Health care-seeking behaviour for sexually transmitted infections in South Africa

Sean Edwin Jooste

Submitted in partial fulfilment of the requirements for the degree of M.A. (Research Psychology) in the Department of Psychology,

University of the Western Cape

Bellville

Supervisor Professor Leickness Simbayi
28th January 2003

ABSTRACT

The main aim of this study was to investigate the health care-seeking behaviour of patients who were diagnosed at primary health care clinics having a sexually transmitted infection (STI). It further aimed to discover whether any significant differences exist between rural and urban populations and between males and females in their health care-seeking behaviour. The study made use of an existing database. The methodology used in this study is referred to as secondary analysis. The data used in this study was obtained from 126 semi-structured interviews conducted with STI patients at 24 clinics, in all nine provinces. In addition, indepth interviews were conducted with 28 STI patients. This sample consisted of 20 females and eight males. Interviews were unstructured and were aimed at discovering patients' perceptions, experiences and health care-seeking behaviour relating to STIs. All 126 participants were found to be symptomatic when they presented at the clinic sites. The most popular reason given for attending the clinic sites was convenience. Most participants reported that they waited less than 7 days before they presented at the clinic sites. No significant differences were associated with delay in health care-seeking. Most participants had negative emotions regarding their illness. Few participants engaged in alternative Some of the 28 STI patients who received in-depth treatment strategies. interviews stated that they would not reveal their STI status for fear of the stigma associated with the disease. Use of alternate remedies and treatment options of were mentioned. The concern of persuading partners to seek treatment was also highlighted. The implications of these findings for improving the management of sexually transmitted diseases and reducing the spread of the disease are discussed.

DECLARATION

The author hereby declares that this whole thesis, unless specifically indicated to

the contrary in the text, is his own original work.



Sean Edwin Jooste

ACKNOWLEDGEMENTS

I would take this opportunity to acknowledge the support and encouragement I received from my family in Belhar. It has been a long journey, which was made easier through your constant interest shown. At times I felt somewhat harassed, but I understand.

A special thanks to my wife, Mandy (the love of my life), for supporting me during the final stages. I am grateful for time you sacrificed to enable me to complete this thesis.

Particular appreciation must go out to my supervisor, Professor Leickness Simbayi. Your patience and understanding that you have shown, from the start of this thesis to its completion, was unwavering. Thank you for the open door policy that you employed throughout this process. It has been a pleasurable experience to be supervised by you.

I would also like to express my gratitude to the staff of the Institute for Child & Family Development and the Psychology Department.

The financial assistance of National Research Foundation (NRF) towards this research is hereby acknowledged. Opinions expressed and conclusions arrived at, are those of the author and are not necessarily to be attributed to the National Research Foundation.

Finally, thank you to friends and colleagues for your support and words of encouragement. It was appreciated.

TABLE OF CONTENTS

ABSTRACTii			
DECLARATIONiii			
ACKNOWLEDGEMENTSiv			
TABLE OF CONTENTSv			
LIST OF TABLESix			
CHAPTER 1 INRODUCTION			
1.0 Introduction1			
1.1 Background to the study1			
1.2 Rationale of the study4			
1.3 Statement of research problem4			
1.4 Aims5			
1.5. Research questions WESTERN CAPE 5			
1.6 Hypotheses6			
1.7 Significance of the study6			
1.8 Layout of the rest of the mini-thesis6			
1.9 Chapter summary			
CHAPTER 2 LITERATURE REVIEW AND THEORECTICAL			
FRAMEWORK			
2.0 Introduction			
2.1 Introduction to STIs			
2.1.1 Types and epidemiology of STIs			

2.1.	.2	Treatment of STIs	11
2.2	Loca	al studies	12
2.2.	.1	South Africa	12
2.2.	2	Cameroon	13
2.2.	3	Zimbabwe	14
2.2.	4	Kenya	15
2.2.	5	Uganda	l 6
2.2.	6	Zambia	17
2.2.	7	Summary of local studies	8
2.3	Inter	national studies	8
2.3.	1	India	8
2.3.	2	United States of America	
2.3.	3	China2	23
2.3.	4	Summary of international studies	24
2.4	The	pretical frameworks	25
2.4.	1	The health belief model	25
2.4.	2	The commonsense models of illness	26
2.4.	3	Theory of reasoned action	27
2.5	Chaj	oter summary2	28
		•	
СНАР	TER	3 METHODOLOGY	
3.0	Intro	oduction2	29
3.1	Metl	nodological framework2	29
3.2	Orig	inal study3	30

3.3	Pres	sent study	33
3.3	.1	Sample	34
3.3	.2	Procedure	36
3.3	.3	Instrument and design	36
3.3	.4	Analysis	37
3	3.3.4.1	Quantitative analysis	37
3	3.3.4.2	2 Qualitative analysis	38
3.2	.1.	Chapter summary	39
CHA	PTER	4 RESULTS	
4.0	Intro	oduction	40
4.1	Qua	ntitative results	40
4.1	.1	Previous experiences of STI	40
4.1	.2	Current experiences of STIs	43
4.1	.2	Significance of cross-tabulations	48
4.2	Qua	litative results	48
4.3	Cha	pter summary	52
CHAI	PTER	5 DISCUSSION	
5.1	Intro	oduction	54
5.1	Sum	nmary of main findings	54
5.2	Exp	lanation of main findings	55
5.2	.1	Previous episodes of STI	55
5.2	.2	Current experiences of STIs	56

:	5.2.2.1 Symptomatic presentation of symptoms					
:	5.2.2.2	Reasons for attending clinic				
3	5.2.2.3	Duration of symptoms58				
	5.2.2.4	Reaction to symptoms5				
	5.2.2.5	Alternative treatment strategies6				
	5.2.2.6	Notification of illness61				
5.3	Limita	tions of the study62				
5.4	Suggestions for future research					
5.5	Implic	ations of the present finding63				
5.7	Conclu	ısion63				
REF	ERENCE	S65				
APPI	ENDICES	S72				
APPI	ENDIX A					
APPI	ENDIX E	B: HEALTH CARE-SEEKING BEHAVIOUR				
		OUESTIONNAIRE75				

LIST OF TABLES

Table 1.	Syphilis prevalence trends by province among antenatal clinic
	attendees 1998-2000
Table 2.	Biographical information of sample
Table 3.	Sexual history of the sample35
Table 4.	Total number of STIs experienced by sample $(n = 126)$ 41
Table 5.	Symptoms which brought participants to the clinic43
Table 6.	Participants' reasons for attending the clinic44
Table 7.	People who are informed about participants' STI infection45
Table 8.	Responses of participants received from individuals concerning their
	STI status
Table 9.	Alternative sites used to treat STI symptoms
Table 10.	Outcome of treatment of STI symptoms treated at different medical
	sites47

CHAPTER 1

GENERAL INTRODUCTION

1.0 Introduction

In this chapter the background of the study is presented to start with. This is followed by the rationale for the study as well as the statement of the research problem and the hypotheses that were tested. Next, the significance of the study is presented, followed by the layout the rest of the mini-thesis as well as a brief chapter summary.

1.1 Background to the study

STIs are considered as an important public health problem all over the world (Faxelid, Ndulo, Ahlberg & Krantz, 1994). They are among the most common causes of illness in the world (Gerbase, Rowley, Heymann, Berkley & Piot, 1998). For several decades, STIs have been ranked among the top five diseases for which adults in developing countries seek health care services (Buvè, Laga & Piot, 1993). More than four million urogenital chlamydia trachomatis infections occur in the United States annually. It occurs mostly in young sexually active persons from all socio-economic groups (Gaydas et al., 1998). In the United States of America., Western Europe and Australia, the incidence of curable STIs in 15-49 year olds is estimated to be 1% and 4%, whereas in Sub-Saharan Africa it ranges between 11% and 35% (Colvin, 2000). Sub-Saharan Africa has the greatest burden of STIs in the world (Colvin, 1997). South Africa is believed to have one of the highest infection prevalence rates of classic STIs in the world

(Pham-Kanter, Steinberg & Ballard, 1996). Although population-based frequency data are few and mostly unreliable, it has been estimated that approximately four million episodes of STIs occur yearly in South Africa (Department of Health, 1997). This figure increased rapidly, and according to Colvin (1997), approximately 11 million STI cases are treated annually in this country. This places a huge burden on the limited resources available for public health.

Although STIs have been ranked among the top five diseases in developing countries, it was not until the emergence of the human immunodeficiency virus/acquired immune deficiency syndrome (HIV/AIDS) epidemic that the importance of STIs was fully and widely appreciated (Buvè et al., 1993; Setel, 1999). The interaction between STIs and HIV infection (Laga, Nzila & Gorman, 1991, cited in Buvè et al., 1993) is strong enough to warrant the priority allocation of resources to STI control programmes in an effort to reduce the burden of STIs and slow down the spread of HIV. Patients with an STI are at a high risk of HIV infection. There is evidence that STIs facilitate the transmission of HIV (Cohen, 1998; Colvin, 2000). According to Mabey (2000), STIs facilitate the heterosexual transmission of HIV-1, and that this has been an important factor in the rapid spread of HIV infection in developing countries. He further states that the impact on HIV incidence is likely to be highest in populations with a high STI and low HIV prevalence. It could be concluded that the high prevalence of STIs in the Sub-Saharan Africa has probably contributed significantly to the HIV epidemic in this region. This could explain why South Africa is suffering from an explosive HIV epidemic (Wilkinson & Wilkinson, 1998). The prevalence of HIV infection in antenatal clinic attendees in South Africa has risen from 1% in 1990 to 23% in 1998. It has one of the fastest growing epidemics in the world with an estimated 3.61 million people already infected (Alder & Qulo, 1999).

An often unrecognised aspect of STIs, including bacterial STIs, is how frequently persons with these infections have no symptoms or do not recognise symptoms. Most studies of STIs are conducted in health-care settings specifically for persons who do recognize symptoms; therefore, these studies usually overestimate the proportion of infected persons who are symptomatic. Studies of STI screening in non-health-care settings (e.g., jails, workplaces, and communities) or health-care settings where STI treatment is not the primary function (e.g., family-planning clinies) suggest that most persons with gonorrhea or chlamydia are asymptomatic. Among women seeking contraceptive or other gynecologic services, 52% of those with gonorrhea and at least 70% of those with chlamydial infection exhibited neither symptoms nor signs of infection (Phillips, Hanff, Wertheimer & Aronson, 1988). Four population-based studies of men documented that 68%-92% of those with gonorrhea reported no symptoms (Ellerbeck, Vlahov, Libonati, Salive & Brewer, 1989), and one study reported that 92% with chlamydia reported no symptoms (Grosskurth et al., 1996).

This common lack of symptoms for gonorrhea and chlamydia has important implications for treatment of these STIs, as well as for the way in which STI treatment can be used for HIV prevention. Providing access to treatment for persons with STI symptoms is an essential aspect of STI and HIV prevention, but most curable STIs will go unrecognised and untreated without increased efforts to detect and treat persons without symptoms. Opportunities to identify and treat asymptomatically infected persons include screening in health-care settings when

persons present for other problems (e.g., in emergency rooms or family-planning clinics, during routine or annual physical examinations, and during vaccination visits for adolescents and adults) and in non-health care settings (e.g., schools and jails). Screening also can be conducted through sex-partner-notification programs

One of the major reasons for the current STI epidemic has been the failure of clinicians to ensure that the sexual partners of patients with STIs are examined and treated. Most persons with genital discharges, lesions, or pain cease sexual activity and seek medical care. Accordingly, those who transmit infection usually are asymptomatically infected or have mild symptoms whose implications are not understood. Therefore, they often will not spontaneously seek medical attention, and physicians must see that they are examined and treated (CDC, 1998).

1.2 Rationale of the study

Very little is known about the duration of time people in South Africa wait before seeking STI treatment. In addition to this, issues pertaining to their sexual behaviour while symptomatic remain under researched. Such information is relevant for improving the management and reducing the transmission of STIs. By identifying behaviours that inhibit the speedy treatment of STIs, one would be able to reduce the spread of the disease as well as HIV infection.

