

**EVALUATING THE QUALITY OF CARE FOR
SEXUALLY TRANSMITTED INFECTIONS (STI)
IN 14
PRIMARY HEALTH CARE (PHC) FACILITIES IN
UMJINDI LOCAL MUNICIPALITY,
MPUMALANGA
PROVINCE**

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A mini-thesis submitted in partial fulfilment of the requirements for the degree of Masters in Public Health (MPH), in the School of Public Health, University of the Western Cape.

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KEY WORDS

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Evaluation

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Epidemic



ABSTRACT

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The overall aim of this study was to evaluate quality of STI services in Umjindi Local Municipality. A concrete objective was to investigate the health system issues that may have a negative impact in the provision of quality STI services in the local municipality. These include accessibility of the STI services to the community, training of health workers in syndromic management, availability of necessary equipment and supplies for STI management, turn-around time for blood results (RPR), and infrastructure of the facilities.

The study was a descriptive cross-sectional study, using both qualitative and quantitative methods. All PHC facilities (14) in the local municipality participated in the study. These were 9 fixed clinics, 4 mobile clinics and 1 community health centre. A clinician was interviewed in each facility. The DISCA tool was used for data collection and was supplemented with in-depth interviews with clinicians, observations and record reviews.

The main findings included: the quality of STI services provided in the district was sub-optimal due to lack of training, lack of support both from the clinic supervisors and Local Service Area (LSA) health management team, and poor infrastructure. Some facilities lack the necessary equipment and supplies, as well as the necessary skills to provide quality STI services. In addition, STI management was not necessarily seen as an entry point into the comprehensive HIV/AIDS programme. Furthermore, utilisation of STI services by the community was very low.

Clearly, there was interest shown by clinicians in the provision of quality STI services, however, the environment in which they work was not conducive to sustaining that interest.

In conclusion, although the principles of syndromic management are well understood by most clinicians in the local municipality, there are no systems in place to support the use of the guidelines. In addition, there are no reliable equipment and supplies, as well as the necessary skills to provide quality STI services to clients and their partners.

DECLARATION

I declare that Evaluating the Quality of Care for Sexually Transmitted Infections in 14 Primary Health Care facilities in Umjindi Local Municipality, Mpumalanga province, is my own work, that it has not been submitted for any degree or examination in any other university, and that all the sources that I have used or quoted, have been indicated and acknowledged by complete references.

Witness Sakumzi Ntaya

November 2004

Signed:



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ABBREVIATIONS

AIDS	Acquired Immuno-deficiency Syndrome
ANC	Ante Natal Care
CDC	Centre for Disease Control
DHIS	District Health Information Systems
DISCA	District STI Quality of Care Assessment Tool
DoH	Department of Health
GUD	Genital Ulcer Disease
HIS	Health Information Systems
HIV	Human Immuno-deficiency Virus
HST	Health Systems Trust
IEC	Information, Education and Communication
LAP	Lower Abdominal Pain
LSA	Local Service Area
MUS	Male Urethral Syndrome
NDoH	National Department of Health
PHC	Primary Health Care
PID	Pelvic Inflammatory Disease
PMTCT	Prevention of Mother-to-Child Transmission
RPR	Rapid Plasma Reagin
STIs	Sexually Transmitted Infections
VCT	Voluntary Counselling and Testing
VD	Vaginal Discharge
WHO	World Health Organisation



CHAPTER 1 - INTRODUCTION

1.1 Introductions and Problem Statement

Curable STI represent a large burden of disease worldwide with an annual incidence of about 333 million case, as confirmed by Jackson et al (2004:167). CDC (1998:6) states that eighty six percent of the world's burden of STI occurs in the developing world. The biggest problem is among the poorest nations of the world, many of which are found in sub-Saharan Africa, where the highest rates of new cases per 1 000 population are found. WHO estimates that in sub-Saharan Africa,

“About 69 million new cases occur per year, in a population of 269 million adults aged 15 – 49 years, resulting in an incidence rate of 256 per 1000” (WHO 1998:9).

As confirmed by the NDoH (1998:41), in South Africa STIs constitute a major public health challenge, as it is estimated that 11 million STI cases occur annually. Routine HIV and Syphilis surveillance also indicates high rates of these infections countrywide. Furthermore, the 1998 DoH South Africa Demographic and Health Survey data indicate that high rates of curable STIs have been documented with as many as 10 – 12% of adults of reproductive age reporting STI symptoms within the previous three-month period. This study is critically important because, as indicated by Moodley,

“The public health importance of STIs has been increasingly underscored by epidemiological and biological evidence that they act as co-factors in the sexual transmission of HIV.” (Moodley 2002:13).

