

SYNDROMIC TREATMENT OF SEXUALLY TRANSMITTED  
INFECTIONS: A WESTERN CAPE COMMUNITY PHARMACIST  
STUDY

By

KIM WARD

THESIS

Kim Lana Ward

Department of Pharmacy Practice

School of Pharmacy

University of Western Cape

2001

SYNDROMIC TREATMENT OF SEXUALLY TRANSMITTED INFECTIONS: A  
WESTERN CAPE COMMUNITY PHARMACIST STUDY

By

KIM LANA WARD

A thesis submitted in partial fulfilment of the requirements for the degree of  
MAGISTER PHARMACEUTICAE in the Department of Pharmacy Practice, School  
of Pharmacy, University of the Western Cape.

Supervisors: Prof. Nadine Butler  
Department of Pharmacy Practice  
University of the Western Cape

Dr. Pierre Mugabo  
Department of Pharmacology  
University of the Western Cape

NOVEMBER 2001

SYNDROMIC TREATMENT OF SEXUALLY TRANSMITTED INFECTIONS: A  
WESTERN CAPE COMMUNITY PHARMACIST STUDY

Kim Ward

**KEYWORDS**

Syndromic treatment

Sexually transmitted infections

South Africa

Western Cape

Community pharmacies

Pharmacists

**ABSTRACT OF THESIS**

**Kim Lana Ward**

**Department of Pharmacy Practice**

**School of Pharmacy**

**University of Western Cape**

**2001**

## ABSTRACT OF THESIS

### SYNDROMIC TREATMENT OF SEXUALLY TRANSMITTED INFECTIONS: A WESTERN CAPE COMMUNITY PHARMACIST STUDY

This cross-sectional survey of 85 randomly selected community pharmacists in the Western Cape, South Africa, estimates that 200 000 sexually transmitted infections (STI) cases are seen in private community pharmacies throughout the Western Cape per annum, confirming anecdotal evidence that community pharmacies are a preferred source of STI care.

This study also describes the views of pharmacists regarding their utilisation as STI care providers, and the treatment practices of those who currently provide this service to the community. The majority (74.1%) of pharmacists view their current role in STI treatment as under-utilised and 98% expressed a slight to strong willingness to play a role in the syndromic treatment of STIs. Pharmacists' knowledge of the link between HIV and STIs is associated with an increased willingness to provide STI syndromic treatment (RR= 3.03, 95%CI 1.45- 6.31, p=0.0004). The quality of STI treatment among those pharmacists currently providing medication is poor, with only 13.6% (n=44) of pharmacists prescribing the correct treatment for penile discharge, 6.3% (n=32) for genital ulcers and 0% (n=32) prescribing the correct treatment for vaginal discharge.

The findings of this study underline the need for STI treatment services in community pharmacies, and the need for a pharmacist training intervention in the syndromic treatment of STIs.

---

Author's Name

---

Date

## DECLARATION

I declare that Syndromic treatment of sexually transmitted infections: a Western Cape community pharmacist study is my own work, that it has not been submitted before for any degree or examination in any other university, and that all the sources I have used or quoted have been indicated and acknowledged by complete references.

KIM LANA WARD

November 2001

Signed .....

## ACKNOWLEDGEMENTS

This study was funded by the Centre for AIDS Prevention Studies, University of California, San Francisco (UCSF). Additional financial support was provided by PharmaNatura.

I would like to thank my co-supervisors, Dr. Sandy Schwarcz, Dr. Willi McFarland and Dr. Jeff Klausner from UCSF for contributing their experience and knowledge in the preparatory stages of this project.