Statement of research problem 1.3

Delayed seeking of health care has dire consequences for the effective management of STIs. It not only increases the risk of long term damage to the individual concerned, but it also increases the spread of the disease in the community. In order to increase the effectiveness of the management and treatment of STIs, it is essential that more is known about the different health care-seeking strategies employed by sufferers of the disease.

1.4 Aims

The main aim of the research project was to try to understand the health care-seeking behaviour of STI patients with regards to STIs, with the goal being to improve such behaviour. The specific objectives of the project were to identify health care-seeking practices engaged by STI patients that advance the transmission of STIs and those that inhibit the spread of the disease. Furthermore, it sought to discover if there were any significant differences in health care-seeking behaviour between men and women, between high versus low prevalence rates of STI infection, as well as between rural and urban STI patients.

UNIVERSITY of the WESTERN CAPE

1.5. Research questions

- (a) Are there significant differences in health care-seeking behaviour between males and females?
- (b) Are there significant differences in health care-seeking behaviour between STI patients from provinces with high versus low prevalence rates of STI infection?
- (c) Are there significant differences in health care-seeking behaviour between rural and urban STI patients?

1.6 Hypotheses

It is hypothesised that there are significant differences in health care-seeking behaviour between men and women STI patients.

It hypothesised that there are significant differences in health care-seeking behaviour between STI patients from provinces with high versus low prevalence rates of STI infection.

Furthermore, it is hypothesised that there are significant differences in health care-seeking behaviour between rural and urban STI patients.

1.7 Significance of the study

As mentioned earlier, a strong link between STIs and HIV has been discovered. Patients with an STI are at a greater risk of contracting HIV infection. Thus by preventing and controlling the spread of STIs, one prevents and controls the spread of HIV. This is important since HIV develops into AIDS, and unlike STIs, there is no cure for AIDS at present. Accordingly, controlling the spread of classic STIs will further help control and prevent the further spread of HIV/AIDS.

1.8 Layout of the rest of the mini-thesis

Chapter 2 focuses on a review of relevant literature pertaining to this study. Both international and local studies will form part of this section. In addition to this, an overview will be given of the theoretical frameworks that will be utilised in this study.

Chapter 3 outlines the secondary analysis method used in this study. The aims, description of sample, procedure and instruments used in the original study are

discussed. An overview of the secondary analysis used in this study concludes this chapter.

In chapter 4 presents the results of the study. These include both qualitative and quantitative findings.

Chapter 5 discusses the results. This includes providing some explanations for the results as well as the limitations of the study, and suggestions for future research. The implications of the study are also presented. Finally, a brief conclusion is provided.

1.9 Chapter summary

This chapter provided the background to the study. It showed that STIs are a major health concern throughout most parts of the world, especially in Sub-Saharan Africa in general and South Africa in particular. While incidence and prevalence rates decrease in developed countries such as United States and Europe, it continues to grow at alarming rates in Sub-Saharan Africa. More importantly, the strong relationship between STIs and HIV has further highlighted the need to effectively manage and reduce the rates of STIs. It is assumed that this reduction in the spread of STIs would also reduce the current HIV epidemic that exists in South Africa. Delayed health care-seeking by sufferers of STIs would increase the incidence and the prevalence rate of the disease and hence the present study into the issue. Increasing the knowledge base concerning health care-seeking behaviour of STI patients would assist government and health care workers in combating this disease.

CHAPTER 2

LITERATURE REVIEW AND THEORETICAL FRAMEWORK

2.0 Introduction

This chapter will provide a brief overview of the status of STIs in South Africa. Furthermore, it reviews both local and international studies on health care-seeking behaviour of STIs. It also presents three theoretical frameworks for the study.

2.1 Introduction to STIs

STIs are a group of more than 50 infectious diseases that are all transmitted mainly by sexual contact. The causative agents include bacteria, such as gonorrhoea, chlamydia trachomatis, pallidum, haemophilus ducreyi; and viruses, such as herpes simplex, hepatitis B, human papilloma and HIV (human immunodeficiency virus) (Buvè et al., 1993).

Epidemiological research aided by new developments in laboratory technology has revealed STIs impact on health, especially in women and in children (Buvè et al., 1993). According to Bannister, Begg and Gillespie (1996), consequences of these diseases include pelvic inflammatory disease, infertility, ectopic pregnancy, abortion, foetal abnormality, and childhood mortality. In sub-Saharan Africa, 50% of infertility cases among women are considered to be due to tubal infections, which are usually caused by gonorrhoea or chlamydia (Cares, Farley & Rowe, 1985).

2.1.1 Types and epidemiology of STIs

- (a) Gonorrhoea, commonly known as the 'clap', is usually associated with a vaginal discharge in women and urethral discharge in men. There can also be infection in the throat, the upper genital tract (uterus or fallopian tubes) in women or in the rectum. Newborns may develop ophthalmia neonatorum after inoculation in the birth canal of their infected mothers (Roberts, 1999). Pain on urinating is common (Moore, Rosenthal & Mitchell, 1996). In South Africa the prevalence rates of gonorrhoea amongst pregnant women is 7.8%.
- (b) Infections due to chlamydia trachomatis are among the most prevalent of all sexually transmitted diseases. In women, these infections often result in serious reproductive tract complications, such as pelvic inflammatory disease, infertility, and ectopic pregnancy. In addition, infected pregnant women can infect their babies during delivery (Roberts, 1999). chlamydia infections are of particular concern because of their prevalence and the high likelihood that the infection will be asymptomatic. The chlamydia prevalence rates among pregnant women in South Africa during the 1990s was 12.4% (WHO, 2001).
- (c) T. vaginalis is a common parasite of both males and females and the incidence is in part related to hygiene. Intercourse is the usual method of transmission, especially via asymptomatic males. Many women with this infection may not have any symptoms. Urethritis and prostatovesiculitis in males is usually asymptomatic (Roberts, 1999). In spite of the fact that trichomononiasis is the most common of STIs, data on prevalence and

incidence are limited. Prevalence studies amongst pregnant women in Africa show rates of 41.4% in South Africa (WHO, 2001).

(d) Syphilis is a bacterial STI that progresses in stages. The disease is curable and progression of disease is preventable, but if left untreated it can cause cardiovascular and neurological diseases, and blindness. Syphilis causes genital ulcers, which increase the likelihood of sexual HIV transmission two- to five-fold. Untreated, syphilis can be transmitted from a pregnant woman to her fetus (NIAID, 2000). Table 1 shows that the syphilis prevalence rates in South Africa has decrease. These findings were established through the antenatal surveillance system (Department of Health, 2001).

Table 1. Syphilis prevalence trends by province among antenatal clinic attendees 1998-2000

Province	1998	1999	2000	
KwaZulu-Natal	15.8	4.4	2.6	
Eastern Cape	9.6	15.8	3.3	
North West	9.1	9.6	3.6	
Mpumalanga	8.6	3.8	3.7	
Northern Province	5.6	9.1	4.2	
Free State	4.4	3.8	4.8	
Western Cape	4.4	8.6	5.1	
Northern Cape	3.8	5.6	5.1	
Gauteng	13.8	4.4	9.6	
National	10.8	6.5	4.9	

Source: National HIV/Syphilis Survey, 2000

- (e) Genital herpes is a chronic disease, of which there are two types: herpes simplex virus Type 1, which is associated with cold sore blister, and Type 2, which occurs around the genital region and is usually associated with genital herpes (Bannister et al., 1996). It affects people in all socioeconomic groups, with a peak incidence in people age 15-29 (Roberts, 1999).
- (f) Hepatitis B affects the functioning of the liver. The initial symptoms included fever, rash, and painful joints. There may be some jaundice causing yellowing of the skin and white of the eyes. If untreated it may lead to death from acute or chronic liver failure or liver cancer (Moore et al., 1996).
- g) Genital warts, resulting from infection with human papillomavirus, are asymptomatic in nature and manifests itself about two months after infection. Initially there may be reddish swellings that grow into a cluster of small, painless, cauliflower-shaped lumps on the penis, perineum, labia, vulva, cervix, or in and around the anus. If occurring in the vagina or anus, warts may go undetected. Infection may also occur without the development of actual warts.

2.1.2 Treatment of STIs

The internationally successful syndromic approach is widely used in the public sector health services in South Africa (Department of Health, 2001). While the syndromic management of STIs has been applied nationally since 1997, provinces like KwaZulu-Natal, have used this approach for some time (Health System Trust,

1997). According to the Department of Health (2001), 80% of the clinics have at least one health worker trained in this approach.

The syndromic approach for STIs is a strategy enabling high quality STI management in under-resourced settings (WHO, 1994). It is a comprehensive approach aimed at addressing STI diagnosis, treatment and prevention (Grosskurth, et al., 1996). The syndromic approach was developed and recommended by WHO mainly because patients usually present with more than one STI and that some STIs are expensive and difficult to confirm and thus more cost effective to treat (Grimwood, Karpakis & McNab, 1996).

2.2 Local studies

The studies included in this review are divided into two parts. In the first part, seven local studies are cited. Local in this review refers to studies that have been conducted in Sub-Saharan countries such as, Cameroon, Zimbabwe, Kenya, Uganda, Zambia as well as South Africa.

2.2.1 South Africa

The literature pertaining to health care-seeking behaviour of STI patients in South Africa appears to be limited. To date, only one recently published South Africa study has investigated health care-seeking behaviour. This is the study by Meyer-Weitz, Reddy, Van den Borne, Kok and Pietersen (2000) among 292 adolescents, who were among 1 505 patients seeking care at STI clinics in Cape Town at the time of the study. The majority of the adolescents (56%) sought health care from the clinic in less than 7 days after noticing their symptoms; 23%

waited between a week and 10 days; while 21% of the adolescents indicated that they had waited longer than 10 days. Sex, age and education were not significantly associated with a delay in seeking health care. For most adolescents (62%), the present STI was their first experience of the disease. All the adolescents who had an STI previously had sought health care at clinics. With regard to the patients' number of sex partners in the past 6 months, 49% had had only one partner, 23% had had two partners and 28% had had more than two partners. A small minority of the adolescents (14%) indicated that they had treated their STI symptoms prior to seeking health care by washing their genitals with disinfectants, using laxatives or using traditional medicines. The adolescents who resorted to self-treatment were more inclined than others to wait longer than 10 days before seeking health care. The majority of the adolescents (65%) indicated that they had talked to their partners about their present STIs. The majority (60%) of sample was male. Most had a high school education.

WESTERN CAPE

2.2.2 Cameroon

Crabbe, Carsauw, Buve', Laga, Tchuppo and Trebucq (1996) conducted research to study the impact of cost of treatment of STIs on the preference of men with urethritis to seek care in the informal sector. The study made use of data collected from two community-based surveys, which were conducted in Yaounde and Douala. The surveys were carried out among male company employees, who were not older than 40 years old. Participants were interviewed on socioeconomic characteristics, occurrence of signs and symptoms of STIs and health care-seeking behaviour. Of the 189 men in the general population, 16% reported

that they had resorted to self-medication, compared to 15% among the company workers. Overall 52% of the men in the general population and 57% of the company employees consulted in the formal sector. It was also found that men of higher education were more likely to consult in the formal sector than men with lower education. Thus, no differences were found between the two populations.