Individuals who are infected with STIs are at least 2 to 3 times more likely than uninfected individuals to acquire HIV if they are exposed to the virus through sexual contact. The high rates of STIs that are seen in the sub-Saharan Africa are associated with the explosive spread of HIV in the region. This close association of STIs with increased HIV transmission has placed STI control high on the global public health agenda; hence the control of STIs is a public health priority. Grosskurth et al (1995:530 – 536) reveal that data from some studies indicate that treatment of curable STIs reduces HIV transmission. Therefore, effective STI control is critically important in reducing the extent of the HIV epidemic in countries with high prevalence rates.

The National HIV/AIDS/STI Strategic Plan 2000 – 2005 prioritises the effective management of patients with STIs. The key focus of the national strategy for the control and management of STIs is on syndromic STI management at Primary Health Care (PHC) facility level. Mullick et al define syndromic management as,

“A multifaceted strategy for STI control that includes the recognition of symptoms by the patient, and an effective treatment regime that comprehensively covers the possible aetiological agents for a defined syndrome.” (Mullick et al 2000:4).

National STI Treatment Guidelines that are evidence-based are commonly used at PHC level. In addition, a ‘PHC Package,’ which outlines norms and standards for prevention and management of STIs in the public sector facilities, has been developed. This includes the need for facilities to have annual quality of care reviews, and staff to be trained in the management of STIs and HIV/AIDS/STI counselling.

These national policy documents, strategic guidelines and STI programme protocols, have been used as a framework and basis upon which the study was based. It was hypothesised that the quality of care for STI services that is provided by the 14 PHC facilities in Umjindi Local Municipality is inadequate. The primary goal of the study was to assess the quality of care of STI services within the 14 PHC facilities.

Data was collected from 14 PHC facilities through an existing District STI Quality of Care Assessment Tool (DISCA), which is a tool that is used at clinics to assess the quality of STI management. As confirmed by Coetzee et al (1998:) the DISCA Tool measures key input, process and output indicators related to the management of people with STIs. The information obtained through DISCA evaluations, guides development of interventions and forms baseline from which future project evaluations can be done. Evidence by Mullick et al confirms that,

“The DISCA tool is very useful for evaluating quality of STI care at a clinic level, however, it is NOT able to give information on all aspects of STI care” (Mullick et al 2000:5 – 26).

(See attached Appendix B on DISCA limitations). Other data collection methods like observations and record reviews were also used. Data was collected and analysed on key STI indicators like accessibility of STI services, availability of key clinical equipment, knowledge of correct STI treatment, availability of STI drugs and staff training in syndromic management of STIs. Findings are thoroughly discussed and are drawn together with some literature that has been reviewed. Finally, a set of practical recommendations that have possible implications both on policy and practice is outlined to respond to the identified problems.

1.2 Rationale for the Study

The inadequate quality of STI services in the public sector in South Africa has been repeatedly documented, but these findings have not been integrated into health delivery systems that could effect the necessary improvement, as indicated by Harrison et al (1998), Mathews et al (1998), Schneider (1995), and Wilkinson et al (1998). This baseline assessment of STI management was conducted in order to determine areas of weaknesses and strengths in the current practice. Baseline data on the knowledge and practices of health care providers would be important in designing interventions to improve the quality of STI care they offer. This study therefore, is very valuable to the Local Service Area (LSA) health management team, as it has formed the basis of a benchmark for future STI quality of care activities; identify areas needing improvement in the quality of care on STI services in the local municipality under study; and outline a set of recommendations and an action plan to address the identified shortcomings and improve them. It is anticipated that the findings from this study will:

- Enhance and reinforce the need for continuous evaluation of STI services in the local municipality as a mechanism for quality improvement,
- Assist the LSA team to continuously seek effective strategies to improve identified problems on STI service provision, in form of the developed action plan; and
- Use the action plan as a tool for monitoring and evaluation of STI services.

The study particularly benefited the members of the Umjindi local municipality health team. Specifically, the major beneficiaries of the study were the clinicians and the clinic managers in the 14 clinics, as strengths and gaps of STI care in the facilities were analysed.

The other beneficiaries would be the provincial Department of Health in Nelspruit, particularly the HIV/AIDS Directorate within which the STI Control Unit falls, and the Provincial Health Information Systems Directorate. The study findings would also provide evidence to the management for decision-making. Furthermore, it is hoped that the department could facilitate a process of replicating important lessons from the study, throughout the province.