## CONTENTS

Title (Cover page).....	(i)
Title.....	(ii)
Keywords.....	(iii)
Abstract (Cover page).....	(iv)
Abstract.....	(v)
Declaration.....	(vi)
Acknowledgements.....	(vii)
Contents.....	(viii)
List of tables.....	(xi)
List of figures.....	(xiii)
CHAPTER 1: INTRODUCTION.....	1
HIV-1 burden in South Africa.....	1
Public sector burden.....	2
Understanding the public health system of South Africa.....	3
Health regions and primary health care services in the Western Cape.....	4
<i>Health Regions</i> .....	4
<i>Primary Health Care Services</i> .....	5
Syndromic treatment of STIs.....	6
CHAPTER 2: LITERATURE REVIEW.....	7
HIV-1 and STI linkage.....	7
Western Cape HIV-1 and STI statistics.....	10
STI care in the private and public sector.....	12

Lessons learnt from literature.....	14
<b>CHAPTER 3: RATIONALE FOR THE STUDY.....</b>	<b>15</b>
Study rationale.....	15
Research question and objectives.....	16
<b>CHAPTER 4: RESEARCH DESIGN AND METHODOLOGY.....</b>	<b>18</b>
Hypothesis.....	18
Sample size calculation.....	19
Sampling strategy and selection criteria.....	20
Instrument selection and content.....	21
Pretesting and validation of the instrument.....	26
Ethical consideration.....	27
Data collection.....	27
Statistical analysis.....	28
<b>CHAPTER 5: RESULTS.....</b>	<b>29</b>
Descriptive data.....	29
Analytic data (Hypothesis testing).....	49
<b>CHAPTER 6: DISCUSSION.....</b>	<b>55</b>
Descriptive data.....	58
<i>Pharmacy profile and client demographics.....</i>	<i>58</i>
<i>Frequency of STI syndromes.....</i>	<i>59</i>
<i>Utilisation of pharmacists in STI care.....</i>	<i>60</i>
<i>Obstacles to providing STI treatment.....</i>	<i>61</i>

<i>Profile of nurses and their utilisation in STI treatment</i> .....	62
<i>Syndromic treatment of STIs</i> .....	62
<i>Quality of STI treatment</i> .....	63
<i>Partner notification</i> .....	65
Analytic data.....	66
CHAPTER 7: CONCLUSION AND RECOMMENDATIONS.....	68
NOTES.....	71
REFERENCES .....	72
APPENDICES:	
<i>Appendix A: STI treatment protocols</i>	
<i>Appendix B: Map of Western Cape Regions</i>	
<i>Appendix C: Map of Cape Metropole</i>	
<i>Appendix D: Consent forms (English &amp; Afrikaans)</i>	
<i>Appendix E: Questionnaire (English &amp; Afrikaans)</i>	

## LIST OF TABLES

<b>Table 1:</b> PHCCs per region in Western cape (DOH, Western Cape, 2001).....	5
<b>Table 2:</b> Primary health care services rendered by PAWC and Local Authorities 1999/2000 (DOH, Western Cape, 2001).....	12
<b>Table 3:</b> Daily pharmacy operating hours (n=85).....	29
<b>Table 4:</b> Weekend availability of community pharmacists (n=85).....	29
<b>Table 5:</b> Economic status of population served by community pharmacies (n=85).....	30
<b>Table 6:</b> Clients seeking pharmacist advised therapy for general ailments and for STIs (n=85).....	30
<b>Table 7:</b> Frequency of STI syndromes per month (n=85).....	31
<b>Table 8:</b> Pharmacists' perception of need for the provision of STI treatment in community pharmacies (n=85).....	34
<b>Table 9:</b> Pharmacists' views regarding their current role in STI treatment (n=85).....	34
<b>Table 10:</b> Willingness of pharmacists to play a future role in aspects of STI management (n=85).....	35
<b>Table 11:</b> Pharmacists' degree of willingness to provide STI syndromic treatment (n=85).....	36
<b>Table 12:</b> Proportion of pharmacists employing a nursing sister (n=85).....	39
<b>Table 13:</b> Nurse practicing times in pharmacy (n=31).....	39
<b>Table 14:</b> Nurses' current role in STI treatment in community pharmacies (n=31).....	40
<b>Table 15:</b> Willingness of pharmacists to allow nurses to conduct aspects of STI treatment in community pharmacies (n=31).....	41
<b>Table 16:</b> Pharmacists views on preferred provider/s of STI management in pharmacies (n=31).....	42