2.2.3 Zimbabwe

Pitts, McMaster, Mangwiro and Woolliscroft (1999) conducted a study aimed at identifying the factors which contribute to delays and triggers at a Genito Urinary (GU) clinic. A focus of this research was to understand the thoughts and decisionmaking processes of both men and women, who suspected that they might have an STI. Clients attending a general health clinic for a suspected STI were randomly approached to participate in the study. Information was collected via a semistructured interview schedule. Eighty-four clients participated in the study; 31 women and 53 men. When participants were asked for estimation of duration of infection, 80% estimated longer than a week, and 38% longer than one month. When asked whether they had delayed in seeking treatment, nearly 70% claimed not to have delayed. Of the percentage of participants whom indicated that they delayed, 12% delayed due to factors associated with money, 8% delayed due to factors associated with the service, 4% delayed for physical reasons and 5% gave no reply. Participants adopted different treatment seeking strategies. Only 38% (n = 32) came directly to the clinic, 25% (n = 21) used traditional herbs or medicines, 13% (n = 11) used self-treatments that are more modern and 11% did not know what to do or did nothing. Thirty-one percent (n = 26) had attended an STI clinic previously. Only 19% (n = 6) of women reported a previous attendance at an STI clinic, compared to 38% (n = 20) of men.

2.2.4 Kenya

A study conducted by Moses et al. (1994) aimed at identifying health careseeking and related behaviours relevant to controlling STIs in that country. Patients with STIs were interviewed at eight public clinics about their health careseeking and sexual behaviours. Three hundred and eighty patients (n = 189 men and 191 women), primarily came from low socio-economic groups participated in this study. The findings of the study were that women waited significantly longer than men to attend study clinics and were more likely to continue to have sex A large proportion of patients had sought treatment while symptomatic. previously in both the public and private sectors without relief of symptoms, resulting in delays in presenting to study clinics. For women, being married and giving a recent history of selling sex was both independently associated with continuing to have sex while symptomatic. Men were more likely to have sought treatment in the informal sector than women. The informal sector included pharmacists, traditional practitioners, drug peddlers and others. Women were more likely to have sought treatment in public-sector facilities. The main reasons given by men for having sought care in the private medical or informal sectors were convenience of access and perceived greater privacy.

2.2.5 Uganda

Paxton, Kiwanuka, Nalugoda, Gray and Wawer (1998) conducted a study among people in rural areas to quantify the extent to which asymptomatic infections and treatment seeking behaviour may affect control of STIs. This study formed part of an ongoing project. Adults enrolled in the initial survey provided specimens to determine baseline prevalence of infection. They were allocated to At follow-up 10 months later the behaviour of people experiencing symptoms between surveys was documented to estimate the proportion of symptomatic infected people expected to seek treatment. Researchers fitted both baseline prevalence of infection and treatment seeking between surveys to the Piot-Fransen STI control model. In the first survey 12 827 people were enrolled, 9662 were seen at the follow-up. The baseline prevalence of infection from the first survey indicated that most infections were asymptomatic. It was discovered that 53.3% of men and 65.6% of women with gonorrhoea, 91.7% of men and 76.0% of women with chlamydia, and 81% of women with trichomonas or bacterial vaginosis reported no symptoms in the previous six months. In the 10 months between the first and second surveys, 30.4% of women and 9.7% of men experienced genital tract symptoms. Women reported vaginal itching (15.4%), pelvic pain (14.7%), vaginal discharge (9.4%), and genital ulcer (5.5%). Men reported genital ulcer (4.3%), dysuria (4.2%), and urethral discharge (1.7%). Over 40% reported they had done nothing to treat symptoms or prevent transmission and less than 40% of the subjects who were counselled had sought treatment for syphilis. Overall, 59.1% of symptomatic men and 55.4% of women sought treatment, and only 16.9% and 3.9%, respectively,

notified their partners. Almost three quarters of those seeking treatment used government health centres or private clinics, the rest treated themselves or visited traditional healers. More men (27.5%) than women (11.3%) chose to treat themselves. More than half reported sexual intercourse, and only 4.5% of men and 0.5% of women used condoms while they had symptoms.

2.2.6 Zambia

Faxelid, Ndulo, Ahlberg and Krantz (1994) conducted a descriptive study of existing treatment programmes for STI patients at two outpatient departments in Lusaka. The focus of their study was issues pertaining to partner notification. These included number of sexual partners identifiable and patients' knowledge and reactions to having an STI. Fifty women and fifty men participated in this study. Their findings revealed that women had STI symptoms for a median of 14 INIVERSITY of the days before they came for treatment compared with a median of five days for men. More than 66% of the women compared with 36% of the men had two or more complaints. Men, who knew they had a STI, came earlier for medical attention. The reasons given to explain this was that men had higher education in general and had a tendency to a greater openness about sexual matters. For men, awareness of having a STI was related to the number of days before seeking health care, which was not the case for women. This could be explained either by men understanding beforehand that they were ill, that they were better informed or that they were more inclined to discuss the matter. It was found that as much as 30% of the women could not mention any symptom connected with STI. A majority of women were not aware that they had a STI even after seeing the physician and having received treatment. Finally, improved communication was found to be related to better control of STIs.

2.2.7 Summary of local studies

In all the studies reviewed, females as compared to males waited on average longer to seek treatment. Some of the reasons provided for delay in treatment seeking included financial and physical constraints. The respondents employed various treatment strategies. A small percentage of participants reported self-treatment prior to visiting the clinics. A few reported seeking treatment at traditional healers and at private medical settings. One study found that most infections were asymptomatic.

2.3 International studies

In this section, six studies are presented. These include studies from India, the United States of America and China.

2.3.1 India

Research conducted by Evans and Lambert (1997) among female sex workers in urban India focused on local understandings of sexual health problems, practices related to the maintenance of health and the prevention of disease, factors influencing treatment-seeking and use of medications. Research activities were undertaking with three groups: 27 sex workers, 13 non-sex workers, five local key informants, and seven service providers. They discovered that the main help-seeking "trigger for action" was an inability to work and perform daily tasks.

They generally sought treatment within one to three days for incapacitating complaints, whereas they waited for up to a week or more with regard to less painful or ambiguous symptoms. In these cases, home remedies were sometimes tried initially. If the condition did not improve, help was sought due to concerns of long-term harm. Self-treatment with medicines purchased directly from pharmacies was a common practice, mainly for the management of mild or chronic complaints. The women preferred seeking help from the private sector because it involved a minimal loss of time. Private sectors' greater flexibility gave it an advantage over the public sector. The hospitals were further away from their homes and consultations involved a long wait.

It was also found that the biggest problem in terms of effective clinical management of STIs concerned treatment compliance. They frequently switched services in the middle of treatment if "cure" was not forthcoming. Women often stopped taking their medicines when they became asymptomatic. The researchers concluded that health-seeking strategies appear to be more closely related to general conceptions of the nature of health under particular material conditions than to ethnomedical illness classifications or aetiologies.

2.3.2 United States of America

There are four recent studies that have been conducted on health care-seeking behaviour for STIs. They were conducted by Mehta, Shahan and Zenilman (2000), Fortenberry (1997), Hook et al. (1997) and Pitts, Woolliscroft, Cannon, Johnson and Singh (2000) at an inner-city emergency department, a public STI

clinic in Chicago, at five urban STI clinics and at study at a genitourinary clinic (GU) in a general hospital respectively.

One of the main findings from these studies was that delay in seeking screening for a possible STI varied considerably. Some participants sought treatment quickly, others delayed for months, and in a few cases, even years. Mehta et al. (2000) found that the median period before seeking treatment after onset of symptoms was one week, one week for women and a few days for men. Thirtyfour patients delayed treatment for two weeks or longer. Fortenberry (1997) found that symptomatic female adolescents reported significantly longer total care-seeking and appraisal intervals than asymptomatic female adolescents or symptomatic male adolescents. Overall, 38% and 32% of male and female subjects, respectively, obtained care within 3 days of problem recognition; 27% male participants and 34% of female participants required more than 7 days to obtain clinical care. The remainder of the subjects required 4 to 7 days to obtain care. Hook et al. (1997) found in their study that over one third (35% of men, 37% of women) of the sample presented at the clinics only after more than one week of genitourinary symptoms. Of those patients who presented after more than 7 days of symptoms, 21.5% of men and 28% of women reported eight to 30 days of symptoms and 11.5% (13.5% men and 9.1% women) reported that symptoms had been present for more than one month. Pitts et al. (2000) found that the median delay for symptom appraisal was 3 days. Fifty-nine percent delayed in symptom appraisal for less than one week, 12% between one and two weeks, 7% between two and three weeks, 3% between three and four weeks, and 20% more than four weeks. The average time for having symptoms before attending the clinic was 30 days. Fourteen percent had had symptoms for less than one week, 13% between one and two weeks, 9% between two and three weeks, 8% between three and four weeks, and 56% for longer than four weeks. Thirteen percent had had symptoms for longer than one year. Clients' previous treatment-seeking behaviour was not associated with their behaviour for treatment of an STI. The average delay between first thinking about coming to the clinic, and actually attending it was nine days. Twenty-five percent waited for less than one week, 28% between one and two weeks, 13% between two and three weeks, 4% between three and four weeks, and 29% for longer than four weeks. Six people waited longer than six months.

Reasons for not seeking treatment sooner included "it didn't bother me that much" (38%), "no insurance" (38%), "no money" (31%), and "other more important things to do" (31%) (Mehta et al., 2000). Hook et al. (1997) found that for all symptomatic women (43.3%) and men (35.6%), the commonest reason cited for delaying STI clinic attendance was their hope/belief that their symptoms would resolve. Difficulties in getting time off from work and believing that their symptoms were not a priority were mentioned by 13.9% and 17.5% of women, respectively. In the case of men it was 18.2% and 10.2% respectively. In addition, 11.3% of men, and 10.6% of women who delayed for more than 7 days reported that they did not know where to go for care.

Mehta et al. (2000) found that delayed treatment was associated with intravenous drug use and an effort to self-treat. Participants who sought treatment within a few days of symptom onset were less likely to report an effort to self-treat than those who waited one week or longer. Fifty-eight percent of the women

and 24% of the male sample attempted self-treatment. Fortenberry (1997) found that avoiding sex and discussing the STI-related problem with others were common behavioural responses to the problem. Twenty-six percent of symptomatic women reported douching in response to the symptoms. Nonprescription medication and antibiotic use were reported by 25% of the Among male participants, only cognitive variables (greater participants. perceived barriers, lower self-efficacy, and higher perceived seriousness) were related to longer duration of the total care-seeking and appraisal intervals. Among female participants, lower household income, being symptomatic, and cognitive variables (greater knowledge, higher seriousness and greater stigma) and previous STI were associated with prolonged care-seeking intervals. Hook et al. (1997) discovered that the proportion of symptomatic patients who presented to the clinics after more than one week varied by disease. Only 6.5% of men with symptomatic gonococcal urethritis and over 73% diagnosed with genital warts delayed more than 7 days before clinic attendance. Women diagnosed with cervicitis syndromes (42.8%) or pelvic inflammatory disease (43.8%) presented to the clinics only after 7 days of symptoms. Over one third of women with the most common causes of symptomatic vaginal discharge (bacterial vaginosis, trichomoniasis, or fungal vaginitis) presented to the clinic only after symptoms had been present for more than one week. Similarly, 34.8% of symptomatic women who had sexual contact with men that had STIs delayed for more than a week before presenting to the STI clinic. Women diagnosed with genital herpes and gonorrhea were least likely to delay clinic attendance. It was found that men who were over the age of 34 years or black were significantly less likely to delay STI clinic attendance. In contrast, men with college or higher levels of education were significantly more likely to delay presentation to STI clinics for more than 7 days. For women, only race/ethnicity was significantly associated with the timing of STI clinic attendance. Women who were white or Filipino/Pacific Islanders were more likely to delay attendance, whereas black women were less likely to delay clinic attendance. Pitts et al. (2000) found no gender differences in their study. Delay was significantly associated with age. Those over 45 delayed significantly longer than other age groups before treatment seeking.

Mehta et al. (2000) found barriers to clinic use included lack of knowledge of available services and misclassification of symptoms by patients as not STI related. Attending the clinic would also reveal the participants medical condition. Respondents indicated that they would be embarrassed if people they knew thought that they had an STI, and others reported that they would be embarrassed if people knew they had attended an STI clinic. In their study the Emergency Department was more attractive in that it was not specifically a STI site and the services were available 24 hours daily, whereas the STI clinics were available only during working hours.