1.3 Background of Umjindi Local Municipality

Umjindi is one of the 4 local municipalities that form the Ehlanzeni District Municipality (DC 32) in Mpumalanga Province, located in the southern part of the district, and information from the 2001 census indicates that the local municipality covers an area of 1 747 square kilometres with a total number of 14 455 households with only one small old mining town known as Barberton, which has not developed much as the roads into town and main roads in the area are tarred but in a poor condition. It has a total population of 53 737 out of which about 53% (i.e. 28 357) are males, whilst over 50% are between the ages 15 and 49 years and are considered to be sexually active.

The area is semi-urban with the population concentrated around the town and mining areas, and main economic activities being mining, forestry, farming and small businesses. According to the Umjindi Situational Analysis (2002:18), the informal settlements account for 20% of houses. 80% of the houses have electricity and sewage systems, 2 500 households have access to the water supply system through a public tap, whilst 2 577 households do not have any type of sanitation facilities, whilst about 1 000 households are believed not to be having any annual income whatsoever.

The increasing population influx and the mushrooming of the squatter areas is another emerging feature of the small and only town, due to the high rate of unemployment and the old mines in the area. The health facilities serving this area are, 1 District Hospital, 1 TB Hospital, 1 Private Hospital, 4 mine clinics, 1 Community Health Centre, 9 fixed clinics and 4 mobile clinics. A rapid analysis of 2001 STI data through Umjindi District Health Information Systems (DHIS), indicated some gaps in the management of STIs in Umjindi e.g. with regards to partner notification system and large numbers of STI “repeats.” Because the DHIS is a minimum data set system and few STI indicators are included in the system, this study is critical in understanding the “bigger picture” of STI management and facilitating the plans for improvement of the management of STIs in Umjindi.

CHAPTER 2 - Literature Review

2.1 STI AND HIV PREVALENCE

Globally, the World Health Organisation (WHO) estimates that about 340 million new cases of curable STIs occur each year in people aged 15 – 49 years, with a global distribution that closely mirrors that of HIV, as quoted in Jackson et al (2004:167). The indisputable facts that STI produce serious economic, social and health consequences, made more clear by their association with HIV and that all STDs are preventable and many are curable, make it incumbent on governments and communities to meet the challenge of STI prevention and control. The STI incidence data revealed by WHO, confirms that,

“The highest rate of new cases per 1000 population occurs in sub-Saharan Africa where an estimated 69 million STI new cases per year occurs in a population of 269 million adults aged 15 – 49 years, resulting in an incidence rate of 256 per 1000.” (WHO 1998:11).

By the same fact, the NDoH (2002:1) argues that these highest rates of STIs that are seen in sub-Saharan Africa are associated with the explosive spread of HIV in the region. In addition, untreated STIs are associated with high rates of spontaneous abortion, stillbirth, tubal infertility, and genital ulcers as well as significant disease among children born to infected mothers, as women are hit harder in Africa than men. The NDoH (2002:2) further indicates that an estimated 3.4 million new HIV infections occurred in sub-Saharan Africa in the year 2001, which means about 28.1 million Africans now live with the virus. Recent antenatal clinic data show that several Southern Africa countries have now joined Botswana with prevalence rates among pregnant women exceeding 30%, as confirmed by NDoH (2002:1).

NDoH (1998:41) The national department of health states that,

“STIs constitute a major public health challenge to South Africa where it’s estimated that 11 million cases occur annually.” (NDoH 1998:41).

Ipsa facto, Ramkisoan et al (2003:1) indicate that as many as 10 – 12% of adults of the reproductive age are reporting STI symptoms within a 3 months period. According to the 2002 National Antenatal Seroprevalence Survey, an estimated 3.2% of pregnant women attending antenatal care in the public health sector had active syphilis, higher than the 2.8% in 2001. HIV/AIDS continues to be one of the biggest challenges faced by South Africa today.

The same survey also found that 26.5% of pregnant women who attended public health services were HIV positive, with women aged between 25 and 29 years continuing to be the most affected age with an estimated 34.5% being HIV positive. Based on the results of that survey, it is estimated that 5.3 million South Africans were HIV positive by the end of 2002, even higher than the 2001 projections. The data shows that HIV and STIs continue to be significant public health problems in South Africa.

According to the Summary Report of the 2002 National HIV and Syphilis Antenatal Seroprevalence Survey, Mpumalanga province is one of the provinces with the highest HIV prevalence in the country. Though the survey revealed that the slightly decreasing provincial HIV prevalence rates from 29.7% (2000), 29.2% (2001) to 28.5% (2002) are not statistically significant, it is also worth noting that all these provincial HIV prevalence rates are still above the national average rates in the same years i.e. 24.5% (2000), 24% (2001) and 26.5% (2002).