<b>Table 17: Familiarity with syndromic treatment (n=85).....</b>	<b>43</b>
<b>Table 18: Familiarity with DOH guidelines (n=85) .....</b>	<b>43</b>
<b>Table 19: Penile discharge-Course of action taken by pharmacists (n=85) .....</b>	<b>44</b>
<b>Table 20: Genital ulceration in males-Course of action taken by .....</b>	<b>45</b>
<b>pharmacists (n=85).....</b>	<b>45</b>
<b>Table 21: Vaginal discharge-Course of action taken by pharmacists (n=85) .....</b>	<b>46</b>

## LIST OF FIGURES

<b>Figure 1:</b> HIV seroprevalence at public health antenatal clinics: Western Cape 1997-2000 (DOH, Western Cape, 2001) .....	11
<b>Figure 2:</b> Syphilis prevalence: Western Cape compared to National 1998-2000 (DOH, Western Cape, 2001).....	11
<b>Figure 3:</b> Step-wise approach to the Syndromic Treatment of STIs (Ballard et al., 2000).....	25
<b>Figure 4:</b> Average STI caseload in the Cape Metropole and regions outside the Cape Metropole (Other).....	31
<b>Figure 5:</b> Age distribution of males and females seeking STI treatment in community pharmacies.....	32
<b>Figure 6:</b> Monthly income distribution of STI clients (n=83).....	33
<b>Figure 7:</b> Obstacles to history taking, counselling and prescribing aspects of STI treatment (n=85).....	37
<b>Figure 8:</b> Obstacles to practical aspects of STI treatment (n=85).....	38
<b>Figure 9:</b> Comparison of nurses' current role in STI treatment in the Cape Metropole and regions outside the Cape Metropole (Other).....	40
<b>Figure 10:</b> Treatment for three STI syndromes by pharmacists.....	47
<b>Figure 11:</b> Partner notification method employed by pharmacists.....	48
<b>Figure 12:</b> Relationship between pharmacists' skill and interest levels with regards to practical aspects of STI treatment.....	61

## CHAPTER 1: INTRODUCTION

### 1.1 HIV-1 burden in South Africa

---

South Africa is notoriously known for having one of the fastest growing HIV-1 epidemics in the world. Within a period of 5 years, the HIV-1 prevalence has rapidly escalated from 10.4% in 1995 to 24.5% in 2000 (Department of Health, Annual National HIV Antenatal Survey, 2000). In March 2001, the health ministry reported 500 000 newly acquired HIV-1 infections bringing the total number of infected individuals to a staggering 4,7 million.

In response to this catastrophe, the Department of Health (DOH) promptly constructed an HIV/AIDS/STI Strategic plan for 2000-2005 to impede the rapid spread of HIV-1 across the country. The plan highlights the management and control of sexually transmitted infections (STIs) as one of the main strategies for reducing the transmission of HIV-1. One of the objectives is to ensure effective syndromic management of STIs in both the private and public sector.

South Africa carries a heavy burden of STIs with an estimated 11 million new cases treated each year (Department of Health, Feb 2000). National STI surveillance systems are seriously lacking in South Africa and trends of the most common STIs are gauged from limited facility-based data. Syphilis prevalence trends have been monitored in conjunction with HIV-1 in the annual antenatal clinic surveys conducted by the DOH, and the 2000 survey reflected a prevalence of 6%. A community-based survey conducted in Carletonville, South Africa in 1998, revealed STI infection rates ranging from 5% to 23% for syphilis, 3% to 16% for gonorrhoea and 4% to 9% for chlamydia (Van Dam *et al.*, 1998).

The limited evidence presented in these findings suggests a health problem that needs to be addressed urgently, primarily for two reasons. STIs in themselves pose a serious health problem due to the complications and sequelae that could result from late detection and inappropriate treatment. Moreover, an even greater cause for concern is warranted in light of the compelling evidence linking STIs as a major co-factor in the transmission of HIV (Cohen, 1998; Flemming *et al.*, 1999).