2.3.3 China

Choi, Zheng, Zhou, Chen and Mandel (1999) examined health care-seeking practices among patients with STIs in China. Furthermore, treatment delays and patterns of prior STI care-seeking were investigated.

A survey was conducted at two public STI centres in the cities of Guangzhou (n = 492) and Shenzhen (n = 447). Fourteen physicians interviewed patients

using a standard survey questionnaire. In Guangzhou chlamydia and pelvic inflammatory diseases were more common among women, while in Shenzhen more women had gonorrhoea and condyloma acuminatum, whereas more men had herpes. None of the patients in both cities tested positive for HIV.

Overall, 27% had sought treatment elsewhere prior to their visit to a study clinic. There were no gender differences in prior STI treatment. Participants reported visiting private physicians, public general hospitals, public STI clinics, drugstores, and herbalists or acupuncturists. The majority (124 patients) reported having received treatment from private physicians. The main sources of referral were street advertisements (40%), friends (35%), or newspapers or magazines (30%). The major reasons given for seeking treatment from the doctor were a faster cure (68%), better transportation (24%), and greater anonymity (22%).

Overall, 27% of patients delayed seeking treatment for more than two weeks before their visit to the STI study site. More women (32%) than men (25%) were likely to delay treatment for current symptoms. Among men, those who had previously sought treatment from private physicians for their current symptoms, had no urethral discharge, had engaged in sex trade, or were residents in Shenzhen were more likely to delay seeking treatment. Among women, only living in Shenzen was related to treatment delay.

2.3.4 Summary of international studies

Delays in seeking treatment for a possible STI varied considerably. Some participants sought treatment quickly, others delayed for months, and in a few cases, even years. Delayed treatment was associated with age, intravenous drug

use and an effort to self-treat. Some of the reasons provided for delay in treatment seeking included; lack of money, being too busy and hoping symptoms would disappear. Self-treatment included medicines purchased directly from pharmacies and douching. Choice of treatment sites differed. Both services provided by the private and public sectors' were utilised. It was also found that the biggest problem in terms of effective clinical management of STIs concerned treatment compliance. It is however important to note that most studies in the United States were conducted among mainly African-Americans who come from lower income groups and use public health care centres.

2.4 Theoretical frameworks

There are a range of theoretical frameworks pertaining to health issues. It would be impractical to cite all in this study. The health belief model, the commonsense models of illness and the theory of reasoned action will be used to make sense of the results of the study.

2.4.1 The health belief model

According to Pitts (1996), this is probably the most influential theory in health psychology. The health belief model was first proposed by Rosenstock and was developed and modified by Beker and Maiman (Ogden, 2000). It attempts to explain the adoption of health behaviours (Pitts, 1996). This model considers three sets of factors in predicting people's behaviours (Baum, Gatchel & Krantz, 1997). First, one must take into account the patient's readiness to act, or perceived necessity of action. This is determined by the perceived severity of the

disease state that exists or that could occur and the perceived susceptibility to the illness or its consequences. Risk perceptions are important determinants of health behaviour. The second set of factors involves the estimation of cost and benefits. The patient will choose a treatment that will be effective and that the benefits of following it will outweigh the costs. This factor relates to perceived seriousness (Sheridan & Radmacher, 1992). The patient evaluates how serious the consequences are if the problem develops or is left untreated. The third factor outlined in the health belief model is the need for a cue to action. This cue could be an internal signal or an external one. Internal signals could include pain or discomfort, whereas external cues could relate to health initiatives or communications with others.

The health belief model has been criticised by various authors (Ogden, 2000). Some of the criticisms included its focus on rational processing of information and its focus on the individual. The role that the social and economic environments play is not considered. Furthermore, the role for emotional factors such as fear and denial is absent. Schwarzer (1992, cited in Ogden, 2000) has further criticised the health belief model for its static approach to health beliefs and suggests that within the health belief model, beliefs are described as occurring simultaneously with no room for change, development or process.

2.4.2 The commonsense models of illness

The commonsense models of illness posit that people form their own cognitive models of representations of health and illness (Baum et al., 1997). These models are used to guide their interpretation of illness and bodily states. These models

may or may not correspond to medical reality as defined by a physician. This is an important aspect when one considers the diverse society you find in South Africa. People might hold views concerning health and related issues that do not conform to the mainstream biomedical model. Many health-oriented actions that people take focus on illness. When they experience symptoms, and when symptoms are present, people seek a label for illness, take action such as self-care or seek medical care, and expect illness to disappear with treatment. The representations play an important role in determining health and illness behaviour. People's representations of health also include notions of the cause of disease, ways to treat them, and ways to prevent illness. Patients generally expect a disease to be a brief one and for a cure to be achieved quickly and definitively.

2.4.3 Theory of reasoned action

This theory did not develop from a specific interest in health, but grew out of a general desire the role that cognitive factors, especially attitudes, played in deciding to take action (Bernard & Krupat, 1993). Intention is a key construct in this model (Pitts, 1996). Reasoned action theory (Fishbein & Ajzen, 1975, 1980) states that intention is the best predictor of behaviour. Intention is determined by three factors. The first factor is represented by a person's attitude toward the behaviour. An intention toward a behaviour is influenced by our attitude toward that behaviour. The strength of belief that the behaviour will result in a certain outcome and the evaluation of that outcome as a positive one influences this attitude.

The second factor that influences intentions and behaviour is the subjective norms. This refers to a social factor or a response to external pressures. People respond to how others expect them to behave combined with their motivation to comply with these expectations.

The third factor refers to matters of perceived control. People who feel that they lack the resources or opportunities to engage in a given behaviour are unlikely to generate a strong intention to engage in it even when they hold a favourable attitude and recognise that others would have them do so.

2.5 Chapter summary

Chapter 2 introduced STIs and their epidemiology in South Africa. It went on to review both 'local' and international studies on health care-seeking behaviour for STIs. Finally, it provided three theoretical frameworks that are utilised to explain the findings of this study.

WESTERN CAPE

CHAPTER 3

METHODOLOGY

3.0 Introduction

The first section of this chapter gives a brief overview of the original study that generated the data set that was used by this study. In the second section of this chapter a detailed description is provided of the methodology used in the present study.

3.1 Methodological framework

Both quantitative and qualitative research methodologies are incorporated in this study. The context within which the integration of quantitative and qualitative research is most frequently encountered is in terms of triangulation (Bryman, 1992; Huberman & Miles, 1994). Triangulation makes use of combinations of methods, investigators, perspectives, and this facilitates richer and potentially more valid interpretations (Bannister, Burman, Parker, Taylor & Tindall, 1994). It is particularly valuable in the analysis of qualitative data where the trustworthiness of the data is often a worry (Robson, 1993). Method triangulation entails the use of different methods to collect information. This procedure assumes that all methods have their limitations, their own validity threats and distortions (Bannister et al.). A danger of using only one method is that the findings may merely be an artefact of the method. If an appropriate cluster of methods is used, it increases the likelihood that the material is more than just the product of the method (Bannister et al.).

3.2 Original study

The study, conducted by a team of University of Western Cape researchers led by Professors L. Simbayi (my supervisor) and A. Strebel, was commissioned by the National Department of Health's Directorate of Health Systems Research and Epidemiology in conjunction with the Directorate of HIV/AIDS and STIs and was administered by the Medical Research Council's Office of Research Grants Administration. The research team consisted of a full-time research co-ordinator, an eight-member research team and several research assistants, most of them were Honours and Masters students.

It was a national study conducted in four provinces, viz., the Western Cape, North West, Mpumalanga and Eastern Cape. These particular provinces were sampled because they represented two provinces with high prevalence rates of reported HIV infection in South Africa (North West and Mpumalanga) and two with low prevalence rates (Western Cape and Eastern Cape). Twenty-four Primary Health Care (PHC) centres participated in the study, with six PHC centres selected in each of the provinces: two PHC centres were chosen from large urban centres, two from small urban centres and finally two from rural areas. The selection of PHC centres was done in consultation with provincial, regional and district health structures.

The overall aim of the research project was to examine health care-seeking behaviour of the general public and STI patients. The project's specific objectives were to conduct an audit of selected PHC centres with regard to technical aspects of STI care as well as to obtain a profile of STI patients. Furthermore, it sought to examine the perceptions and experiences of STI health service providers in

selected PHC centres as well as those of the public and STI patients with regards to STIs.

The study sampled individuals who either influenced the transmission of STIs or were affected by it. Participants form each PHC centre included a senior health provider, three interviews with health providers, STI patients, and non-STI patients. Furthermore, two simulated patients (one male and one female) presented at 21 clinics. Focus groups were also conducted with sex workers, prisoners, mine workers, university students, high school pupils, community health workers, a women's church group and housewives.

The methodology included a combination of qualitative and quantitative methods. Semi-structured exit interviews were conducted with STI (n = 126) patients, non-STI (n = 72) patients and health providers (n = 73). The semi-structured interviews conducted with STI patients were used to investigate health care-seeking behaviour; quality of care; and the general barriers to compliance with the syndromic management therapeutic regimen. Semi-structured interviews with non-STI patients were used to ascertain whether there were any differences between the quality of care given to STI patients and that given to non-STI patients. Furthermore, it was used to gain a better understanding of the perceptions that exists among the general public, relating to STIs. The semi-structured interviews conducted with the health providers were used to obtain their perspectives on quality of care and health care-seeking behaviour, as well as to assess providers knowledge of the syndromic management therapeutic regimen. Clinic profiles involved a standardised checklist, which was used to obtain an

inventory of staff drugs and equipments available for STI management as well as staff training in syndromic approach.

In-depth interviews (n=28) were conducted with STI patients. These interviews centred around perceptions, experiences and health care-seeking behaviour relating to STIs, as well as perceptions of the quality of care. Ten focus groups were conducted with health providers and the general community. These focus groups were designed to gather information concerning the general communities perceptions of STIs, health care-seeking behaviour and the quality of STI care. Simulated patients presented at each clinic and completed a standardised questionnaire measuring the quality of care received. This provided researchers with additional information and assisted in verifying information received from participants relating to quality of care they received.

A pilot study was conducted at the urban clinics in the Western Cape to test the validity and reliability of the instruments. Two teams of approximately seven researchers and research assistants, with each team responsible for three clinics were sent for a week of fieldwork in each province. One coordinator who was responsible for overseeing the data collection in each province assisted with the setting up of focus groups as well as driving two simulated patients to each clinic. Health providers were requested to send STI patients as well as non-STI patients to the interviewer(s) after their consultation. Each STI interview took between 45 minutes and one hour to complete while the non-STI patients took approximately 30 minutes.

Thematic content analysis was performed on the qualitative data. The Statistical Package for Social Sciences (SPSS Version 8.0) software was used to analyse the

quantitative data. The statistical techniques used included descriptive statistics, which examined frequencies of occurrences and percentages, and the chi-square test was used to test for any association between categorical variables.

Prior to commencing data collection, formal application for ethical clearance to conduct the project was obtained from the University of the Western Cape's Senate Research Committee. During data collection, anonymity and confidentiality were maintained in the case of patient's records. Informed consent to participate was granted by all patients, community focus group participants, health providers as well as PHC managers.

For capacity building purposes, some postgraduate (i.e., Doctoral, Masters and Honours) students from the Psychology Department of the university of the Western Cape were encouraged to become involved in the project and to use the project for their own thesis or mini-thesis as part of their degree requirements, the present study being one of such studies.

WESTERN CAPE

3.3 Present study

The present study used of a section of the database generated by the original study. The sections utilised were the semi-structured interview schedules and individual in-depth interviews conducted with STI patients. What follows below is a detailed outline of the present study. The areas discussed are the sample, procedure, instruments used, and the analysis employed in the study.

