

Integration of STD Care in the Family Planning Services

A Key Strategy in the Control of HIV Infection



Curriculum Vitae

Dr Evian is a specialist in Community Health who since 1989 has initiated and developed the City of Johannesburg AIDS Programme. As head of the programme, he has been at the forefront of numerous interventions designed to counteract the spread and growth of the epidemic and its impact on individuals and communities. Dr Evian has written many articles and publications on AIDS including a widely used book entitled "AIDS in the Workplace" and recently a futher book "Primary AIDS Care". He is on the editorial board of the MRC's AIDS Bulletin, and has recently joined Alexander Forbes Health Care Division as a Consultant for HIV/AIDS and primary health care development.

Dr Pinto qualified in 1983 at Wits with a MBChB. She did her internship at the Johannesburg General Hospital, worked in various hospitals in various departments but then started at the Johannesburg City Council in 1989 where she is still working. For the past three years she has been co-ordinating the STD clinics, and since 1993 she has been working on the integration of STD management into family planning clinics.

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Summary

The historical neglect of the STD epidemics, the alarming rise in HIV infection and its association with STDs together with the vulnerability of women to these conditions, demand that urgent and effective action is taken by health care providers. The natural first step, in the absence of any other comprehensive primary care service, is to increase the capacity of the family planning infrastructure to provide for the care and prevention of sexually transmitted diseases. This is now one of the country's highest health care priorities.

The STD Epidemics

Sexually transmitted infections have finally achieved the status of being one of our major health care priorities.

For many years now STDs have been one of the most common presenting problems in primary clinical care services in South Africa. In primary care clinics, especially in low resource areas, upwards of 25% of attending adults have conditions attributable to STDs.

In studies on women attending family planning clinics in South Africa,^{1,2,3,4} prevalence studies reveal:

5 – 25% of attending women have a positive syphilis serology.

4 – 12% have clinical or laboratory evidence of gonorrhoea.

5 – 16% have clinical or laboratory evidence of chlamydia.

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The annual incidence of STDs amongst adult South Africans has been estimated to be about 11%.⁵

Women, especially in the younger adult and teenage years are particularly vulnerable. In Nairobi 23% of teenage girls attending antenatal clinics had either gonorrhoea, chlamydia or herpes infection.⁶ Many of these infections are asymptomatic. 70% of chlamydia infection is asymptomatic in women compared to 30% in men, 55% of gonorrhoea is asymptomatic in women compared to 30% in men.⁷

It is indeed surprising that the care and control of STD has been so nationally neglected. Greater Johannesburg can boast of only a handful of dedicated STD clinics. In central Johannesburg alone the two STD clinics (approximately 2km apart) attend to over 50,000 patients per year, the majority of whom are men.

Association of STD and HIV

I would now like to look at the association between STDs and HIV/AIDS.

Sentinel HIV studies in the two central Johannesburg STD clinics reveal the following data:

In 1989 the HIV prevalence among STD attenders in Johannesburg clinics was 2,89% (F) and 2,11% (M). This figure has risen at a steady rate to a prevalence of 23,14% (F) and 16,41% (M) at the end of 1993. (See Table 1)

Patients with STDs are universally one of the most highly infected groups with HIV. HIV sentinel prevalence studies in Johannesburg show how susceptible patients with STDs are to