## 1.2 Public sector burden

---

According to the 1996 census, South Africa had a population of 43.5 million (Statistics South Africa, 1996). An evaluation of health services across the country conducted in 1998 reveals a poignant reality of the unequal distribution of human resources in the private and public health sector (Pick *et al.*, 1998).

According to this review, 80% of the population attend public health facilities, while only 40% of health personnel are employed in the public sector. Nurses constitute 42% of total health personnel in the public sector, while medical doctors and pharmacists constitute a mere 3.8% and 0.5% respectively (Pick *et al.*, 1998).

Only 18% of South Africans have access to a medical aid scheme, yet this minority has access to 60% of the health resources in the private sector (Baron *et al.*, 1998).

Certainly the current HIV crisis places additional strain on an already fragile public health system with scanty human resources. The situation is discouraging and although efforts are being made to correct the imbalance in service delivery, progress is slow while HIV transmission rages on.



### **1.3 Understanding the Public Health system of South Africa**

---

South Africa comprises a single national health department with nine provincial health departments viz., Eastern Cape, Gauteng, KwaZulu-Natal, Mpumalanga, Northern Cape, Northern Province, North West, Free State and Western Cape.

The health-care system is based on a district model, which employs a primary health care approach. Health districts are established throughout the country and primary health care services are rendered by provincial administrations and local authorities. Free services are provided to all without the benefits of a medical aid scheme through public primary health care centres (PHCCs) such as clinics and community health-care centres. Referrals are made to higher levels of care, i.e. district then regional hospitals (DOH, 1996).

PHCCs provide a range of services, which include immunisation; communicable and endemic disease prevention; maternity care; screening of children; Integrated Management of Childhood Illnesses (IMCI) and child health care; health promotion; youth health services; counselling services; chronic diseases; diseases of older persons, rehabilitation; accident and emergency services; family planning, and oral health services (South African Year Book, 2000/01).

The bulk of services in PHCCs are provided by PHC nurses trained to practise in an almost independent capacity. Ideally, a health care team encompasses the expertise of various health personnel, each playing an indispensable role. In reality the public health sector is faced with a financial and personnel crisis which does very little to attract health care workers into their employment. Since nurses constitute the vast majority of health personnel in the public primary health settings, the DOH has

granted them leverage to practise in areas previously outside their scope of practice. In the past nurses were trained primarily in tertiary institutions where they played a supportive role to doctors in providing curative services. The training of nurses has now evolved to meet a public health need at primary level, through the provision of promotive, preventative and curative services (Pick *et al.*, 1998).

## **1.4 Health regions and primary health care services in the Western Cape**

---

### ***1.4.1 Health regions***

The Western Cape comprises 10% of the total South African population, which translates into 4.3 million people (DOH, Western Cape, 2001). More than any other province in South Africa, the Western Cape is experiencing an influx of people into the urban areas. The 1996 census verified that 87% of the population live in urban areas where public health services are not designed to cope with such numbers (Statistics South Africa, 1996).

An urban area, as defined by the Provincial Administration of the Western Cape (PAWC) includes towns, cities and metropolitan areas. The main urban area in the Western Cape is the Cape Metropolitan area, whereas non-urban (peri-urban and rural) areas include commercial farms, small settlements, rural villages and other areas further away from towns and cities (DOH, Western Cape, 2001).

The Western Cape is divided into four main health regions viz., Cape Metropole West Coast Winelands, South Cape/Karoo and Boland/Overberg regions, which are further, subdivided into 25 health districts.

#### 1.4.2 Primary health care services

The Cape Metropole health region serves the largest proportion of PHC attendees in the Western Cape, having to cope with a staggering 6.5 million during 1999/00 (Table 1). This is to be expected, given that the majority of the Western Cape population resides in the Metropole. Presumably, the number of attendees will increase over the years, if trends over 1998/99 and 1999/00 persist, and the DOH should urgently move to institute mechanisms to accommodate the inevitable overflow of patients.

