, Zimbabwe

gonococcal urethritis was the commonest form of
STD seen in men; other investigators\(^3\) 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 micro-
scopist 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
chancreoid 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.

Willcox\(^5\) 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 decrease in the incidence of syphilis.

Prostitution plays an important role in the transmis-
ion of STD, and many aspects of society predispose to promiscuity.\(^6\) Promiscuity is
couraged 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 STD 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 effi-
cient contact-tracing service is vital if any attempt is
to be made to control STD.

I should like to thank the Salisbury City Medical
Officer of Health, Dr J C A Davies, for his
encouragement and assistance in preparing this paper.

References

1. Sogbetun AO, Alausa KO, Osoba AO. STD in Ibadan,
2. Willcox RR. Importance of the so called “other” STDs. *Br J
Vener Dis* 1975;51:221-6.
incidence and types, as found in the African of Zimbabwe.
5. Willcox RR. *A Venereal Diseases Survey of the African in
Southern Rhodesia*. Salisbury: South Rhodesian Government,
1949.