As confirmed by Shisana & Simbayi's data (2002:5), the province has got the 3rd highest HIV prevalence rate in the country at 14%. The current District Health Information Systems (DHIS) provides limited data on STI incidence trends within the provinces, with the exception of Gauteng, which has an STI surveillance system. To this extent, HST asserts that,

“Only data on the male urethral discharge (MUD) from the DHIS is currently available on a monthly basis” and ipso facto “the MUD incidence rate (which is the number of cases of MUD per 1 000 male population aged more than 15 years) is often used as a direct proxy for STI since such cases are invariably STI, to track the distribution of STI in the target population.” (HST 2002:262).

Furthermore, the control of the MUD is also vital to the control of the HIV virus, since it makes the spread of the HIV virus easier. However, the little evidence from the DHIS shows that the incidence of the MUD has been slightly on the increase in the Mpumalanga province between 2000 (37%) and 2002 (40%), as indicated by HST (2002:263). Notwithstanding the limitations, this is a cause for concern for the STI incidence in the province.

2.2 THE STI – HIV RELATIONSHIP

Various studies, as indicated by Mullick et al (2000:4) have shown that there is biological evidence demonstrating that the presence of other STIs increases the likelihood of both transmitting and acquiring HIV as STIs facilitate the transmission of HIV by up to ten times. Individuals who are infected with STIs are at least 2 to 5 times more likely than uninfected individuals to acquire HIV if they are exposed to the virus through sexual contact. This close association of STIs with the increased HIV transmission has placed the STI control high on the global public health agenda hence the control of STIs is a public health priority. The Nelson Mandela/HSRC national household survey of HIV prevalence, also confirmed the strong link between HIV and STIs as evident in Shisana & Simbayi (2002:10).

Despite the relatively low reporting levels during this study, as only 2.6% of participants revealed had been diagnosed with an STI during the previous 3 months period prior to the study, 39.9% of them were found to be HIV positive compared with 13.2% amongst those who had **not** been diagnosed with an STI in the previous 3 months. Shisana & Simbayi (2002:10) warn that this strong relationship between STIs and HIV is worth noting.

Grosskurth et al (1995:530 – 536) reveal that some studies have also shown that treatment of curable STIs reduces HIV transmission. The experiences from the Lesedi project, which is a “best practice” model for STI control shows that the treatment of STIs in sex workers led to a significant decrease in STIs in miners who work in the area, and it was estimated that the interventions reduced HIV infection by 46%. Furthermore,

“In rural Mwanza, Tanzania, merely improving the case management of STIs through syndromic approach in clinics reduced the incidence of new HIV infection by 40%.” (Grosskurth et al 1995:530 – 6).

However, as indicated by FHI/USAID (2001:2), in the nearby Rakai, Uganda, on the other hand, mass antibiotic treatment of the sexually active population reduced neither most curable STIs nor HIV transmission.

Finally, in agreement with Gilson et al (1997:1805 – 09) available evidence strongly supports 2 conclusions with important implications for programming. Firstly, reducing STI prevalence to levels seen in countries with low-level HIV epidemics is feasible; and secondly, doing so is likely to have a major impact on HIV transmission in countries where both HIV and STIs are common. Therefore, effective STI control can help reduce the extent and the HIV epidemic in countries like South Africa that have a high prevalence rate.

2.3 SOUTH AFRICA'S RESPONSE TO THE STI PROBLEM

The NDoH, in collaboration with a broad spectrum of stakeholders introduced the National Public Health Sector Overall Policy Strategy for the control and management of STIs in the second half of the 1990s. As indicated by HST (2002:258) the key focus was on the nationwide introduction of syndromic STI management at Primary Health Care (PHC) levels. As a result of implementing this strategy, the national STI Treatment Guidelines including safer sex education, condom promotion, partner notification and treatment, were introduced and are generally available at PHC facility level. Training manuals have been developed and master trainers and service providers have been trained in all of the 9 provinces. Furthermore, a number of new initiatives at different levels of the health system have been developed with the aim to develop the STI quality of care. These include,

“The National STI Initiative, aimed at improving STI management at the clinic and sub-district levels through evaluation and monitoring of the quality of STI care, and identifying aspects of care that need further strengthening.” (HST 2002:259 – 260).

However, quality of care with regards to STI management still remains a challenge, specifically the implementation of quality STI management programmes at PHC level. The latter challenge, as suggested by HST (2002:259), is coupled with the need for wider dissemination of treatment guidelines and the improvement in partner management through counselling and provision of partner notification slips at clinics.