3.3.1 Sample

The size of the sample for this study was 126. Table 2 reflects the demographic characteristics of the sample. The majority of participants (n = 48; 38%) were Xhosa-speaking. The proportion of the sample that were employed (n = 46; 36.5%), held mostly unskilled jobs. The majority (n = 57; 71.2%) of those participants who were unemployed were supported by their parents.

 Table 2.
 Biographical information of sample

Variable	Frequency	Percentage
Sex		
Male	45	35.7
Female	81	64.3
Age		
16 - 25 yrs	61	48.4
26 - 40 yrs	58	46
Home language*		Accessed on the Control
Indigenous	UIMIVERS	TY of t193.6
Afrikaans	WESTERN	()
Race	WESTER	
African	117	92.9
Coloured/Indian	9	7.1
Education		
None	5	4
Primary	23	18.3
Secondary	90	71.4
Tertiary	8	6.3
Employment status		
Employed	46	36.5
Unemployed	80	63.5
Marital status*	×	
Married	26	20.6
Single	68	54
Cohabiting	25	19.8
Separated	4	3.2
Divorced	1	8

^{*}Responses total less than 100% because some participants did not respond.

Table 3 reflects the sexual behaviour patterns of the participants. The majority of participants (n = 68; 54%) defined their current marital status as being single. The overwhelming majority (n = 93; 88.6%) indicated that they had a regular sexual partner.

Table 3.Sexual history of the sample

Variable	Frequency	Percentage
Regular sexual partner*		
Yes	93	88.6
No	12	11.4
Duration with sexual	12	
partner*		
Under 1 year	22	22.4
1-5 years	50	151
6-10 years	15 11 11 11	15.3
•	11	11.2
Over 10 years Number of other sexual		11.2
		Ш
partners in past year*	54	43.9
0		
1 2-5	U35 IVERSITY of	23.6
	WESTERN CAL	23.0
Over 5		4.1
Total number of sexual		
partners		44.4
One	56	44.4
Two	30	23.8
Three-six	33	26.2
Over 6	5	4
None	2	1.6
Number of children*		
None	33	39.8
One	25	30.1
Two-Five	24	28.9
Over five	1	.8

^{*}Responses total less than 100% because some participants did not respond.

3.3.2 Procedure

This study used an existing database, which was obtained from Professor Simbayi (my supervisor). The method used in the present study is referred to as secondary analysis. Hakim (1982) defines secondary analysis as any further analysis of an existing data set, which presents interpretations, conclusions, or knowledge additional to, or different from, those presented in the first report on the inquiry as a whole and its main results. The advantage of this method is that it is cost and time efficient (Chadwick, Bahr & Albert, 1984; Hakim, 1982). It is cheaper to re-analyse existing data, and findings are much more rapidly generated by such re-analysis. By utilising this method, one optimises the use of scarce public resources (Rockwell, 1998). Furthermore, inexperienced researchers could also benefit from the work of experienced professional researchers (Moomal, 1998).

The disadvantage of this type of method is that occasionally insufficient information is reported about the collection of the data to determine possible biases in them. A lack of specification about sampling, measurement and coding raises doubts about the quality of the data (Chadwick et al., 1984). One cannot correct the mistakes made in the design of the research instrument or in the collection of the data.

3.3.3 Instrument and design

A semi-structured interview schedule was used to gather the information from the participants. The schedule drew on questionnaires used by McCoy (1996) and Moses et al. (1996). It included issues such as biographical information, sociodemographic information, history of previous health care-seeking behaviour, sexual behaviour practices in general and while STI-infected, and the nature of the STI patient's current symptoms and health care-seeking behaviour. The interviews took between 45 minutes and one hour to complete. It was exit interviews, which meant that potential participants were interviewed after nurses examined and determined that they had had a STI. Interviews were concluded in the participants' preferred languages.

In addition to the use of the quantitative method alluded to above, a qualitative methodology was also included. In-depth interviews were conducted with 28 STI patients at 12 clinics. This sample consisted of 20 females and eight males. Interviews were unstructured and were aimed at discovering patients' perceptions, experiences and health care-seeking behaviour relating to STIs.

A team of researchers conducted both semi-structured and in-depth interviews.

One co-ordinator was responsible for overseeing the interviews being conducted at the PHC centres in all four provinces.

3.3.4 Analysis

Data gathered from both the semi-structured interview schedule and in-depth interviews were analysed as follows.

3.3.4.1 Quantitative analysis

All quantitative analysis was carried out using the Statistical Package for the Social Sciences (SPSS), version 10.0. Participants' responses to both the open-

and closed-ended questions were categorised and coded, and assessed in the form of percentages and number of responses or frequencies.

The next procedure performed to analyse the data was cross-tabulation. This refers to examining the relationships between two or more variables (Chadwick et al., 1984). Hall and Hall (1996) states that cross-tabulations are used to answer the question whether there is any association or relationship between two variables. Cross-tabulation is one of the simplest and most frequently used ways of demonstrating the presence or absence of a relationship (Bryman & Cramer, 1997). The chi-square test was used in conjunction with the cross-tabulations. This is a test of statistical significance that allows a researcher to discover the probability that the observed relationship between two variables may have arisen by chance (Bryman & Cramer, 1997). Chi-square is a test of how much the observed and expected frequencies differ from one another (Pretorius, 1995). The computed chi-square value was determined to be significant at the 0.05 level of statistical significance.

3.3.4.2 Qualitative analysis

As noted earlier, in-depth interviews were conducted with 28 STI patients. All interviews were tape-recorded and transcribed verbatim. It was then translated into English Access was not obtained to the entire transcripts of the individual interviews. What were acquired from Professor Simbayi were excerpts from the various interviews that related to health care seeking behaviour. A thematic analysis of the available text was done by drawing on the dominant themes that emerged from it.

A thematic analysis is a coherent way of organising or reading interview material in relation to specific research questions (Bannister et al., 1994).

3.2.1. Chapter summary

This chapter gave a detailed description of the methodology used in this study.

A brief summary was provided of the original study was first presented.

Thereafter, a detailed account of methodology used in the present study was given.



CHAPTER 4

RESULTS

4.0 Introduction

In this chapter the results of the study are presented. As noted in the methodology chapter, both quantitative and qualitative analytic procedures were used.

4.1 Quantitative results

The results from the semi-structured interview schedule are presented first. The information obtained from this schedule pertains to issues around previous and current STI experiences. There were 23 items that focussed specifically on health-seeking behaviour. The results are presented for each item separately. The results of each item are expressed in terms of percentages and frequencies, so that one is able to obtain a clear picture of not only the number of participants who responded in a particular way, but also the proportion. There are instances where the results are expressed in the form of tables. In addition to this, the results of cross-tabulations that were performed are also reported.

4.1.1 Previous experiences of STI

When patients were asked if this was the first time they had suffered from an STI, 58.7% (n = 74) of the respondents concurred while 40.5% (n = 51) disagreed. One respondent did not respond to the question. Table 4 illustrates the number of STI episodes experienced by respondents.

Table 4. Total number of STIs experienced by sample (n = 126)

Number of STI	Frequency	Percentage	•
One	73	57.9	•
Two	13	10.3	
Three	21	16.7	
Four or more	17	13.5	
No response	2	1.6	
Total	126	100	

The respondents (40.5%; n = 51) who stated it was not their first episode of STI were further asked to indicate how many previous times they experienced the symptoms. From that group 25.5% (n = 13) of the participants had had one previous STI, 41.2% (n = 21) had had two previous episodes, and 33.3% (n = 17) indicated that they had experienced the symptoms three or more times.

When questioned as to how long ago they had had their last symptoms, 36% (n = 18) indicated more than 1 year, 28% (n = 14) stated between 6 and 12 months, 22% (n = 11) between 1 and 6 months, and a minority (14%; n = 7) had experienced symptoms less than 1 month ago. One respondent did not respond at all to the question.

In response to the item that probed if they went for any treatment as a result of their symptoms, the majority 72.5% (n = 37) indicated that they went for treatment while 27.5% (n = 14) did not seek any treatment.

The group that went for treatment were asked to indicate where they went to seek help. Most participants (57.9%; n = 22) indicated that they attended a clinic, 34.2% (n = 13) visited a private doctor, and 5.3% (n = 2) sought help at a traditional healer. One (2.6%) respondent indicated other as a response, but failed to specify where he went. Four (10.8%) respondents indicated more than one

response. One (2.6%) participant indicated traditional healer and three (8.1%) participants indicated another clinic as the additional response.

The overwhelming majority of participants (83.8%; n=31) who sought treatment, where treated by means of pills. A minority (5.4%; n=2) were treated by means of injection and another two (5.4%) respondents indicated "other". The remainder (5.4%; n=2) failed to respond to the question.

The vast majority (86.5%; n = 32) of participants indicated that they had completed their treatment. A minority 5.4% (n = 2) did not complete their treatment. The remainder (8.1%; n = 3) failed to respond to the question.

When asked whether their partners were treated, the majority of the participants (54.1%; n = 20) disagreed, 35.1% (n = 13) agreed, while 5.4% (n = 2) did not know whether their partners were treated. The remainder (5.4%; n = 2) failed to respond to the question.

When participants were asked to describe what they liked or disliked about the treatment, the majority (78.4%; n = 29) viewed the treatment in a positive light. However, 21.6% (n = 8) had a negative experience.

Participants gave various reasons why they thought their symptoms returned. Over a third of the participants (35.1%; n = 13) felt that the practice of unsafe sex was to blame, 16.2% (n = 6) attributed the return of symptoms to their partner practicing unsafe sex with someone else, and 16.2% (n = 6) did not know. Interestingly, 13.5% (n = 5) stated that non-compliance of treatment was the cause that symptoms returned. Three (8.1%) respondents indicated "other" but failed to provide further details. The remainder (10.8%; n = 4) failed to respond to the question.

4.1.2 Current experiences of STIs

In this section of the results that are provided refer directly to those items of the semi-structured interview schedule that questions participants about their present STI experiences. The experiences tapped are those that compelled respondents to visit particular clinic sites, on the day that the research took place.

Table 5 refers to responses given by participants when they were asked to indicate which symptoms brought them to the clinic on the day that they were interviewed. The most common symptoms were abdominal/womb/kidney pain and discharge followed by sores and burning urine/urine-related.

Table 5. Symptoms which brought participants to the clinic

	III. III. III. III. I	
Symptom	Frequency	Percentage
Abdominal/womb/kidney pain Discharge	39 (-) 39 (21) ER ₁₂ (7) Y of the	31.7 (-) 31.7 (40.4)
Sores Burning urine/urine-related problems	1- (.)	9.8 (15) 8.9 (30.9)
Medical referrals	6 (3)	4.9 (7.1)
Itching/burning genitals	6 (7)	4.9 (10.3)
Inclusion of STI lab	5 (-)	4.1 (-)
Contact	2 (-)	1.2 (-)
Bleeding/menstruation problems	1 (2)	.8 (2.3)
Rash	1(1)	.8 (1.5)
Other somatic symptoms	1 (18)	.8 (15)
No response	3 (-)	2.4 (-)
Total	126 (213)	100 (169)*

^{*}Responses total more than 100% because some participants gave more than one response.

⁽⁾ Captures multiple responses by participants

Table 6. Participants' reasons for attending the clinic

Reason	Frequency	Percentage
Convenience	51 (-)	40.5 (-)
Believe clinic can help	25 (1)	19.8 (20.6)
Previous experience at the	12 (-)	9.5 (-)
particular clinic positive		
Habit	11 (2)	8.7 (10.3)
Referred	4(1)	3.2 (3.9)
Poor experience elsewhere	3 (1)	2.5 (3.2)
Clinic is free	2(2)	2.4 (3.2)
Other	13 (2)	10.3 (11.9)
No response	5 (-)	4 (-)
Total	126 (135)	100 (107.1)

Participants gave various reasons why they decided to attend the particular clinic where they were interviewed. Table 6 shows the reasons given by participants for their attendance at the clinic. The most popular reason was convenience, followed by the belief the clinic could help, positive previous experience at the clinic and habit.

