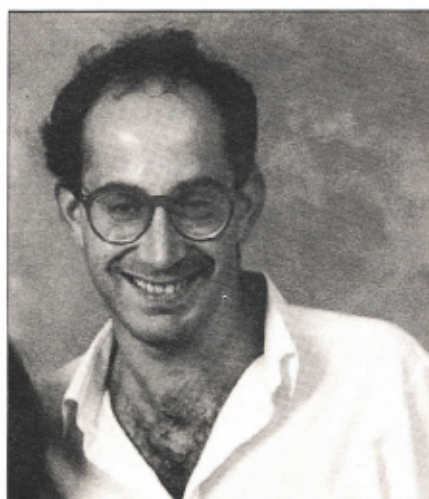


## Care of STDs in Alexandra – Frame G, Ferrinho P, Wilson TD



Frame G  
MBBCh, BSc

Ferrinho P  
MBChB, DTM&H, MSc (Med)

Wilson TD  
MA, BM, BCh (Oxon), MSc (London),  
DTM&H, DPH (Rand), FCP (Paed)

Alexandra Health Centre and University Clinic  
Institute for Urban Primary Health Care  
Centre for Epidemiological Research in  
Southern Africa.

### Curriculum vitae

Dr Gideon Frame graduated BSc (Wits) in 1982 and MBBCh (Wits) in 1986. He worked at the Alexandra Health Centre between 1988 and 1990, and developed the AIDS and STD programme. This includes counselling, clinical care, education, condom provision and lay health worker training. He is an active member of Progressive Primary Health Care Network AIDS Forum and South African Health Workers Congress AIDS Interest Group. Gideon is currently working on MSc (Med) thesis titled "Seroprevalence in Alexandra township".

### Summary

*We review recent research findings related to sexually transmitted diseases (STDs) at the Alexandra Health Centre and University Clinic (AHC). We also report the findings of a postal survey requesting information, from GPs in and within 1 km of Alexandra, on workload due to care of patients with STDs and in need of antenatal care.*

*The care of patients with STD, and particularly the Sexual Health Education (SHE) that they receive, has been greatly improved and studies have been completed on Sexually Abused children, on the profile of patients attending AHC with STD, on HIV prevalence and on the prevalence of penicillin resistant gonococcus.*

*In the survey of GPs, 16 were identified by a snowballing sampling method. The response rate was 81%. From the results we conclude that over 20% of the population over 15 years of age is treated at least once a year for STD. Mostly by GPs and about 1/5 by clinicians at the AHC. We also report on HIV testing, antenatal care and on deliveries conducted by GPs and by the AHC.*

*S Afr Fam Pract 1991; 12: 87-92*

**KEYWORDS:**  
Sexually Transmitted Diseases;  
Urban Health; Physicians,  
Family.

### Introduction

Alexandra is an African Township near Johannesburg with a population of 200 000. It is characterized by rapid population growth due to influx of people from rural and other urban areas, and by a lack of dignified family life because of apartheid policies. Single sex hostels accommodate about 10% of the population, about another 40% live in "shacks" or informal settlements, and only about 20% live in the new "upgraded" housing. Environmental conditions are appalling with grossly inadequate sewerage and water supplies. There is a tremendous lack of recreational facilities and this promotes alcoholism, violence and, together with all the factors already mentioned, breeds sexually transmitted diseases (STD) and sexual abuse of small children.

According to the 1985 census, 75% of the population was over 15 years of age, 52% were males, 48% were females and 31% were females in the fertile age group (15 to 55 years of age).

The health needs of this population are met by the Alexandra Health Centre and University Clinic (AHC), by a small local authority clinic and by an unknown number of general practitioners (GPs). The range of services offered by GPs is unknown. The local authority clinic offers a very restricted range of services which do not include antenatal care (ANC) but does include a once a week clinic for STDs. The AHC services have been well described in a number of publications.<sup>1,2</sup> It offers a comprehensive range of services including general adult and paediatric outpatient care, hypertension and diabetic clinics, antenatal and labour care, once a week specialist clinics,

## ... Care of STDs

well baby services and a 24 hour emergency care unit that includes 13 beds in an "observation area". We also have a basic radiology service and a laboratory that carries out tests for syphilis serology and microscopical examination of gram stained vaginal or penile smears.

The plight of sexually abused children has been described in a number of conference papers.<sup>3,4</sup> STD patients' perceptions of the care received at the AHC has been studied.<sup>5</sup> Patients reported the need for greater privacy during consultation and for more health education. Since then privacy has been increased, standard protocols for the management of patients with STDs have been developed and a sex health education (SHE) programme has been started.<sup>6</sup> The work of SHE has been evaluated twice.