2.4 THE CONCEPT OF THE SYNDROMIC MANAGEMENT

Syndromic management is defined as,

“A multifaceted strategy for STI control that includes the recognition of symptoms by the patient and an effective treatment regime that comprehensively covers the possible aetiological agents for a defined syndrome, appropriate health seeking behaviour of infected individuals, recognition of syndromes by the health care worker, partner management (notification and treatment), behavioural counselling and condom promotion.” (Mullick et al 2000:4).

As indicated by Moodley (2002:6), the ultimate objective of the syndromic management strategy is to reduce the load of STIs and this has gained importance due to its possible impact on HIV transmission, whilst the main advantage of the syndromic management approach is that the patient receives effective treatment at the first visit because the treatment regime targets all common causative agents of the presenting symptoms. Mullick et al (2000:4) further states that it can be done by the use of simplified flow charts, and does not require any form of laboratory testing and has been found to be more effective than clinical diagnosis. Ensuring the implementation of the syndromic management of STI is the main clinical component of the National Strategy.

FHI (2001:6) confirms that the syndromic management approach was endorsed by both WHO and UNAIDS, and it has become the standard of care in many countries for management of the most common STI syndromes. As a result, many PHC personnel have been introduced to syndromic management through training programmes and IEC materials and consequently, this process (amongst others) resulted in the development of the District STI Quality of Care Assessment (DISCA) tool.



CHAPTER 3 – RESEARCH DESIGN AND METHODOLOGY

3.1 Study Aims and Objectives

The aims of the study are:

- To conduct an evaluation of STI services in 14 PHC facilities in Umjindi Local Municipality;
- To identify problem areas needing improvement in all the PHC facilities;
- To use findings of the study as a benchmark for future STI quality of care in the local municipality; and
- To develop an action plan which is informed by the findings that would be used to address the identified shortcomings.

The following are the objectives of the study:

- To determine the STI client load in all the clinics;
- To assess the availability of STI examination equipment and facilities;
- To measure the proportion of pregnant women tested for syphilis in all the facilities;
- To determine the type of treatment given to STI clients in the facilities;
- To assess availability of STI drugs in all the clinics; and
- To evaluate the clinicians' knowledge of correct STI treatment.

3.2 Study design

This was a descriptive cross-sectional baseline study, using both qualitative and quantitative methods. Data was collected during October 2004 through administering a structured (mainly) closed-ended questionnaire, inspections, and record reviews.

3.3 The DISCA Tool

Moys et al (2002:1 – 2) confirm that the DISCA tool was developed after extensive consultations with nurses, public health professionals and health service managers, and measures key input, process and output indicators related to management of people with STI. As further stated by Magwaza et al (2002:35 – 37), the tool was developed in 1997 in response to a need for a system of a continuous quality assurance to improve the care for patients with STIs at district level and it is intended to be used by district clinic supervisors. The DISCA tool collects information on:

- Accessibility of STI services;
- Safe examination of clients presenting with STIs;
- Provision of correct treatment;
- Syphilis screening and treatment for pregnant women;
- Staff training in STI syndromic management guidelines; and
- Availability of drugs and assessment of the suitability of the treatment given to STI clients based on a record review.

In DISCA assessments, direct assessment methods are not possible. As indicated by Heiby (1995),

“It uses indirect methods of assessment, such as inspection of the facility, record review and interviews with healthcare providers, and it defines quality in terms of compliance with technical standards for the provision of care” (quoted in Magwaza et al 2002:35).

Indirect assessment methods are believed to be less complicated in a routine healthcare setting, and clinic supervisors can undertake these evaluations as part of their work, without much reliance from outside experts and evaluators.

Magwaza et al confirm that DISCA tool was endorsed by the National STI and HIV/AIDS Directorate of the Department of Health in August 1998 and it is now being used nationally by district health supervisors. The information obtained is used to guide the development of interventions and forms a baseline from which future project evaluations can be done. Evidence by Mullick et al (2000:5 – 26) confirms that in the National STI Initiative sites, the DISCA is used every 9 months and the information collected is used to guide further interventions. Accordingly, this tool was used in the 14 PHC facilities that formed part of this study at Umjindi Local Municipality, to provide a more accurate picture of the burden of STIs in the sub-district and to also serve as appropriate benchmark for assessment of the STI control efforts that were currently in place.

3.4 Sampling

The study population was clinicians from all the PHC clinics in the area under study. These are 1 Community Health Centre, 9 fixed clinics and 4 mobile clinics. As each clinic is unique in terms of geographical situation, infrastructure, equipment and staffing, the sample included all the PHC clinics in the area so as to get a picture of the Quality of Care rendered in each facility.