When participants were asked how long they had had their symptoms, the majority (55.6%; n = 70) indicated that the duration was less than 7 days, 13.5% (n = 17) had the symptoms between 8-14 days, 11.1% (n = 14) experienced it between 15-30 days, and 12.7% (n = 16) had the symptoms for more than 1 month. A small minority (2.4%; n = 3) of the respondents who did not know how long they had had the symptoms and 4.8% (n = 6) did not respond to the item.

Participants were asked to state what their reaction was to their illness. About a third of the participants (34.9%; n = 44) sought help at the clinic, two (1.6%) sought help elsewhere while six (4.8%) administered self-medication. Forty-eight (39.3%) participants experienced negative emotions and 15 (11.9%) indicated that

they experienced no reaction. Seven (5.6%) participants indicated "other". Four (3.2%) participants did not respond to this question. Additional responses were indicated for treatment sought at the clinic (3.2%; n = 4), no reaction (5.6%; n = 7) and other (1.6%; n = 1.6%).

Participants were asked if they told anyone about their illness. The majority (73.6%; n = 92) of participants had told someone about their illness. The remaining 26.4% (n = 33) did not tell anyone. There was only one (0.8%) no response.

Those participants (73.6%; n = 92) who informed someone about their illness, were asked to indicate whom they informed. Table 7 shows that most people had informed their partner about the illness, followed by friend, parent, relative and spouse in that order.

Table 7. People who are informed about participants' STI infection

	WESTERN	CAPE
Relation to participant	Frequency	Percentage
Partner	38 (1)	41.3 (42.3)
Friend	15 (6)	16.3 (22.8)
Parent	15 (4)	16.3 (20.6)
Relative	8 (9)	8.7 (18.4)
Spouse	14(1)	15.2 (16.3)
Total	92 (113)	100 (122.8)

Those participants who told someone about their STI status were further asked to indicate what the reaction of the person was that they informed. Table 8 shows that advise to seek treatment at the clinic and negative emotions were two most common reactions by the individuals when informed about the STI status.

When participants were asked what else they did about their illness, the vast majority (82.5%; n=104) of participants reported that they did nothing. A minority (8.7%; n=11) of the respondents administered self-medication, while a small minority (2.4%; n=3) consulted or received treatment from someone other than at the clinic site. One (0.8%) respondent indicated "other" and there were seven (5.6%) participants who did not respond at all.

Table 8. Responses of participants received from individuals concerning their STI status

Reactions	Frequency	Percentage
Advised to seek treatment at clinic	57 (1)	61.9 (63)
Expressed negative emotions	14 (-)	15.2 (-)
Supportive	7 (-)	7.6 (-)
No reaction	4(2)	4.3 (6.5)
Other	E3(2) ITY of th	4.3 (14.1)
Advised self-medication	E3C-311 Y of th	3.2 (-)
Advised to change behaviour	FBON CAPI	3.2 (-)
No response	2 (-)	2.1 (-)
Total	92 (104)	100 (113)

Participants were asked whether they sought any alternative treatment prior to attending the clinic. The overwhelming majority (86.3%; n = 107) did not go for any alternative treatment before coming to the clinic. Seventeen (13.7%) respondents made use of alternative treatment. Two (1.6%) participants did not respond to the question.

The proportion (13.7%; n = 17) that used alternative treatment was asked where they went for treatment. Table 9 shows that most participants consulted private doctors followed by pharmacists.

Table 9. Alternative sites used to treat STI symptoms

Sites	Frequency	Percentage	
Private doctor Pharmacy Other clinic Other No response Total	7 (-) 4 (2) 3 (-) 2 (-) 17 (19)	41.1 (-) 23.5 (35.2) 17.6 (-) 11.7 (-) 5.8 (-) 100 (111.7)	

The overwhelming majority (76.4%; n=13) of participants who first sought treatments elsewhere, received treatment in the form of pills. Two (11.7%) respondents indicated "other", while the remainder (11.7%; n=2) did not respond. Four (26.6%) additional responses were given: one (6.6%) respondent stated that medication was given, and three (20%) indicated that they received an injection.

Those participants who had received alternative treatment were asked what the outcome of the treatment was. Table 10 shows that symptoms mostly stayed the same or disappeared.

Table 10. Outcome of treatment of STI symptoms treated at different medical sites

Outcome	Frequency	Percentage
Symptoms stayed the same	8	47
Symptoms went away	7	41.1
Symptoms got worse	1	5.8
No response	1	5.8
Total	17	100
		:

The final question posed to participants who sought treatment elsewhere related to their reaction to the treatment they received. The majority (52.9%; n = 9) had a negative experience, with 35.2% (n = 6) participants indicated that they had a positive experience. Two (11.7%) participants did not respond to the question.

4.1.2 Significance of cross-tabulations

The cross-tabulations on all questions failed to reveal any significance differences between males and females nor between rural and urban populations nor between STI populations from provinces with low prevalence and high prevalence rates of STI.

4.2 Qualitative results

The data that presented here was derived from the 28 in-depth interviews that were conducted with STI patients. Data are presented under the dominant themes that emerged. The actual transcripts of the respondents are included. At the end of each transcript, a code is provided. This code indicates the order in which the participant was interviewed, the clinic site where the interviewed took place, and the gender of the participant.

Main theme 1: Notification of disease to others

The main theme that emerged was eventually that of non-disclosure. For example the following was said by many respondents:

I will be the only person who knows this. It will be difficult to tell someone else (2bM).

No, when you tell people about your problem they go about telling others (5aW)

The thing is I never spoke about it, as I was here before I was scared to tell them. I never told anybody about it, I was scared (7bW).

Main theme 2: The use of alternative remedies

Most people reported using alternative remedies such as traditional medicines as well as vaginal douching with household products. This is illustrated in the following excerpts;

People use traditional herbs to take them [lice] out. When they are on the outside, for example the armpits, you have to wash with Jayes fluid (1bM)

To avoid the problem [condom falling off] I decided to clean myself every time after I've had sexual intercourse by using laxatives or herbs (7aW).

People also drink 'magazini' or 'dip' or even laxatives, because they think it will help cleanse even the womb and bladder...'magazini' does help, it really cleanses you from within, even if you have not been having your periods for some time, now once you drink 'magazini' you end up having them...I only know they use things like 'dip', 'magazini' or even Epsom Salts, which is a laxative...when some women wash they use Bicarbonate of Soda, they say it brings out the discharge, they also say it helps for the rash...there are so many methods, some say you can insert Disprin in your vagina, then afterwards you can put on a pad (7dW).

Main theme 3: Public vs. Private care

What also emerged was that the choice of treatment setting was determined by financial cost. There were respondents who sought treatment at the clinics because they could not afford private care or they thought that they would be referred to a doctor. This is illustrated by the following excerpts;

At home we were all on my father's medical aid, so I went to the doctor who helped me (2bM).

The thing is whenever I am sick I go to a doctor, but now I don't have money so I decided to come here [clinic] (4cM).

I thought if I came to the clinic they would refer me to a doctor and then I did not have the money to go there. So now they have doctor here at the clinic one can come (7bW). I went to a doctor in town, he gave me the pills which I was given here at the clinic...I then stopped going to the doctor and I decided to come here because I can get medication free here (8cW).

Main theme 4: Treatment of only one partner

A major problem that hinders effective management and control of STIs is the apparent unwillingness of certain partners of STI patients to seek treatment. This problem is capture in the following excerpts;

UNIVERSITY of the

I telephoned him so that we could come together for treatment. He just promised me that he would come, but he never came (5aW).

He gives me a hard time. I was given several treatments but he refused to come to the clinic (5bW).

He said he will not come to the clinic, he will buy some medication from the chemist...he said he will not go to the clinic (7bW).

He will refuse to come here because he will think about being forced to use condoms (7dW).

When I asked him to come to the clinic so as to get the same injection that I am getting he said he would not be able to do so, he became evasive and said a lot of other things (laughs)...he said he does not want to be seen by people when coming to the busy-bodies

who will want to know as to why he is at the clinic, considering that the clinic is mostly used by women. So he saw it best to go to the doctor (8cW).

Main theme 5: Traditional Healers

There were respondents who sought treatment from traditional healers. This is illustrated by the following excerpts;

I consulted a certain women (traditional healer) who told me it is 'lethopa'. She gave me a powder to smear on my vagina but it did not help at all (5aW).

When he drank the herbal mixture he asked me to drink it. What else could I do, he strongly believes in traditional healing...the adults say a reason why one has an STI is because we do not use certain herbs, at home we do use the herbs (7aW).

Most men go to the traditional healers; others start in the clinic, then afterwards they go to the traditional healers because they are good to treat men who suffer from STIs (10cW).

Main theme 6: Positive perceptions of traditional healers

There were respondents who sought treatment from traditional healers and who expressed a positive attitude towards this form of treatment choice. This is captured in the following excerpts;

Coming back to the issue of him not getting treated, he once said to me that there's a possibility that what he has does not need western or doctor's medication. He suspects it's something which was done on purpose by someone (1L).

I: Does African traditional medicine help at times?

Yes it helps because it can heal 'lethopa'

I once had it [drop]...my mother took me to another lady and I was given a herbal mixture to drink...Yes, I was cured...(5aW).

I did not. I've never heard that one can go to a healer for a discharge treatment...some of the healers can treat these things [drop] I really do not see a person going to a healer and saying that she has a discharge (7bW).

Main theme 7: Negative perceptions of traditional healers

There were participants who expressed negative views towards utilising traditional healers. For example, some respondents said the following:

They say that these healers can cure the STIs but I don't trust this (8bW).

They are given herbs to drink. I don't think it is possible to treat STIs or just diseases with herbs. These people pay for these herbs and yet they don't work...

I: Have you ever been to a traditional healer for an STI?

No...a friend of mine once offered me some herbal mixture but I refused to drink it because I prefer to come here to the clinic or to the doctor (8cW).

I will go to the clinic because traditional healers are using another treatment which is different from the treatment that is used in the clinics. If I go to the clinic I must be sure that I am going to use the treatment of traditional healers. That is my own belief, I cannot mix these two treatments, and I have not got the proof of traditional healers...my health is very important, so that is why I use the clinic treatment because I heard that it helps (10cW).

4.3 Chapter summary

In this chapter the results of both the quantitative and qualitative data were presented. The quantitative data from the semi-structured interview schedule were divided into two parts. Firstly, results were provided for participants', who had had previous STI experiences. Secondly, the results of participants' current STI experiences were presented. Results from the cross tabulations revealed no

significant differences between gender or between rural and urban populations. The qualitative data was obtained from the 28 in-depth interviews that were conducted with STI patients. The data was presented under the dominant themes that emerged.



CHAPTER 5

DISCUSSION

5.1 Introduction

In this chapter the results of the present study are summarised and explained.

The limitations and implications of this study, and suggestions for future research are provided. The chapter concludes with a summary of the entire thesis.

5.1 Summary of main findings

Over half of the sample reported a previous episode of STI. All participants were symptomatic when they presented at the clinic sites. The most popular reason given for attending the clinic sites was convenience. More females than males attended the clinics. The majority of participants reported that they waited less than 7 days before they presented at the clinic sites. Sex, age, education and geographical setting (urban or rural) were not significantly associated with delay in health care-seeking. Most participants had negative emotions regarding their illness. Few participants engaged in alternative treatment strategies. Private doctors were the most common alternative choice where treatment was sought. Most sought treatment at clinics. The majority of participants notified others about their illness. In most cases it was their sexual partner.

5.2 Explanation of main findings

5.2.1 Previous episodes of STI

More than half of the participants in this study had previously suffered from an STI. Meyer-Weitz et al. (2000) reported similar findings. This could suggest that the treatment of STI patients as a means of controlling STIs is not effective enough. The problem appears to reside in the lack of treatment received by partners of the infected participants. The practice of unprotected sex also appears to be a contributing factor in the repeated episodes of STIs. This is echoed in Paxton et al.'s (1998) study that found that participants did not do anything to prevent the transmission of STIs. More than half reported sexual intercourse, and only a small percentage of men and women used condoms while they had symptoms. Moses et al. (1994) also found that women were more likely to continue to have sex while symptomatic. STTY of the

Evans and Lambert (1997) found that the biggest problem in terms of effective clinical management of STIs concerned treatment compliance. This was not evident in this study with the overwhelming majority of participants reporting that they completed their treatment.