In August 1989 it was found that after going through SHE, 4 out of 11 STD patients still believed that gonococcal urethritis could be spread through toilet seats (unpublished data). A more recent evaluation

---

20%<sup>+</sup> of adults is treated once a year for a STD

---

indicated a definite improvement in knowledge and attitude of patients exposed to the SHE talks, although it was felt that better use should be made of teaching aids.<sup>7</sup> The profile of patients attending SHE for a period of one year and the risk for STD ulcer diseases in these patients is currently in press.<sup>8</sup> A HIV seroprevalence survey has been recently completed<sup>9</sup> and we are in the

process of developing a Sex Health Outreach Programme (SHOP). Despite the high rate of gonococcal urethritis resistant to penicillins<sup>10</sup> (15%) we have so far been unable to afford regimens (eg with spectinomycin) that take into account this resistance.

A record review of women attending for obstetric care in 1987/1988 revealed a rate of 6% positive syphilis serology.<sup>11</sup>

Despite our extensive data basis on STDs in Alexandria we remained without a basic knowledge of the proportion of STD patients attended to by the AHC rather than by the other health care providers in Alexandria. In order to calculate the proportion of STD patients attended to by GPs and to calculate the range

and the nature of care provided, we carried out a small survey in September 1990.

## Population and Methods

The objectives of the survey were specifically to find out: how many and what type of STD patients attend Alexandria GPs and what management protocols are used; how many pregnant women attend GPs and how are they managed; how many and what stage of HIV (human immunodeficiency virus) infected patients are managed by GPs.

The study was of a descriptive nature. Sampling followed a "snow balling" approach. We approached GPs known to us, and through them we obtained information on other GPs working in or within 1 Km of Alexandria.

Table I. GP STD Workload, Treatment and Problems

| GP ID | STDs per week | Dispensing | Drug resistance          |
|-------|---------------|------------|--------------------------|
| 1     | 60            | Yes        | Gonococcus               |
| 2     | 30            | Yes        | Very Seldom              |
| 3     | 10            | Yes        | Gonococcus               |
| 4     | 30            | Yes        | Gonococcus and Chancroid |
| 5     | 30            | Yes        | Urethritis and Chancroid |
| 6     | 15            | Yes        | Conococcus               |
| 7     | 12            | Yes        | Gonococcus               |
| 8     | 12            | Yes        | No                       |
| 9     | 45            | Yes        | Gonococcus               |
| 10    | 20            | Yes        | Urethritis               |
| 11    | 40            | Yes        | No                       |
| 12    | 20            | Yes        | Gonococcus               |
| 13    | 20            | Yes        | Gonococcus and Syphilis  |

## ... Care of STDs

All the GPs were given or posted a written 2 page questionnaire. These were either returned by post, collected from the GP surgery or, in a minority of cases completed during a telephonic interview.

## Results

We identified 16 GPs. The response rate was 81%.

The GPs saw on average  $26 \pm 15$  STD patients per week (10 to 60 patients). All of them dispensed directly to patients and all of them again had encountered the problem of drug resistant STDs particularly gonococcal urethritis (table I). Their treatment regimens, like ours, are based on penicillin, tetracycline,

erythromycin, bactrim and flagyl. The use of antibiotics appropriate for resistant urethritis, such as spectinomycin, was only reported by one GP.

On average they attended to  $10 \pm 13$  women for antenatal care per week (1 to 50) and  $5 \pm 6$  of these were new cases (1 to 25). None of them followed their cases through to delivery and eventually all of them referred most cases to the AHC (table II). Only 3 of the 13 GPs that replied referred patients immediately to the AHC, the remainder referring only after a number of ANC visits. Most do not carry out laboratory tests for syphilis in pregnancy and the two that carried out such procedures mentioned positive rates of 5 and 10%.

The extent to which HIV testing was carried out varied markedly. Overall the GPs had carried out 202 HIV tests, essentially for insurance purposes, and had found 3 seropositive cases, giving a prevalence of 1,5% (table III).

---

The Alexandra Health Centre is the main provider of preventative and promotive care

---

Using the data as presented in table IV we can calculate that the AHC sees about 20% of all STDs in the Township and the GPs see the majority of the balance.