However, it is anticipated that the results mainly around systems issues like drugs supplies and management, health information systems and capacity building would inform the larger population, e.g. plans for improving health systems delivery in the broader Ehlanzeni District Municipality. The sample comprised of one Community Health Centre, 9 fixed clinics and 4 mobile units, thus a total of 14 PHC facilities. As an integrated supervision strategy, the resources and support lobbied from the LSA health management team, made it possible for the study to be conducted in all the 14 facilities.

In selecting the clinicians for this clinic-based study, the researcher used convenience sampling. One clinician who treats STIs and was available in each clinic during the time of the study was selected in the sample. Ten STI client-held files/patients records were chosen using systematic sampling i.e. every fifth patient record, until they were 10 in total; from the filing cabinets were also included in the study.

3.5 Data collection

Data collection was done through:

- Using an existing DISCA tool;
- Face-to-face interviews where one professional nurse per facility was interviewed on issues such as accessibility, antenatal screening and STI treatment, staff training, referral criteria, problems that affect daily delivery of quality STI care, and recommendations to improve the situation;
- Observations were made to establish whether consultations of patients are done in privacy, availability of equipments for safe provision, current guidelines and information, education and communication (IEC) materials;
- Record reviews for example, patient medical records to determine client load, establish diagnosis and actual treatment given to STI clients, as well as laboratory specimen registers to establish the number STI clients screened for syphilis and results; and
- Inspection of the facilities, equipment and supplies.

3.6. Validity and Reliability

Since its introduction in 1998, some studies done by the likes of Coetzee et al (1998) and Mullick et al (2002), have underscored the fact that the DISCA tool measures what it purports to measure i.e. the key input, process, and output indicators related to the management of people with STIs. Furthermore, the work done by the National STI Initiative has specifically confirmed the stability of the tool as the results of the evaluations and interventions in the pilot sites have been replicated in a number of sites countrywide. Initially, pilot testing of the tool was conducted as,

“The instrument was pilot-tested in six clinics in three districts located in the Northern Cape, Western Cape and Eastern Cape provinces during December 1997.” (Magwaza et al 2002:35).

The purpose of the pilot study was to understand district supervisors’ difficulties and experiences with the instrument, to assess the extent of training needed for its effective independent use, the time needed to complete the clinic assessment and gauge the accuracy of the clinic data. A researcher conducted a standardised 45-minute training session of five district clinic supervisors, who then conducted their own assessments in clinics under their control. Magwaza et al (2002:37) indicate that various training sessions reviewed STI syndromic management and guidelines, together with the concept of quality of care and its assessment and introduced the contents and use of the instrument.”

The pilot study informed the modification of the instrument and the exclusion of unavailable or unreliable indicators like STI counselling services. As confirmed by Magwaza et al,

“The revised DISCA instrument collects information on quality of care by assessing 1. Accessibility of STI services, 2. Provision of safe examination and treatment, 3. Syphilis screening and treatment for pregnant clients, 4. Staff training in STI management, and 5. Availability of STI drugs and correctness of treatment given by reviewing ten patients.” (Magwaza et al 2002:37).

Based on the above, a pilot study was not done for the purposes of this study. Instead, a one-day training workshop was conducted for all data collectors to ensure that data would be collected in a similar manner, through training them on the important technical aspects using the facilitator's manual entitled, "A Practical Guide to Using the DISCA" that was developed by the National STI Initiative, and endorsed by the national Department of Health.

3.7 Data analysis

Before and during data processing, quality-control checks were performed to ensure that all information in the 14 DISCAs had been properly collected and recorded to ensure completeness and internal consistency. The raw data was cleaned, edited and statistically manipulated using MS Excel. Qualitative variables were grouped into themes and sub-themes. The following frequencies of basic indicators were used:

- Percentage of STI clients of adult client load
- Percentage of examination rooms with proper lighting
- Percentage of consultation rooms with an examination couch
- Number of sterile specula per clinic
- Percentage of STI clients tested for syphilis
- Average turn-around time for syphilis
- Percentage of drug treatments from record reviews prescribed according to the National Syndromic Management Guidelines
- Percentage of drugs out of stock at the time of DISCA assessment
- Proportion of clinicians citing correct treatment for Male Urethral Syndrome (MUS)
- Percentage of clinicians with formal STI training.