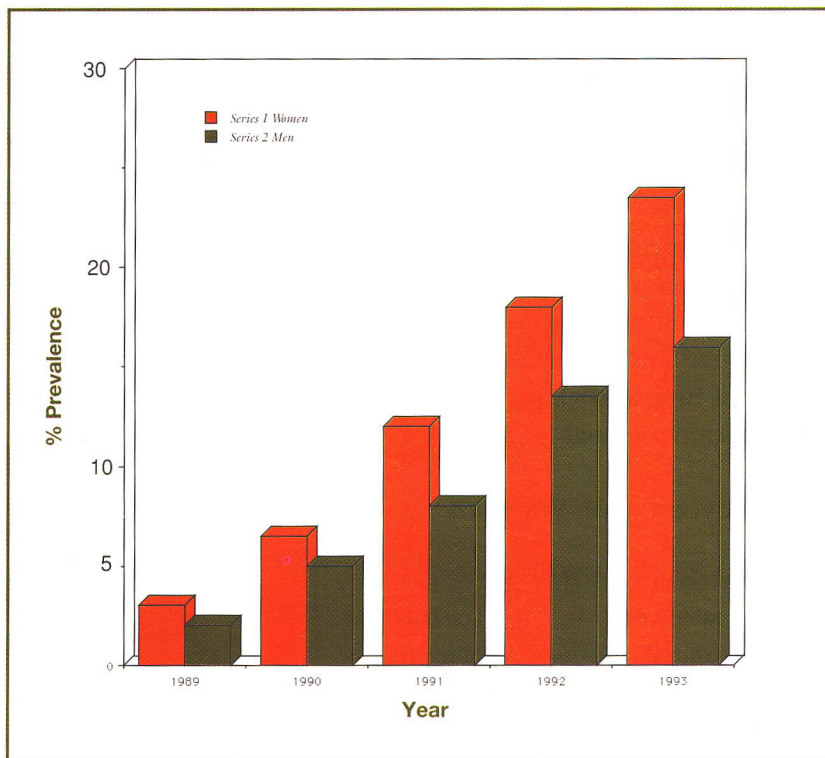


Table 1: HIV Prevalence – STD Clinics, Johannesburg Central

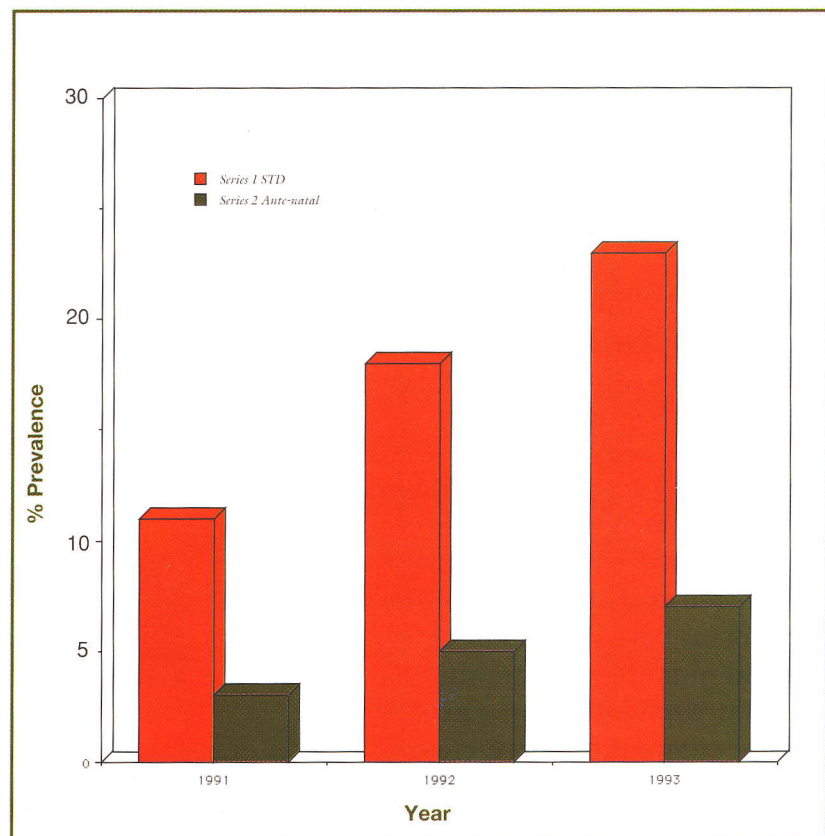


Table 2: HIV Prevalence in women – STD and Ante-natal Clinics Johannesburg Central (1991-1993)

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HIV infection compared with antenatal care attenders (who are the most reliable surrogate marker of the usual sexually active female population). See Table 2.

