Some aspects of sexually transmitted disease in Swaziland

PETER BURNEY
The Middlesex Hospital, London

Summary
A survey of sexually transmitted diseases was attempted in Swaziland. Time and the terms of reference limited its scope, but much interesting information was gathered.

Neither the prevalence nor the relative frequency of the different diseases in the community could be ascertained, but there was evidence to support the local impression that the sexually transmitted diseases present an increasing problem in Swaziland.

An important problem was that of case finding and two aspects of this are stressed:
1) A general lack of knowledge concerning the venereal diseases;
2) The large number of men infected by ‘casual’ girl friends who cannot easily be traced, and who form a reservoir of infection in the community.

Introduction
This report summarizes a survey performed under the auspices of the Swazi Ministry of Health between 6 July and 28 September, 1973. The Ministry proposed the subject because of their concern over the number of patients with sexually transmitted diseases (STD), and the author, a preclinical medical student, spent 4 weeks training at James Pringle House, the STD clinic at the Middlesex Hospital, London.

The sample
The sample seen had no clear geographical or population limits. The survey was limited to the out-patient department of the government hospital at Mbabane, the capital of Swaziland, many inhabitants being migrant labourers who have strong social ties outside the town. The patients included were those who reported at the out-patient department with an STD during the 3-month period of the survey, and those of their contacts who could be persuaded to attend and were found to be infected. The factors determining a patient’s attendance with STD are not known.

Methods
All patients who reported to the department with a suspected STD were as fully investigated as possible. Syphilis was diagnosed on the basis of a positive result to the Venerable Disease Research Laboratory (VDRL) test, and gonorrhoea by finding typical intracellular Gram-negative diplococci in vaginal or urine samples; lack of sugar fermentation plates prevented satisfactory cultural diagnosis. Genital sores could not be further investigated, although four cases of lymphogranuloma venereum (LGV) were suspected from the history and physical findings.

As patients were thought unlikely to return for further investigation if they did not receive treatment at the first visit, it was necessary to treat some women without confirming the diagnosis. These were not included in the survey.

Diseases diagnosed
The relative frequency with which patients present at an out-patient department does not necessarily reflect the importance of their diseases in the community, but the pattern of disease seen is of interest and may give an indication of relative prevalence. Of 240 patients seen during the course of the survey, 124 were suffering from presumed gonorrhoea, 67 had genital sores, and 23 reported with both; a further 26 had positive VDRL reactions and were assumed to have syphilis with or without some other STD.

Of the 26 patients whose VDRL test was positive, three had lesions usually associated with primary syphilis and three had condylomata lata. The rest were cases of presumed latent syphilis presenting with another infection, and the fact that these comprised 8 per cent. of the total sample emphasized the importance of screening all cases of venereal disease for latent treponemal infection.

With one exception cases of urethral discharge in men appeared to be due to gonorrhoea. The exception was a 24-year-old man referred to the clinic after failing to respond to a wide range of antimicrobial drugs. His urine was found to contain many epithelial cells and Gram-negative cocobacilli provisionally identified as Pasteurella species. The condition responded to tetracycline.
No cases of non-specific urethritis (NSU) were seen and the explanation of this is obscure. It is surprising that the increase in the incidence of this condition in Europe and America is not reflected in Swaziland.

All urines tested, for whatever reason, at the request of the medical staff of the hospital were examined for T. vaginalis by direct microscopy. About 29 per cent. (51/179) of the women and 4 per cent. (6/149) of the men were infested. About 50 per cent. (108/215) of women attending an ante-natal clinic and 35-5 per cent. (11/31) of women with gonorrhoea were found to have T. vaginalis in their urine.

Prevalence
It proved impossible to determine the prevalence of venereal diseases but the evidence collected supported the local impression that these conditions were increasing.

Failure of patients to present
An important question is 'Why do patients with STD fail to present at an out-patient department?' Although many patients believed that these conditions were European diseases and so, by implication, particularly amenable to European medicine, many consulted isinyanga (herbalists).

Patients were asked if they had had any previous genital infection and, if so, what action they had taken. 71 of the men and 37 of the women admitted to no such previous history. The answers obtained from the rest are summarised in Table I.

Thus 17 per cent. (20/116) of men and 44 per cent. (7/16) of women who reported to a hospital with a venereal disease could remember and would admit to a previous genital infection for which they had not sought help at either a hospital or a clinic.

Part of the popularity of the isinyanga may be ascribed to their superficial success. One male contact claimed that his discharge had been cured by an inyanga, but that he still had dysuria. Intracellular Gram-negative diplococci were found in his urine. Local remedies include self-medication with patent medicines which can be dangerous because they fail to cure the disease and can actually cause damage.