3.8 Ethical considerations

An information sheet was given to all the participants outlining the study purpose and process to be followed (attached as Appendix F). Informed consent was sought from all the clinicians to participate in the study (attached as Appendix G). Confidentiality and privacy was maintained throughout the study by keeping the names of the respondents anonymous. Permission was granted by the Department of Health to conduct the study (attached as Appendix C). The Research and Ethics Committees of the University of the Western Cape (UWC) approved the research protocol and gave ethics clearance, respectively. The findings of the study were reported back to the clinicians and together with the LSA health management team an action plan was developed to correct the identified problems (attached as Appendix D).

3.1 Study Limitations

- The study population parameters are limited to the public service Primary Health Care facilities and nurses in the sub-district, which is not possible to generalize the findings.
- The study did not identify the causes of the problems that were revealed.
- All data were obtained from the service providers only, i.e. no data were collected by interviewing clients. The perception of the providers may not always have been objective and may have created bias... (See Appendix B on Limitations of the DISCA tool).
- As in any other survey, the results are only as good as the data collection at source. The validity of the findings and/or conclusions made from the data in this study is limited by the reliability of the reporting systems that are in place at each individual facility.

CHAPTER 4 – RESULTS: PRESENTATION AND DISCUSSION

4.1 Description of facilities

There are 14 PHC facilities in Umjindi Local Municipality, 1 community health centre, 9 fixed clinics and 4 mobile clinics. All facilities are classified as rural, as Umjindi is a rural district. Twelve facilities are under the authority of the province, whilst 2 facilities are under the local government.

4.2 DATA PRESENTATION

4.2.1 Human Resources

The total number of clinicians working in the PHC facilities in Umjindi Local Municipality was 44. None of the clinicians working in the PHC facilities had been on a formal training course in STI syndromic management. However, 7 of the clinicians had some form of training in STI management through in-service training programmes. All the 14 professional nurses interviewed had been trained on HIV/AIDS counseling.

4.2.2 STI clients in the PHC facilities

From the survey data, it is shown that the number of new symptomatic STI clients attending PHC facilities in Umjindi local municipality during September 2004 was 575, which is 5% of the total number of adult clients. The facility with the highest number of clients was Boulders where 12% of clients were treated for STIs. Mobile Clinic 1 followed with 10% and Louieville with 7%. The rest of the facilities recorded less than 7% clients treated for STIs with Mobile clinic 3 recording the lowest rate of 1% (see Table 1)

Table 1: Number and % of STI clients per facility in September 2004

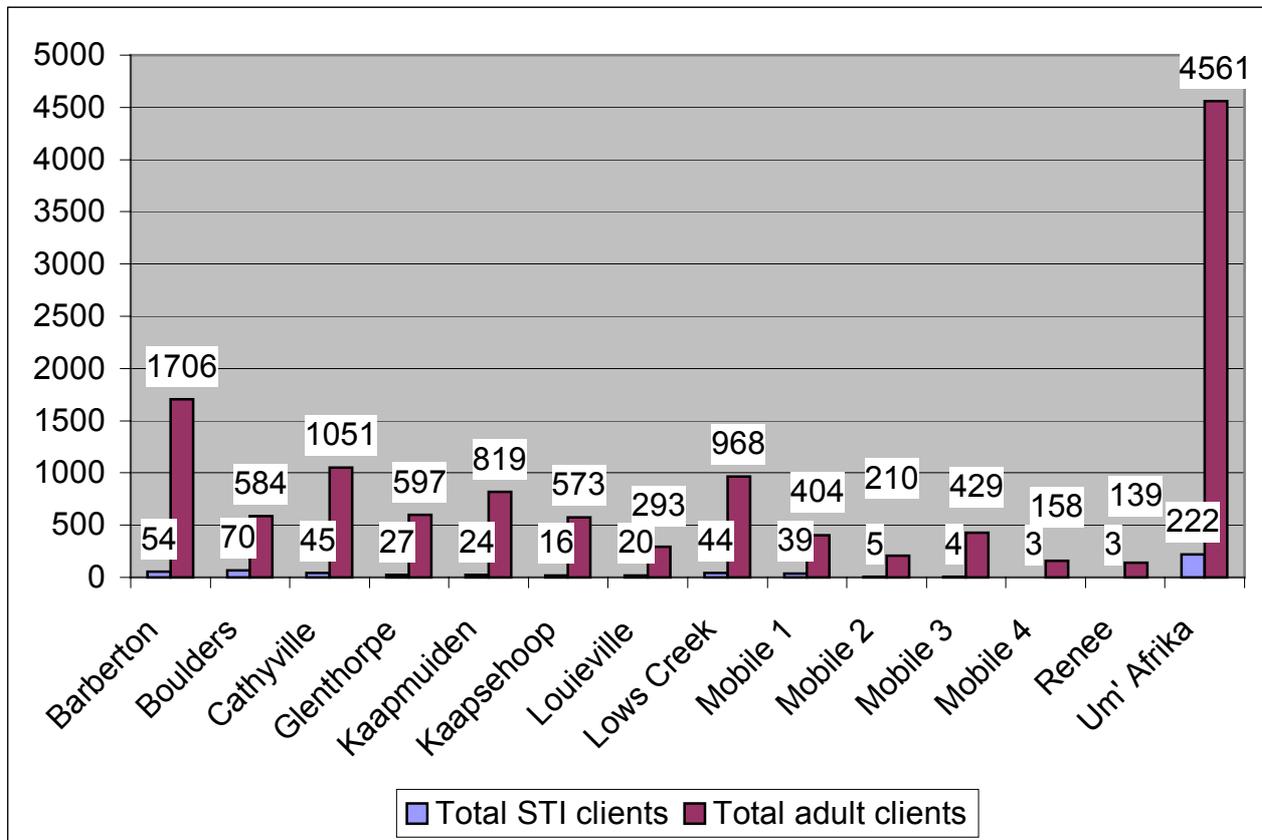
Facility	Total Adult clients	STI Clients	% STI clients of the total
Barberton	1 706	54	3
Boulders	584	70	12
Cathyville	1 051	45	4
Glenthorpe	597	27	5
Kaapmuiden	819	24	3
Kaapsehoop	573	16	3
Louieville	293	20	7
Lows Creek	968	44	5
Mobile 1	404	39	10
Mobile 2	210	5	2
Mobile 3	429	4	1
Mobile 4	158	3	2
Renee	139	3	2
Um' Afrika	4 561	222	5
Total	12 492	575	5