HIV prevalence amongst STD attenders in countries such as Malawi, Uganda and Zambia are now reported at 50% – 70%⁸ and there is little to suggest that South Africa will be any different within the next 3-5 years.

HIV Infection and Women

The prevalence of HIV infection amongst women is a further consideration. Women in Africa and indeed in South Africa are consistently higher than that of men (Table 3. Sentinel Groups).

It is estimated that the ratio of women infected to that of men is 1:0,7.⁹

Furthermore, women tend to become infected at an earlier age than men. In South Africa the second highest prevalence of infection is amongst teenage girls following that of women in the 20-24 year age group¹⁰ (Table 4. sero-prevalence among pregnant women in SA). Table 5 shows the ratios of HIV infection between women and men in different age groups in Zimbabwe and Malawi.

In another study in Tanzania¹¹ (Table 6), among teenage girls presenting with induced abortions, 38% of the girls reported that the father of the aborted foetus was 45 years or older. These and numerous other studies reveal that women in lower socio-economic communities are clearly highly vulnerable to HIV infection. However this vulnerability is not only confined to socio-economic reasons but also due to important biological factors.

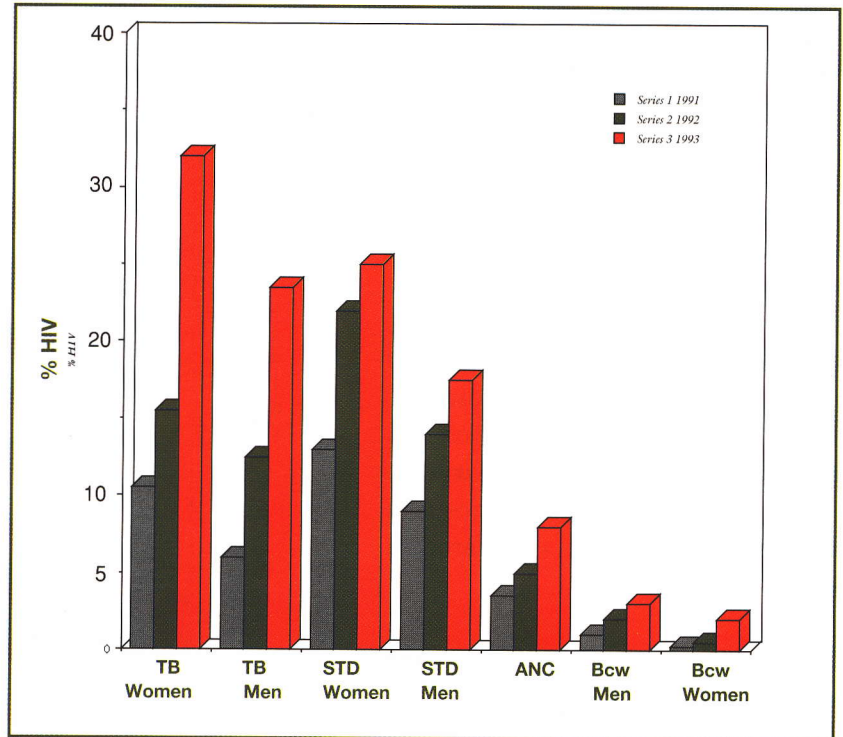


Table 3: Johannesburg AIDS Epidemic Sentinel Surveillance 1991-1993

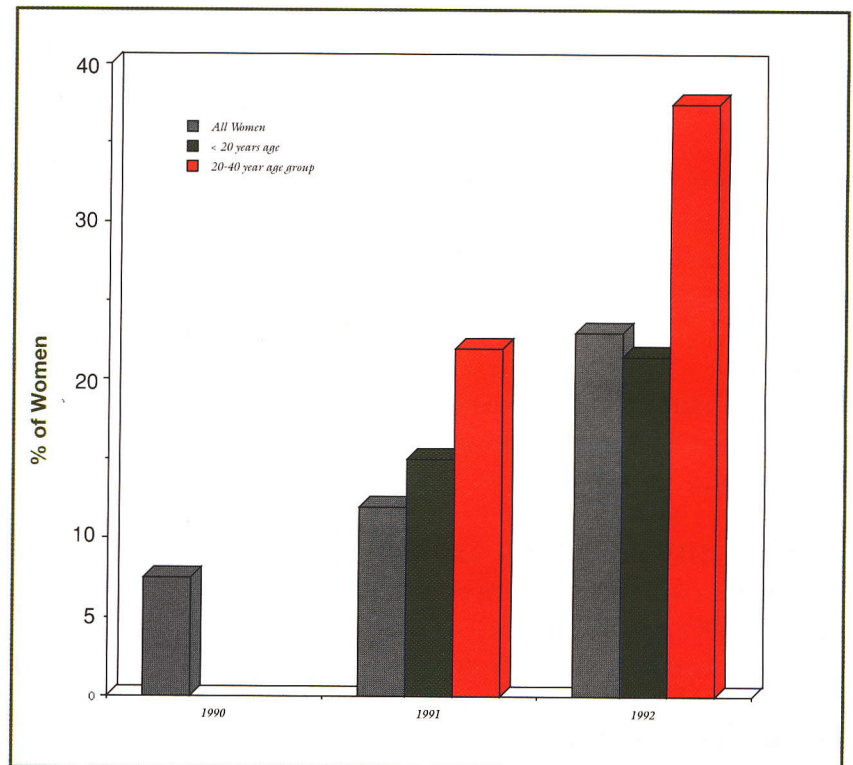


Table 4: National HIV Sero-prevalence Study in Pregnant Women in South Africa

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These include: The women:

- being the receptive sexual partner,
- frequently harbouring inflammatory genital lesions.
- exposed endometrial lining during menstrual period and
- the presence of a symptomatic and more commonly asymptomatic STDs.

STDs are clearly one of the most 'malignant' associations with HIV. This is due to a number of reasons:

- The HIV virus gains entry into the body via attachment to CD4 receptor cells. These CD4 receptors are most commonly found on inflammatory cells such as macrophages, dendritic cells, and T4 lymphocytes. Sexually transmitted diseases, especially those which cause genital ulceration, provide ideal conditions for HIV transmission. There is a massive migration of CD4 receptor cells to the genital area, together with an erosion or disruption to the genital lining allowing the virus easy entry to the site of the CD4 receptor cells. The semen of an HIV positive man is highly infected with HIV virus and the likelihood of a successful HIV transmission is increased approximately 10 fold in the presence of inflammatory genital disease.

- In addition HIV virus is 'shedded' in high concentration in the genital discharges of HIV+ men and women.
- The presence of HIV infection in turn also facilitates the spread of STDs. This is achieved mainly by delaying the healing time of a number of the STDs especially that of chancroid and thereby, probably, also contributing to drug failures and drug resistance, completing a cycle of reciprocal amplification of STD and HIV epidemics.
- Finally, the socio-economic and behavioural determinants of HIV infection are identical to those of other traditional STDs.

Control of STDs will reduce the HIV epidemic

The control of STDs will contribute significantly to the overall control of the HIV epidemic. The potential of STD reduction in helping to control the spread of HIV is illustrated in a recent simulation in a hypothetical African country with 1% HIV prevalence in 1990.¹² (such as SA)

- Without any STD reduction the HIV prevalence would exceed 16% within 15 years.

In RSA upwards of 25% of attending adults have conditions attributable to STD.

Despite women being so vulnerable to HIV infection, they do not come for help as regularly as men.

Through family planning clinics we can reach women best.

Table 5: HIV Prevalence in teenage Girls

Country	Age groups	Male: Female Ratio
Malawi	15 - 19 years	1 : 5
	20 - 24	1 : 3
	25 - 29	1 : 1,5
Zimbabwe	15 - 19 years	1 : 5
	20 - 29	1 : 3
	30 - 39	3 : 1

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- A 10% STD reduction will reduce the prevalence of HIV infection to 12% within 15 years.
- A 20% reduction in STDs will reduce the HIV prevalence to less than 1% within 15 years.