Although PHCCs are more or less proportionally distributed according to the number of attendees in each region, the PHCCs in the regions outside the Cape Metropole are less accessible to the largely rural population.

**Table 1: Primary Health Care Centres per region in Western Cape (DOH, Western Cape, 2001).**

Region	Health attendance		Community health centres and clinics
	98/99	99/00	
Cape Metropole	6 185 139	6 451 613	159
Boland/Overberg	1 061 551	1 125 849	64
West Coast/Winelands	1 245 160	1 332 705	80
Southern Cape/Karoo	1 365 759	1 436 116	62
<b>Western Cape province (TOTAL)</b>	<b>9 857 609</b>	<b>10 346 283</b>	<b>365</b>

## 1.5 Syndromic treatment of STIs

---

Syndromic treatment is based on classifying the various causative agents which give rise to a particular clinical picture/syndrome, e.g. syndrome of genital ulcers. A combination therapy approach is then prescribed to eliminate the main pathogens known to cause such a syndrome. Any health care worker, irrespective of area of expertise, may be trained to use flow charts to reach a diagnosis and suitable treatment (Ballard *et al.*, 2000).

The World Health Organisation (WHO) strongly recommends the adoption of STI syndromic treatment services in developing countries where laboratory facilities are often unaffordable and inaccessible to the majority of the population. Integration of these services into existing health care facilities in the public and private sector makes STI treatment more accessible to communities. WHO supports the strengthening of all health care workers who are able to launch syndromic treatment services.

In 1995 the national DOH developed the first set of STI syndromic treatment guidelines for primary health care in South Africa. While significant strides were made in the public sector to train PHC staff and provide essential drugs, very few plans were devised for promoting the STI syndromic approach in the private sector. The DOH has since recognised the importance of involving private health personnel in this initiative to reinforce DOH strategies to reduce the HIV burden in South Africa (Dartnall *et al.*, 1997).

## CHAPTER 2: LITERATURE REVIEW

The literature review provides a basis for developing the central research theme, which rests on the premise that STIs and HIV-1 are linked. The first step was therefore to skim through literature that has established the association between HIV-1 and STIs, and then to delve deeper into literature assessing the impact of STI management interventions on HIV-1 incidence.

National health reports and policy documents describe the quality of STI care in the public and private sector, an indicator for DOH progress towards achieving standardised STI care across South Africa. Lastly, a review of local/provincial health reports describes the HIV-1 and STI scenario at provincial level, with a primary focus on the Western Cape.

### 2.1 HIV-1 and STI linkage

---

There is sufficient evidence to support the hypothesis that the presence of STIs (non-ulcerative and ulcerative) increases HIV-1 shedding from the genital tract of HIV-positive individuals (Moss *et al.*, 1995; Cohen *et al.*, 1997; Ghys *et al.*, 1997). Furthermore, several cohort studies show an association between STIs (regardless of aetiology) and an increased risk of HIV-1 seroconversion (Craib *et al.*, 1995; Nelson *et al.*, 1998). The logical progression for researchers subsequent to these findings was to establish whether an STI management and control intervention could ultimately reduce the HIV-1 incidence in a population.

A number of intervention studies attempted to quantitate the effect of STI management and control on HIV-1 incidence. Three cohort studies conducted among female sex workers in Zaire, Kenya and Bolivia all showed that clinic-based STI

interventions in conjunction with condom promotion produced a decrease in HIV-1 incidence in these high-risk groups (Flemming *et al.*, 1999).

The first community level intervention trial was conducted in Mwanza, Tanzania and the second in Rakai, Uganda. The results of the Tanzania trial demonstrate that an improvement in STI clinic based treatment reduces the HIV-1 incidence in the study population (Grosskurth *et al.*, 1995). The results of the Rakai trial however demonstrate that intermittent mass STI home-based treatment does not reduce HIV-1 incidence in the study population (Wawer *et al.*, 1999).