What appears to be a major problem in the management of STIs is the treatment of the partners of STI patients. This problem emerged from the focus group discussions. Most men refused or were reluctant to go for treatment or have themselves examined for an STI infection. It would seem that men viewed the clinics as the domain of females. It could be that the majority of the men are

unable to afford alternative treatment and do not go to the clinics. It is therefore possible that participants will eventually again have episodes of STI.

5.2.2 Current experiences of STIs

5.2.2.1 Symptomatic presentation of symptoms

All participants were symptomatic when they presented at the clinic sites. It appears that most symptoms were severe enough to necessitate seeking treatment. According to the health belief model, these symptoms act as the internal signals that cue participants to seek treatment. Participants evaluated the consequences of leaving their symptoms unchecked compared to seeking treatment. This would suggest that in this study the risk perceptions acted as important determinants of health behaviour.

The concern is that studies have shown that most STI infections are asymptomatic (Paxton et al., 1998; Grosskurth et al., 1996). The fact that none of the participants were asymptomatic represents a problem. It would suggest that the spread of the disease is left largely unchecked. This makes effective control of STIs virtually impossible. People should be made aware of risky sexual behaviours that could lead to STI infection. The social norm that should be adopted is for people who suspect or are in situations that might possibly lead to STI infection to go for screening.

5.2.2.2 Reasons for attending clinic

The most popular reason given for attending the clinic site was convenience, followed by the belief that the clinic could help. The clinics might have been convenient because of their close proximity to participants' homes.

Surprisingly, as most participants were unemployed, one would have expected participants would cite that clinics were primarily chosen because treatment was free. It did however emerge from the focus groups that some participants sought treatment at the clinics due to financial constraints. If participants were able to afford it, then private medical care would be the preferred choice.

The fact that a person's employment situation affects one's health care-seeking behaviour is illustrated in Evans and Lambert's (1997) study. For the participants their study loss of time equalled financial loss. They therefore sought help from the private sector, which provided greater flexibility over the public sector. The hospitals were in most cases further and consultations involved a long wait.

Almost two thirds of the sample used in the quantitative phase of the present study consisted of females. A similar sample composition was found in the Moses et al. (1994) study. They found that women were more likely to have sought treatment in public-sector facilities. Men were more likely to have sought treatment in the informal or private sectors. The main reasons given by men for having sought care in the private medical or informal sectors were convenience of access and perceived greater privacy.

A similar pattern emerged in this study. Male partners of STI patients, view the clinic as a treatment option for females. They refused to go for treatment at the clinic. They preferred to seek treatment at private doctors and at pharmacies. An

explanation for this behaviour can be found in the Mehta et al.'s (2000) study, where participants indicated that they were embarrassed if people they knew thought that they had an STI. Others reported that they would be embarrassed if people knew they had attended an STI clinic.

5.2.2.3 Duration of symptoms

The majority of participants in this study reported that they waited less than 7 days before they presented at the clinic sites. These findings are similar to those in studies conducted by Meyer-Weitz et al. (2000), Pitts et al. (2000), Mehta et al. (2000) and Hook et al. (1997). However, participants delayed less as compared to participants in studies conducted by Pitts et al. (1999) and Faxelid et al. (1994). It might be that symptoms experienced by participants in this study were much more severe, and hence the quicker response behaviour for health care. Evans and Lambert (1997) also found varying delays in treatment seeking among participants according to the how painful the symptoms were.

In this study sex, age, education and geographical setting (urban or rural) were not significantly associated with a delay in seeking health care. Meyer-Weitz et al. (2000) also found no significant difference relating to delay in seeking health care. These findings are contrary to studies conducted by Moses et al. (1998) and Fortenberry (1997), which found that women waited significantly longer than men to attend clinic sites.

Among the factors that could have possibly influenced the lack of any significance in the present study might be that the sample size of the present study was too small and that the distribution of sexes was disproportionate.

Alternatively, the findings may well suggest that delay in health seeking in the sample is similar, irrespective of age, gender or location.

5.2.2.4 Reaction to symptoms

Only a third of the participants reacted positively towards their STI symptoms. This proportion of the sample sought treatment for their symptoms. Possibly this health care-seeking behaviour is as a result of previous experience of an STI episode. Due to these previous experiences, participants might be able to identify symptoms and are aware of the implications if an STI is left untreated. Alternatively symptoms might have been severe enough to warrant quick treatment seeking.

Another explanation, according to the commonsense models of illness, is that when the participants experience symptoms, they seek a label for the illness, and take action such as self-care or seek medical care. They expect the illness to disappear with treatment.

The most common reaction participants experienced as a result of their illness was negative. It could be that they were ashamed to have STI symptoms. This could result in delay in health care-seeking. It might also make it difficult for individuals to inform others about their STI symptoms, and it might lead them to carry the burden of the disease on their own.

5.2.2.5 Alternative treatment strategies

A very small percentage of the sample adopted alternative treatment strategies. This could account for the shorter delay in treatment seeking at the clinic sites as compared to other studies. Previous studies have found that participants who resorted to self-treatment were more inclined than others to wait longer before seeking health care (Evans & Lambert, 1997; Meyer-Weitz et al., 2000).

There were indications from the focus group discussions that participants made use of traditional healers. This was also evident in the quantitative data. It might be that participants were reluctant to indicate that they sought treatment from traditional healers, because their symptoms persisted.

Moses et al. (1994) found that men were likely to seek treatment at pharmacies, traditional practitioners, drug peddlers and others. This could explain why there were fewer men than women in the present study. It would also account for the smaller number of alternative treatment strategies employed by the sample.

Seeking treatment at a private doctor was the most common alternative treatment strategy to the clinic. Choi et al. (1999) found the major reasons given for seeking treatment from the doctor were a faster cure, better transportation and greater anonymity.

Self-treatment with medicines purchased directly from pharmacies was a second most common practice. Few home remedies or traditional medicines were used. Evans and Lambert (1997) found that the above strategies were mainly for the management of mild or chronic complaints. As suggested earlier, the symptoms experienced by the majority of the participants might have been severe enough to warrant professional treatment.

5.2.2.6 Notification of illness

The majority of participants in this sample disclosed their illness to a second party. In most cases it was either their partner or spouse. Most studies reviewed did not record this phenomenon. One study found that a very small percentage notified their partners (Paxton, 1998).

Most participants received a positive response from the individuals they informed about their illness. The message that they received was that they should seek treatment. According to the theory of reasoned action, these messages act as the subjective norms. This refers to a response to external pressures. People respond to how others expect them to behave.

About a third of the sample informed their parents or friends. This is low when one considers that just under half the sample is still very young. A possible explanation for this might be that they were afraid of the possible negative reaction they might get from parents and friends. Most participants indicated that they had a regular sexual partner, which could explain the high percentage of disclosure to partners.

The data from the focus groups were sometimes conflicting. Some participants mentioned that they would not disclose their illness because they were afraid that more people would eventually know that have an STI.

It might be that most participants who experienced negative emotions towards their symptoms were ashamed and in all likelihood would not want to disclose it.

This could result in delay in treatment seeking. Participants might not do anything about their symptoms and hope that it would disappear. Hook et al.

(1997) found this to be the commonest reason cited for delaying STI clinic attendance.

5.3 Limitations of the study

This study analysed an existing database. The sample composition for the quantitative part of the study was too small and was skewed towards females, which might have limited the significance of the statistical computations. This is one of the disadvantages of secondary analysis. One cannot correct the mistakes made in the design of the research instrument. Furthermore, the sample comprised mainly of participants whom attended Primary Health Care centres. STI patients who attended other health care sites, such as private doctors or traditional healer, were not included in this study. The health care-seeking behaviours of that section of the population might differ to those sampled.

UNIVERSITY of the

5.4 Suggestions for future research RN CAPE

Possibilities should be explored to conduct a large scale national study using a large random sample. The sample should included patients seeking care at both private and public institutions. This would provide a clearer picture of the extent of STIs and would also allow a comparison to be made between the health care-seeking behaviour of patients utilisation the different health care settings.

Studies should also be carried out to evaluate current syndromic management approach. This could be useful in identifying the weaknesses of the approach and to consolidate its strengths.

5.5 Implications of the present finding

More than half of the respondents indicated that they had had a previous STI. This would suggest that the current preventative programmes or syndromic management approach are not as successful as they could be. One of the major reasons for the current STI epidemic has been the failure of clinicians to ensure that the sexual partners of patients with STIs are examined and treated. This should also include previous sexual partners. Condom promotion, especially among males, should be encouraged. Women stated that partners refused to use condoms.

STI infection is largely asymptomatic. Strategies must be developed that are geared to treat and target this problem. Opportunities to identify and treat asymptomatically infected persons could be carried out in different health-care settings when persons are present for other problems.

As mentioned earlier, a strong link between STIs and HIV has been discovered. Patients with an STI are at a greater risk of contracting HIV infection. Thus by preventing and controlling the spread of STIs, one prevents and controls the spread of HIV.

5.7 Conclusion

The health care-seeking behaviour of the majority of the sample used in this study was generally positive. Most participants sought treatment in a relatively short period after experiencing the symptoms. No significant health care-seeking differences were found for either gender or the geographical locations where the people lived. The area of concern is the high number of participants whom have

had repeated episodes of STI. This is a concern that has to be addressed. Guidelines as layed out in the syndromic management approach should be adhered to more strictly.

This study has shown that one of the obstacles to effective STI control is the apparent lack of treatment of the sexual partners of STI patients. Initiatives should be undertaking to remove the notion that public health care settings, such as clinics, are exclusive treatment sites for females. Males should be encouraged to make use of these facilities and in this way STI control could be improved. It is important to remember that by preventing and controlling the spread of STIs, one prevents and controls the spread of HIV.

UNIVERSITY of the WESTERN CAPE

REFERENCES

Abdool Karim, S.S. (1994). Editorial: challenges to the control of sexually transmitted diseases in Africa. <u>America Journal of Public Health</u>, <u>84(2)</u>, 1981.

Adler, C. & Qulo, O. (1999) HIV/AIDs and STIs. In N. Crisp & A. Ntuli (Eds), South African Health Review (pp. 301-314). Durban: Health Systems Trust Ajzen, I. & Fishbein, M. (Eds). (1980). Understanding attitudes and predicting social behaviour. New Jersy: Prentice-Hall.

Bernard, L.C. & Krupat, E. (1994). <u>Health psychology</u>. <u>Biopsychical factors in health and illness</u>. New York: Harcourt Brace College.

Bannister, B.A., Begg, N.T. & Gillespie, S.H. (1996). <u>Infectious disease</u>. London: Blackwell Science.

Bannister, P., Burman, E., Parker, I., Taylor, M. & Tindall, C. (1994). Qualitative methods in psychology. A research guide. Buckingham: Open University Press.

Baum, A., Gatchel, R.J. & Krantz, D.S. (1997). An introduction to health psychology. (Third ed.). New York: McGraw-Hill.

Bryman, A (1994). Quantitative and qualitative research: further reflections on their integration. In J. Brannen (Ed.), <u>Mixing methods</u>: <u>qualitative and</u> <u>quantitative research</u> (pp. 57-78). London: Sage Publications.

Bryman, A. & Cramer, D. (1997). Quantitative data analysis with SPSS for windows. London: Routledge.

Buvè, A., Laga, M. & Piot, P. (1993). Where are we now? Sexually transmitted diseases. <u>Health Policy and Planning</u>, <u>8</u>(3), 277-281.

Cares, W., Farley, T. & Rowe, P. (1985). Worldwide patterns of infertility: is

Africa different? Lancet, 2, (596-598).