Table II. GP ANC\* Workload Management

| GP ID | Total ANC Per Week | Number of cases Per Week | Deliveries | Referrals to ANC |
|-------|--------------------|--------------------------|------------|------------------|
| 1     | 5                  | 2                        | 0          | 3                |
| 2     | 50                 | 25                       | 0          | 45               |
| 3     | 2                  | 2                        | 0          | 2                |
| 4     | 15                 | 6                        | 0          | 13               |
| 5     | 10                 | 5                        | 0          | 10               |
| 6     | 8                  | 7                        | 0          | 5                |
| 7     | 5                  | 5                        | 0          | 4                |
| 8     | 15                 | 4                        | 0          | 9                |
| 9     | 10                 | 4                        | 0          | 10               |
| 10    | 4                  | 2                        | 0          | 3                |
| 11    | 1                  | 1                        | 0          | 1                |
| 12    | 2                  | 2                        | 0          | 2                |
| 13    | 4                  | 2                        | 0          | 3                |

\* ANC = Antenatal Clinic

## Discussion

The data is limited. The attendance figures for the local authority clinic are educated guesses as we could not get hold of reliable information. The methodology used by each GP to arrive at the figures provided to us, is not clear.

Since the completion of this survey we became aware of another GP giving us total of 17 GPs. The population to GP rate is about one GP for 12 000 inhabitants and half this figure, if we include the staff of the AHC.

This survey allows us to speculate that over 20% of the population of Alexandra over the age of 15 years is treated at least once a year for a STD. Gonococcal urethritis is still being managed by drug protocols that are likely to be ineffective in 15% of patients. HIV testing is done by GPs

## ... Care of STDs

Table III. HIV Testing by GPs

| GP ID | HIV Tested | HIV Positive | Aids | Died |
|-------|------------|--------------|------|------|
| 1     | 30         | 0            | 0    | 0    |
| 2     | 5          | 0            | 0    | 0    |
| 3     | 2          | 0            | 0    | 0    |
| 4     | 10         | 0            | 0    | 0    |
| 5     | 20         | 0            | 0    | 0    |
| 6     | 100        | 2            | 0    | 0    |
| 7     | 0          | 0            | 0    | 0    |
| 8     | 0          | 0            | 0    | 0    |
| 9     | 30         | 0            | 0    | 0    |
| 10    | 0          | 0            | 0    | 0    |
| 11    | 0          | 0            | 0    | 0    |
| 12    | 5          | 1            | 0    | 0    |
| 13    | 0          | 0            | 0    | 0    |

essentially for insurance purposes. In caring for antenatal patients due consideration is not given to the possibility of positive syphilis serology. We do feel these patients should be referred early on to the care provider that is going to be responsible for delivery.

The HIV seropositivity is similar to

that reported from other centres in South Africa<sup>12,13,14,15</sup> and it is therefore appropriate to create awareness of attempts at the AHC to develop a HIV control programme.

GPs should make use of facilities offered for testing, health education and follow up of patients. Our own approach up to now has been of

limited testing according to specified criteria (Table V). The number of cases found following this method have been disappointing. At the moment we are aware of 10 HIV positive patients. Most cases have been brought to our attention by hospital notifications to us of either the patients' or their children's (in the case of women) seropositivity.

Lastly, if we generalize our figure, then it seems that GPs are likely to be the main providers of curative care in Alexandra, at least for most conditions, while the AHC remains the main provider of preventive and promotive care. This is supported by evidence from another survey where 39% of mothers of small children with diarrhoea reported that they would take their children to a GP for initial care<sup>16</sup>. It also seems that most

Table IV. STD Patients seen in and around Alexandra each week

| Venue    | Patients | Percentage |
|----------|----------|------------|
| GPs      | 450      | 78         |
| AHC      | 100      | 17         |
| State Cl | 30       | 5          |

of our weekly ANC bookings go via a GP before attending the Health Centre for ANC (table VI). This should be kept in mind in the search of models for health care appropriate for the urban poor.

## Bibliography

1. Naylor CD. Alexandra Health Centre: Primary Health Care for an Impoverished Black Township in South Africa. *Ann Int Med* 1988; 109: 73-5.