#### **2.1.1. Zaire study (Laga *et al.*, 1994)**

A cohort study was conducted in an urban area in Zaire, among a group of female sex workers who were followed-up for a period of three years. A monthly clinic-based intervention consisted of STI screening, free treatment and condom promotion. The HIV-1 incidence declined from an initial 11.7/100women years (wy) to 4.4/100wy three years thereafter ( $p=0,003$ ).

The HIV-1 incidence rates among women with different degrees of exposure to the clinics were calculated. The results demonstrate a decline in HIV-1 incidence with increased frequency of clinic attendance after controlling for reported condom use, confirming an independent impact of STI intervention on HIV-1 incidence.

#### **2.1.2 Tanzania trial (Grosskurth *et al.*, 1995)**

A randomised controlled intervention trial in Mwanza, Tanzania tested the hypothesis that improved STI case management reduces the incidence of HIV-1. The intervention groups received continuous improved STI case management, i.e. establishment of an STI reference clinic, staff training, regular supply of drugs,

regular supervisory visits to health facilities and health education about STIs. The control group had access to unimproved existing services.

Surveys were conducted at baseline and follow-up after 2 years, and the results reflect a lower HIV-1 incidence in the intervention (1,2%) than in the control (1,9%) group. The conclusion drawn is that improved management and control of STIs reduces HIV-1 incidence by about 40% (95%CI 15-55).

### **2.1.3 Uganda trial (Wawer *et al.*, 1999)**

A randomised control intervention trial in Rakai, Uganda tested the hypothesis that community level control of STIs results in a lower incidence of HIV-1 infection in comparison with control communities.

The intervention group received home-based mass antibiotic treatment upon initial visit and every 10 months thereafter (2 follow-up rounds), while the control group received anthelmintics, vitamins and iron-folate supplements at the same intervals. Participants in the control group reporting current STI symptoms were referred to mobile clinics for ethical reasons. Both study groups received identical education on prevention of HIV-1 infection; free condoms and free general health care.

The results demonstrate no difference in reduced HIV-1 incidence between the control and intervention group.

### **2.1.4 Impact of Tanzania and Uganda trials (Grosskurth *et al.*, 2000)**

Although the results obtained from these trials appear contradictory, several reasons could be furnished for these findings. The Uganda trial does not necessarily nullify the findings of the Tanzania trial, since the different designs, intervention strategies as well as evaluation methods employed may well have contributed to the different outcomes. Another major contributing factor cited, was the difference in the stages of

the HIV-1 epidemic in the two countries. In Mwanza, Tanzania the HIV-1 prevalence was low at 4%, but steadily rising, whereas the prevalence in Uganda at 16% was stable. The author suggests that STI to HIV-1 transmission decreases as the HIV-1 epidemic in a population matures.

In essence, the trials highlight several factors that could guide policy-makers in planning STI management and control programs to reduce the HIV-1 incidence. For example, continuous access to improved STI services, as opposed to mass STI treatment, is an intervention strategy which many countries have adopted in an attempt to reduce HIV-1 incidence.

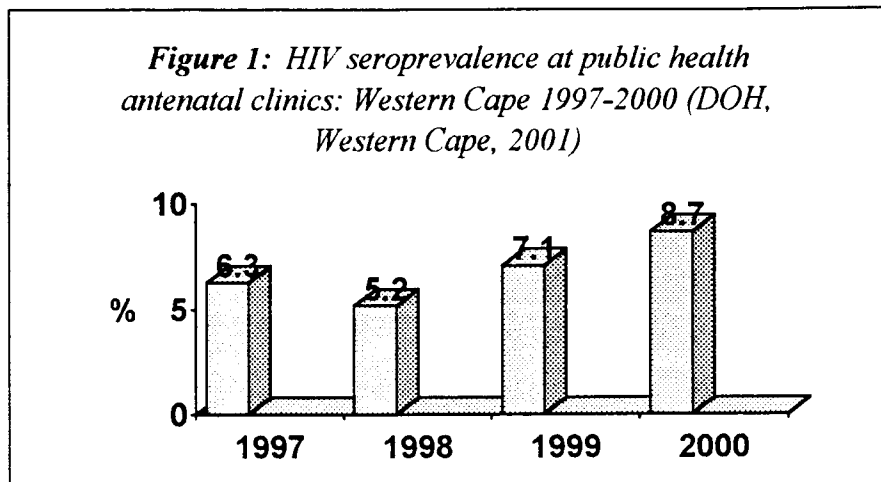
## **2.2 Western Cape HIV-1 and STI statistics**