CDC (1998). HIV prevention through early detection and treatment of other sexually transmitted diseases-United States: recommendations of the advisory committee for hiv and STI prevention. Morbidity and Mortality Weekly Report, July 31. Centers for Disease Control and Prevention.

Chadwick, B.A., Bahr, H.M. & Albert, S.L. (1984). Social science research methods. New Jersey: Prentice-Hall.

Choi, K., Zheng, X., Zhou, H., Chen, W. & Mandel, J. (1999). Treatment delay and reliance on private physicians among patients with sexually transmitted diseases in China. <u>International Journal of STI & AIDS</u>, <u>10</u>(5), 309-315.

Cohen, M.S. (1998). Sexually transmitted diseases enhance HIV transmission: no longer a hypothesis. <u>The Lancet</u>, <u>351(3)</u>, 5-7.

Colvin, M. (2000). Sexually transmitted infections in southern Africa: a public crisis. South African Journal of Science, 96(6), 335-340.

Colvin, M. (1997) Sexually transmitted diseases. In P. Barron (Ed.), <u>The South African Health Review</u> (pp. 203-206). Durban: Health Systems Trust

Crabbe, F., Carsauw, H., Buve', A., Laga, M., Tchuppo, J. & Trebucq, A. (1996). Why do men with urethritis in Cameroon prefer to seek care in the informal health sector? Genitourinology Medicine, 72(3), 220-222.

Department of Health (1997). <u>First report: national STI/HIV/AIDs review</u>. Pretoria: Department of Health.

Department of Health (2001). <u>Annual report 2000/2001</u>. Pretoria: Department of Health.

Ellerbeck, E.F., Vlahov, D., Libonati, J.P., Salive, M.E. & Brewer, T.F. (1989).

Gonorrhea prevalence in Maryland state prisons. Sex Transm Dis, 16, 165-7.

Evans, C. & Lambert, H. (1997). Health-seeking strategies and sexual health among female sex workers in urban India: Implications for research and service provision. <u>Social Science Medical</u>, 44(12), 1791-1803.

National Institute of Allergy and Infectious Diseases (NIAID) (2000, October).

Chlamydial Infection. Fact Sheet.

Faxelid, E., Ndulo, J., Ahlberg, B.M. & Krantz, I. (1994). Behaviour, knowledge and reactions concerning sexually transmitted diseases:

Implications for partner notification in Lusaka. East African Medical

Journal, 71(2), 118-121.

Fishbein, M. & Ajzen, I. (1975). <u>Belief, attitute, intention, and behaviour: An introduction to theory and research</u>. Reading: Addison-Wesley.

Fortenberry, J.D. (1997). Health care seeking behaviors related to sexually transmitted diseases among adolescents. <u>American Journal of Public Health</u>, <u>87</u>(3), 417-420.

Gaydos, C. et al., (1998). Chlamydia trachomatis infections in female military.

New England Journal of Medicine, 339(11), 739-744.

Gerbase, A.C., Rowley, J.T., Heymann, D.H., Berkley, S.F. & Piot, P. (1998).

Global prevalence and incidence estimates of selected curable STIs. <u>Sexually</u>

<u>Transmitted Infections</u>, <u>74(1)</u>, 12-16.

Grimwood, A., Karpakis, B. & McNab, M. (1996). Syndromic approach to the treatment of sexually transmitted diseases: a manual of the Western Cape. Cape Town: Department of Health, Provincial Administration of the Western Cape. Grosskurth, H., et al. (1995). Impact of improved treatment of sexually

transmitted diseases on HIV infection in rural Tanzania: randomised trial.

<u>Lancet</u>, 346, 530-536.

Grosskurth, H. et al. (1996). Asymptomatic gonorrhea and chlamydial infection in rural Tanzanian men. <u>BMJ</u>, <u>312</u>, 277-80.

Hall, D. & Hall, I. (1996). <u>Practical social research</u>. <u>Project work in the community</u>. London: Macmillan.

Hakim, C. (1982). Secondary analysis in social science. A guide to data sources and methods with examples. London: George Allen & Unwin. Health System Trust (1997). Our children living in a world with Aids. HST UPDATE, 30.

Hook, E.W. et al. (1997). Delayed presentation to clinics for sexually transmitted diseases by symptomatic patients: A potential contributor to continuing STI morbidity. <u>Sexually Transmitted Diseases</u>, 24(8), 443-448.

Huberman, A.M. & Miles, M.B. (1994). Data management and analysis methods. In N.K. Denzin & Y.S. Lincoln (Eds), <u>Handbook of qualitative research</u> (pp. 428-444). London: Sage Publications.

Mabey, D. (2000). Interaction between hiv infection and other sexually transmitted diseases. <u>Tropical Medicine & International Health</u>, <u>5</u>(7), 32-36.

McCoy, D. (1995). Assessing the management of STIs in a rural health district of KwaZulu. Unpublished M. Phil. thesis, University of Cape Town.

Mehta, S.D., Shahan, J.D. & Zenilman, J.M. (2000). Ambulatory STI management in an inner-city emergency department: descriptive epidemology, care utilization patterns, and patient perceptions of local public STI clinics.

<u>Sexually Transmitted Diseases</u>, <u>27</u>(3), 154-158.

Meyer-Weitz, A., Reddy, P., Van den Borne, H.W., Kok, G. & Pietersen, J. (2000). The determinants of health care seeking behaviour of adolescents attending STI clinics in South Africa. <u>Journal of Adolescence</u>, <u>23</u>, 741-752.

Moomal, Z. (1998). Data sharing [and archiving] for research, teaching and development. South African data archive proceedings workshop on "data sharing for research capacity development" <u>HSRC</u>, 62-87.

Moore, S., Rosenthal, D. & Mitchell, A. (1996). Youth, aids and sexually transmitted diseases. London: Routledge.

Moses, S. et al. (1994). Health care-seeking behaviour related to the transmission of sexually transmitted diseases in Kenya. <u>American Journal of Public</u>
Health, 84(12), 1947-1951.

Ogden, J. (2000). <u>Health psychology</u>. <u>A textbook</u> (2nd ed.). Philadelphia: Open University Press.

Paxton, L.A., Kiwanuka, N., Nalugoda, F. Gray, R. & Wawer, M.J. (1998).

Community based study of treatment seeking among subjects with symptoms of sexually transmitted disease in rural Uganda. <u>British Medical Journal</u>, <u>17</u>(7173), 1630-1631.

Pham-Kanter, G.B.T., Steinberg, M.H. & Ballard, R. C. (1996). Sexually transmitted diseases in South Africa. <u>Genitourinology Medicine</u>, 72, 160-171.

Phillips, R.S., Hanff, P.A., Wertheimer, A. & Aronson, M.D. (1988). Gonorrhea in women seen for routine gynecologic care: criteria for testing. <u>American</u>

Journal of Medicine, 85, 177-82.

Pitts, M. (1996). The psychology of preventive health. London: Routledge.

Pitts, M.K., Woolliscroft, J., Cannon, S. & Singh, G. (2000). Factors influencing

delay in treatment seeking by first-time attenders at a genitourinary clinic.

<u>International Journal of STI & AIDS</u>, 11(6), 375-378.

Pitts, M., McMaster, J., Mangwiro, O. & Woolliscroft, J. (1999). Why do people delay obtaining treatment for an STI? Perpectives from a developing country.

Psychology, Health & Medicine, 4(1), 73-82.

Pretorius, T.B. (1995). <u>Inferential statistics: hypothesis testing and decision</u>
making. Cape Town: Percept Publishers.

Roberts, R.B. (1999). Sexually Transmitted Diseases. Cornell University Medical College.

Robson, C. (1993). Real world research. A resource for social scientists and Practioner-researchers. Oxford: Blackwell.

Rockwell, R.C. (1998). Data sharing [and archiving] for research, teaching and development. South African data archive proceedings workshop on "Data sharing for research capacity development." <u>HSRC</u>, 41-48.

Sheridan, C.L. & Radmacher, S.A. (1992). <u>Health psychology</u>. <u>Challenging the biomedical model</u>. New York: Wiley.

Setel, P., Lewis, M. & Lyons, M. (Eds) (1999). <u>Histories of sexually transmitted</u> diseases and hiv/aids in sub-saharan Africa. London: Greenwood Press.

Terry, D.J., Gallois, C. & McCamish, M. (1993). The theory of reasoned action and health care behaviour. In D.J. Terry, C. Gallois & M. McCamish (Eds). The theory of reasoned action: its application to aids-preventive behaviour (pp. 1-29). Oxford: Pergamon Press.

WHO (1994). Global programme on AIDS: management of sexually transmitted diseases.

WHO (2001). Global prevalence and incidence of selected curable sexually transmitted infections: overview and estimates.

Wilkinson, D. & Wilkinson, N. (1998). HIV infection among patients with sexually transmitted diseases in rural South Africa. <u>International Journal of STI & AIDS</u>, 9(12), 736-739.





APPENDIX A: DEMOGRAPHIC QUESTIONNAIRE

4.	BIOGRAPHICAL INFORMATION	
1	Sex of patient Female Male	1
2	How old are you? Under 15 16-25 26-40 41-60 Over 60	2
3	What is your home language?	3
4	Race of patient Coloured/Indian White Other (specify)	4
5	How much schooling have you had? None Primary Secondary Tertiary	5
6	Are you employed? Yes No [If yes ask: else skip to Q8]	6
7	What is your present job	7
8	When you are not working, who supports you? Spouse Partner Parents Relative Other (specify)	8
9	What is your marital status?	9

Cohabiting Separated Divorced Widowed Single [If not married/cohabiting ask; else skip to Q12]	
10 Do you have a regular sexual partner? Yes No [If yes ask; else skip to Q12]	10
11 How long have you been together? Under 1 year 1-5 years 6-10 years Over 10 years	11
12 How many other sexual partners have you had in the past year? 1	12
13 How many children do you have? 1	13

APPENDIX B: HEALTH CARE-SEEKING BEHAVIOUR

QUESTIONNAIRE

C.	HEALTH-SEEKING BEHAVIOUR Is this first time you have the illness which brought you to the clinic today?	C1
	Yes No [If yes skip the next section and go to question 11] [If no, please ask the following]	
2	How many previous times have you had the symptoms which brought you to the clinic today? Once	2
	Twice Three or more times	
3	[For the last episode before this one, ask the following] How long ago was it that you last had these symptoms?	3
	Less than 1 month ago 1-6 months ago 6-12 months ago	
	More than a year ago	
4	Did you go to anyone for treatment? Yes No [if yes ask; else skip to Q11]	4
5	Who did you go for treatment? Private doctor Traditional healer Other clinic	5
	Pharmacy Other (specify)	
6	What treatment was given? Pills Injection Other (specify)	6

7	Did you complete the treatment? Yes No	7
8	Was your partner treated? Yes No	8
9	What did you like/not like about this treatment?	9
10	Why do you think the symptoms have returned?	10
	[For this visit to the clinic, ask the following]	
11	What are the symptoms which brought you to the clinic today?	11
12	Why did you decide to come to this clinic for treatment?	12
13	How long have you had these symptoms? Less than 7 days 8-14 days 15-30 days More than 1 month	13
14	What was your reaction to this illness?	14
15	Did you tell anyone about your illness? Yes No If yes ask; else skip to Q18]	15
16	Who did you tell? Spouse Partner Parent Relative Friend Other (specify)	16
17	What was their reaction?	17

18 What else did you do about your illness?	18
19 Did you go to anyone for treatment before coming to this clinic? Yes No [If yes ask; else skip to QD 1]	19
20 Who did you go to for treatment? Private doctor Traditional healer Other/this clinic Pharmacy Other (specify)	20
21 What treatment was given? Medication Injection	21
Other (specify) 22 What was the outcome of this treatment? Symptoms went away	22
Symptoms stayed the same Symptoms got worse 23 What did you like/not like about this treatment?	23