Setting aside STDs, other major determinants of South Africa's HIV epidemic are vested in complex socio-economic issues, which are beyond the scope of this paper. As such, education promoting safer sexual practices is a very ineffective 'vaccine' and is, and will continue to fail to control the epidemic. There is no quick fix to South Africa's HIV

Table 6: Age of Teenage Girls' Sex Partners

Amongst girls with induced abortions (N=62)

% of Girls	Age of Sexual Partner
20%	same age group
49%	older
38%	> 45 years

epidemic, however, the most cost effective and efficacious strategy to counteract the epidemic in the short and medium term is to rapidly increase the country's capacity to provide accessible care for STDs. This will result in many other positive spin offs (such as decreasing morbidity and mortality from STDs in general, reduction in infertility, reduction in congenital infections etc).

Increasing capacity to provide STD care for especially women in SA – via family planning services

This now takes me to the main point of this paper.

As STDs have now assumed such national strategic importance, the question arises as to how to increase the capacity to provide accessible care and prevention for these diseases. Also, the capacity to reach women, especially in lower socio-economic strata is a high priority. The natural answer to this question is via the primary care services, however the primary care curative services are poorly developed and although this is likely to be an urgent priority itself, experience has shown us that developing comprehensive accessible primary clinical care will still take a long time – too long to wait. STD clinics are few and far between, and these clinics carry a fair amount of stigma and rejection and are not user friendly to women. Despite women being so vulnerable to HIV infection, STD clinic attendances consistently reveal that men far outnumber the attendance of women.

The best and most widely developed primary care infrastructure, reaching susceptible women, is the family planning services. In South Africa there are currently 3138 fixed family planning clinics and 1085 mobile clinics servicing approximately 60,000 visiting clinic points. These family planning clinics are reported to be reaching approximately 40% of the fertile women.¹³ These clinics provide a wonderful opportunity to reach many vulnerable women in South Africa.

Family planning clinics must now increase their scope of activity to include the care and prevention of STDs. Fortunately the primary care for STDs is relatively simple and straight forward and cheap. STDs present with a few notable symptoms such as dysuria, lower abdominal pain and discomfort, sores, discharges and itching – easy to screen on history

Family planning clinics should increase their scope of activity to include care of STDs.

Primary care for STDs is simple, straight-forward and cheap.

Women in Africa have higher HIV infection rates than men.

Teenage girls show a very alarming picture.

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taking; and present with clear clinical signs such as sores, discharge and warts. Primary care for STDs is easy and can be provided via simple flow charts or algorithms according to these clearly defined syndromes. The therapy and advice does not require sophisticated knowledge or clinical investigation and can be administered by nursing sisters with minimal training and expertise. The primary care for STDs needs a drastic demystification process. Ideally a referral clinic or service is required for cases not responding to this primary care approach.

Experience with syndromic algorithms in other parts of Africa has been very encouraging and is now highly recommended by WHO.

Our experience in the Health and Housing Directorate of the Johannesburg City Council has been very positive. Family planning sisters have been trained through a week long course, and integration of STD care has now taken off. The increased workload is an issue which needs consideration and appears to be the only major problem.

We are hopeful that these clinics will in time further expand their sexual health functions to include HIV testing, sexual counselling, cervical and breast cancer screening and possibly into women's health in general.

Every opportunity needs to be taken to treat and prevent STDs. Family planning services are a natural and logical opportunity.

Conclusion

In conclusion, the historical neglect of the STD epidemics, the alarming rise in HIV infection and its association

with STDs together with the vulnerability of women to these conditions, demand that urgent and effective action is taken by health care providers. The natural first step, in the absence of any other comprehensive primary care service, is to increase the capacity of the family planning infrastructure to provide for the care and prevention of sexually transmitted diseases. This is now one of the country's highest health care priorities.

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STDs are clearly one of the most 'malignant' associations with HIV.

Our experience in the Johannesburg City Council has been very positive.

The most effective strategy to counteract SA's HIV epidemic, is to increase care for STDs.