---

The HIV-1 prevalence for the year 2000 in the Western Cape was 8.7, relatively low compared to the national prevalence of 24.5 (DOH, 2000).

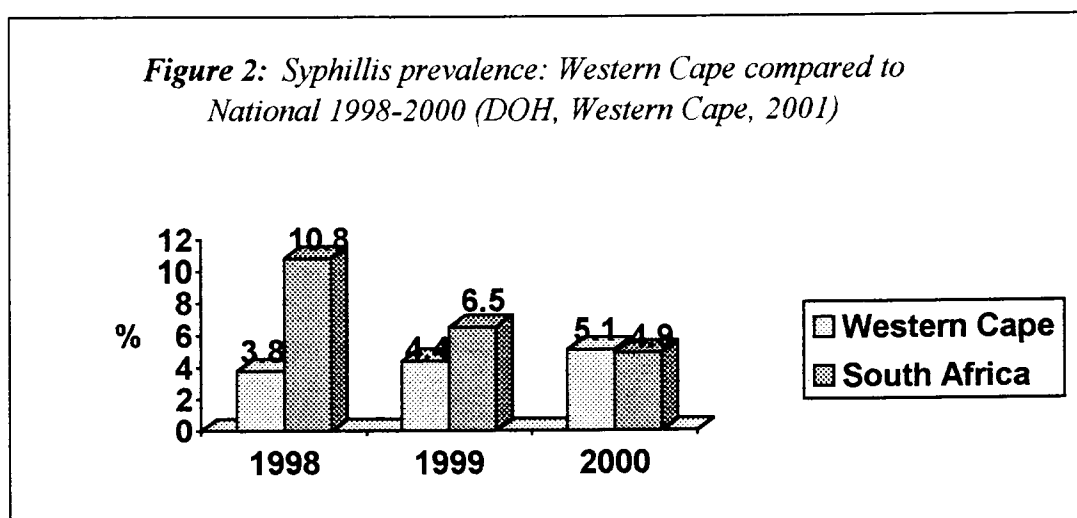
Although HIV-1 trends in the Western Cape over the last four years suggest a steady rise in prevalence, prevention efforts are likely to slow down transmission as achieved in Tanzania (Grosskurth *et al.*, 1995). The HIV-1 trends in the Western Cape are similar to those in Mwanza, Tanzania between 1991 and 1994, when the STI intervention strategy was successfully employed, i.e. low prevalence but rising steadily. Strategies such as STI management and control should be rigorously employed in Western Cape while the HIV-1 prevalence is still low.





Between 1997 and 1998 the HIV-1 prevalence dropped slightly in the Western Cape as shown in Figure 1, interestingly coinciding with a sharp decline in the syphilis prevalence from 18% in 1997 (DOH, 1997) to 3.8% in 1998.

The syphilis trends after 1998 in Figure 2 shows a steady increase while the national trends shows a sharp decline. Improved application of all aspects of the syndromic approach, including syphilis testing, is required in public and private health settings offering STI treatment.



The data in Table 2 represents the STI burden in the Western Cape regions as reported by public PHCCs.