Contact tracing
The need for a vigorous programme of contact tracing is clear from the small proportion of female patients attending the clinic. Only 24 per cent. of those with a sexually transmitted disease and only 20 per cent. of those with a positive VDRL test were female, whereas in a survey undertaken by staff of the local public health unit in 1967 at Msunduzi Township, a part of Mbabane, 54 per cent. of those with a positive Wassermann reaction were female (Friedmann, personal communication).

All contact tracing during this survey was done through the patient, who was given a contact slip for each contact and told that this would ensure free consultation and treatment if necessary. The importance of the procedure was explained to the patient, but the programme was hindered by several difficulties.

(1) Systematic contact tracing had not been done before;

(2) Many patients failed to understand the nature of the contagion. Symptoms were ascribed to having intercourse with a girl who was menstruating or who had taken 'headache' or 'blood-purifying' pills. There is no education in these matters in the schools and these myths are generally accepted even by otherwise well-educated people.

(3) There were no facilities for visiting contacts whose partners were too angry or too embarrassed to pass on the contact slip.

(4) The partners of some patients lived far out in the country and were both difficult to contact and unwilling to make the long and expensive journey to the hospital.

<table>
<thead>
<tr>
<th>Table I</th>
<th>Action taken in response to a previous genital infection by 240 patients</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex (No. of cases)</td>
<td>Action taken</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Female (53)</td>
<td>Did nothing</td>
</tr>
<tr>
<td></td>
<td>Local remedy</td>
</tr>
<tr>
<td></td>
<td>Hospital or clinic</td>
</tr>
<tr>
<td></td>
<td>Total</td>
</tr>
<tr>
<td>Male (187)</td>
<td>Did nothing</td>
</tr>
<tr>
<td></td>
<td>Local remedy</td>
</tr>
<tr>
<td></td>
<td>Hospital or clinic</td>
</tr>
<tr>
<td></td>
<td>Not specified</td>
</tr>
<tr>
<td></td>
<td>Total</td>
</tr>
</tbody>
</table>
Table II  Acknowledged sexual partners

<table>
<thead>
<tr>
<th>Sex</th>
<th>Marital status</th>
<th>Casual admitted</th>
<th>No casual admitted</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>More than one regular</td>
<td>Only one regular</td>
<td>No.</td>
</tr>
<tr>
<td>Male</td>
<td>Married</td>
<td>20</td>
<td>13</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td>Single</td>
<td>48</td>
<td>41</td>
<td>34</td>
</tr>
<tr>
<td></td>
<td>No regular partner</td>
<td>15</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td></td>
<td>Total No.</td>
<td>83</td>
<td>(44)</td>
<td>50</td>
</tr>
<tr>
<td></td>
<td>(Per cent.)</td>
<td>(29)</td>
<td>(27)</td>
<td>(100)</td>
</tr>
<tr>
<td>Female</td>
<td>Married</td>
<td>0</td>
<td>0</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>Single</td>
<td>1</td>
<td>1</td>
<td>38</td>
</tr>
<tr>
<td></td>
<td>No regular partner</td>
<td>1</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td></td>
<td>Total No.</td>
<td>2</td>
<td>(4)</td>
<td>47</td>
</tr>
<tr>
<td></td>
<td>(Per cent.)</td>
<td>(2)</td>
<td>(94)</td>
<td>(100)</td>
</tr>
<tr>
<td>Children</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>3</td>
</tr>
</tbody>
</table>

(5) A large number of the partners were ‘casual’ girl friends unknown to the patients. An enquiry was made into the marital status and sexual contacts of the patients in the 4 weeks before infection. 26 per cent. of the men and 18 per cent. of the women were married. The results are given in Table II.

The large number of casual partners admitted by men in the 4 weeks before infection must imply that this is a major source of infection. Furthermore, if the evidence of the female patients is to be believed casual girl friends comprise an almost entirely untreated section of the population which it is almost impossible to reach by standard methods of contact tracing.

Bearing these problems in mind, the contact tracing programme had some success and is obviously important. About 15 per cent. of those for whom contact slips were issued presented themselves at the out-patient department, most of them very soon after the initial appointment.

**Recommendations**

Some recommendations can be made for improving the situation.

(1) At present education on this subject is not allowed in schools. Public feeling must naturally be taken into account, but this principle should be reconsidered. The present prohibition should not exclude more general dissemination of knowledge on the subject, particularly with a view to persuading some of the elusive ‘casual’ girl friends of the wisdom of periodical examination.

(2) The development of a universal system for tracing contacts for the whole country should be considered.

(3) A far more vigorous attempt should be made to screen all pregnant women by means of the VDRL test. Many of those who attend clinics in the remoter areas probably do not have tests for logistic reasons. Others may not attend clinics at all.

This survey would not have been possible without the help and encouragement of many people both in England and Swaziland, too numerous to thank here individually. I should like to thank Dr. R. D. Catterall and Professor D. L. Miller for criticising previous drafts of this article.