*Continued on page 92*

Table VI. GP-AHC Workloads per week

| Venue | STD Cases | ANC New Cases | Repeat ANC | Total Deliveries |
|-------|-----------|---------------|------------|------------------|
| GP*   | 450       | 88            | 84         | 0                |
| AHC*  | 111       | 94            | 370        | 60               |

\* Estimated assuming 17 GPs and average figures as provided

\* Based on AHC Statistics for September 1990

## ... Care of STDs

Table V. Criteria and Procedures for HIV Testing at Alexandra Health Care

## Who to Suggest for Testing and Counselling

A. *Clinical Suspicion of HIV Infection*

1. People with signs of immune deficiency or suppression (see full list of CDC guidelines), eg
  - atypical infections
  - disseminated shingles etc
2. People with PGL (persistent generalised lymphadenopathy)
  - lymph-node enlargement bigger than 1 cm in two or more extra-inguinal sites for 3 months or more.
3. People with ARC (AIDS- related complex)
  - chronic, debilitating clinical findings for more than 3 months (see full list).
4. Children with FTT (failure to thrive), no obvious cause and some of the *Paediatric Aids Criteria* (see list).

B. *Person Involved in High Risk Activities*

1. Repeat STD attenders, especially people with *genital ulcer disease* (GUD).
2. People who volunteer information about intra-venous drug use, anal sex, prostitution (sex work) etc.

C. *People who might have been exposed to HIV against their will (even though the risk is low)*

1. People who have been raped.
2. Children who have been sexually abused.
3. Health workers who have had a *Blood Accident* (see guidelines).

D. *"Worried well" may be referred to SHE*

## Procedure for Testing and Counselling

1. Person or clinician identify need (see above).
2. Person goes to Sexual Health Educator for AIDS education and to discuss need. (After hours - bring back to S.H.E. later)
3. If person still willing, *consent form* is signed.
4. *Pre-test counselling* occurs. A booking is made for *result-giving & post-test counselling*.
5. Blood is taken. The blood tube is:
  - carefully labelled "*for Dr Frame - Private & Confidential*"
  - sealed in an envelope marked "*National Institute of Virology*"
  - this envelope is placed in the collection box marked "*Rietfontein*" in the Paediatric Outpatient room. (If after daily collection time, envelope goes into the fridge till the next morning)
6. Person comes back for *result - giving & post - test counselling* at the booked time on a Thursday afternoon 2 weeks later.

## ... Care of STDs

2. Ferrinho P, Phakathi G. Alexandra Health Centre and its Patients: Patient Trends, Age, Sex and Address Profiles. *S Afr Fam Pract* 1991; 12(2): 50-5.
3. Marumo L. Child Abuse - Community Outreach in Alexandra Township. Conference paper presented at the SASPACAN Conference, Johannesburg, July 1990.
4. Hyslop J, Howard P, De Villiers F, Wagstaff L. Perspectives from Child Abuse Clinics: Johannesburg - A Composite overview. Conference paper presented at the SASPACAN Conference, Johannesburg, July 1990.
5. Eland Z, Buch E. Preliminary findings from a study to determine sexually transmitted disease patient's perceptions of the care they received at Alexandra Health Centre. Presented at the Sociology of Health Workshop. ASSA Conference, University of Natal, July 1988.
6. Frame G. Sex Health Education at the Alexandra Health Centre and University Clinic. Presented at the Sociology of Health Workshop, ASSA Conference, University of Stellenbosch, July 1990.
7. Frame G et al. Evaluation of a sex health education programme at the Alexandra Health Centre and University Clinic. Internal Report.
8. Ferrinho P, Frame G, Phakathi G. STD patients and risk factors for STD ulcer disease at the Alexandra Health Centre and University Clinic. Internal Report.
9. Frame G, Steinberg M, Ferrinho et al. HIV seroprevalence in STD and ANC attenders at the Alexandra Health Centre and University Clinic. Internal Report.
10. Unpublished Report.
11. Randerer F, Buch E. A review of antenatal records of the Alexandra Health Centre and University Clinic for 1987. Internal Report.
12. Sher R. HIV infection in South Africa, 1982 - 1988 - A review. *S Afr Med J* 1988; 76: 314-18.
13. Padayachee GN, Schall R. Short-term predictions of the prevalence of Human Immunodeficiency virus infection among the Black population in South Africa. *S Afr Med J* 1990; 77: 329-33.
14. Schoub BD, Smith AN, Lyons SF et al. Considerations on the further expansion of the aids epidemic in South Africa - 1990. *S Afr Med J* 1988; 74: 153-7.
15. Schoub BD, Smith AN, Johnson S, et al. Considerations on the further expansion of the AIDS epidemic in South Africa - 1990. *S Afr Med J* 1990; 77: 613-18.
16. Ratsaka M, Buch E. Oral rehydration therapy and diarrhoeal diseases in Alexandra. Paper presented at Epidemiological Conference in 1989, Durban.