**Table 2: Primary health care services rendered by PAWC and Local Authorities 1999/2000 (DOH, Western Cape, 2001).**

<b>Region</b>	<b>New cases treated as STIs</b>	<b>New cases –male urethral discharge</b>
Cape Metropole	82 887	22 487
Boland/Overberg	7 372	1931
West Coast/Winelands	7179	2737
Southern Cape/Karoo	12 773	3973
<b>Western Cape province (TOTAL)</b>	<b>111 320</b>	<b>31 128</b>

## **2.3 STI care in the public and private sector**

---

### **2.3.1 Treatment seeking behaviour**

A high proportion of STI cases is treated by private general practitioners in both urban and rural South Africa. In the health district of rural Hlabisa, northern Kwazulu Natal, STI surveillance over a five month period indicated that 65% of STI

cases were treated by public health clinics, while 35% were treated by a sample of general practitioners. An extrapolation of the latter figure to one year and all general practitioners translated into an estimate of 50% seeking treatment in private doctor's surgeries annually (Wilkinson *et al.*, 1998).

In 1997, a nation-wide survey of private doctors estimated that 5 million STI cases are seen in the private sector annually, confirming the results of the Hlabisa survey. Reasons cited for this treatment seeking behaviour are among others the privacy offered in private doctors' surgeries, the relative anonymity, the convenient hours of operation and shorter waiting periods when compared to public health facilities (Dartnall *et al.*, 1997).

### ***2.3.2 Quality of STI care in the private and public sector***

The South African DOH, while having implemented a policy to improve STI care in the public sector, through training of PHC staff in the syndromic treatment of STIs have had little influence on the quality of STI care in the private sector (Dartnall *et al.*, 1997).

The policy is regarded as being reasonably effective after a national survey conducted in 1998, showed that 82% of nurses knew the correct drug treatment for urethral discharge and 72% for genital ulceration (Pick *et al.*, 1998).

In contrast, a nation-wide study of general practitioners in the private sector reflected a much poorer quality of STI care. When treatment regimens prescribed by private practitioners were assessed against DOH guidelines it showed that 29% knew the correct treatment for urethral discharge, 15% for genital ulcers, 6% for vaginal discharge and 4% for pelvic inflammatory disease. The reasons cited for this poor quality of STI care are a lack of awareness of the syndromic approach and the

incorrect application thereof. This study underscores the training needs of private health care workers in the syndromic treatment of STIs (Dartnall *et al.*, 1997).

## **2.4 Lessons learnt from the literature**

---

The literature recognises the importance of STI management and control as an intervention for reducing HIV-1 transmission. Further emphasis is placed on the types of interventions that are successful as well as describing the ideal epidemiological settings to launch these interventions.

The private sector is an important role player in STI management, given the high proportion of patients who favour this source of care. There are however great disparities in the quality of STI care in the private and public sector, undermining DOH efforts to standardise STI treatment across South Africa.

The management and control of syphilis and other STIs are chief priorities of the DOH in the fight against HIV in the Western Cape and the rest of South Africa.

## CHAPTER 3: RATIONALE FOR THE STUDY

### 3.1 Study Rationale

The current private sector providers of STI care include general practitioners, occupational nurses and traditional healers (Dartnall *et al.*, 1997). Anecdotal evidence suggests that pharmacists in privately owned community/retail pharmacies are among those frequently accessed for STI treatment. The private sector is rich in human resources, with nearly 50% of South Africa's pharmacists practising in community pharmacies.<sup>1</sup>

Although the diagnosis and treatment of STIs currently falls outside the pharmacist's scope of practice, it is suspected that some pharmacists do offer these services to the community. While the treatment practices of general practitioners and nurses are well documented, no literature is available to describe the utilisation of the pharmacist in STI care in South Africa.

The current legislation does not allow pharmacists to diagnose and treat STIs. The Medicine and Related Substances Control Amendment Act of 1997 excludes pharmacists under the definition of an "authorised prescriber" of S3, S4, S5, S6 and S7 medicines i.e. "authorised prescriber" means a medical practitioner, dentist, veterinarian, nurse or other person registered under the Health Professions Act, 1974"

At present, community pharmacies are an under-utilised resource, which could potentially become an ideal setting for launching STI treatment programs. The professional statutory body for pharmacists, the South African Pharmacy Council, seems to be of the same opinion and has consequently developed an HIV/AIDS and STI strategic plan highlighting the potential role pharmacists could play in improving the management and control of STIs.