Table 1 above shows that all the clinics responded on the total client load and STI attendance in the past month. The total number of clients seen at the clinics over the previous month was 15 604. About one third (5 474) of the clients were seen at Um' Afrika, Barberton (1 964) and Cathyville (1 565) clinics respectively, with Renee clinic having the least (181) client load. The number of adult clients seen in all the facilities in the past month ranged from 139 to 4 561 clients, with a mean of 892.

The total number of family planning clients ranged from 27 to 626 while that of the antenatal clients ranged from 8 to 156 clients. Out of all adult clients, the reported STI clients ranged from 3 to 222 per month with a mean of 41 that represent **5%** STI clients of the total adult client load.

4.2.3 Number of STI clients against total number of adult clients

Figure 1: Number of STI clients and total number of adult clients seen in September 2004



As indicated in figure 1 above, out of the 14 facilities, Um' Afrika community health centre had the most number of STI clients (222), while Renee clinic had the least (3) number of STI clients.

4.2.4 Availability of STI services

STI services are available from 08H00 to 16H00 during weekdays in all the facilities except in Um' Afrika Community Health Centre where services are also offered after-hours.

With regard to privacy it was found that consultation could be conducted in privacy in 12 of the facilities whilst in 4 facilities (Kaapmuiden, Kaapsehoop, Louieville and Lows Creek), consultations could be overhead. It was reported that privacy often becomes violated as a result of the size of the clinic. For example a small clinic structure where the consultation room is very close to the waiting area (e.g. in a "park-home"-based clinic) and/or because the consultation rooms are demarcated by the use of curtains, which makes it easier for the people on the other side to hear the conversation between the clinician and the client.

4.2.5 Availability of STI equipment

Table 2: Number of STI equipments available per facility

Facility	Number of Consulting rooms	Number of Exam couches	Number of Exam lights in working order	Number of Sterile specula available
Barberton	2	3	1	3
Boulders	1	1	1	2
Cathyville	2	3	1	2
Glenthorpe	1	1	1	1
Kaapmuiden	2	3	0	5
Kaapsehoop	1	1	0	5
Louieville	1	3	1	2
Lows Creek	3	4	1	1
Mobile 1	1	1	0	0
Mobile 2	1	1	0	0
Mobile 3	1	1	0	2
Mobile 4	1	1	0	0
Renee	1	1	1	3
Um' Afrika	4	3	3	9
Total	22	27	10	35

The above table shows that all the clinics had at least 1 adult consultation room used for the treatment of STI clients. The consultation rooms ranged from 1 (mostly for the mobile clinics), to 4, with a total number of 22 consultation rooms. In total, there were more examination couches available (27) than the total number of consultation rooms (22). It was found that this is mainly due to the fact that in other clinics, examination couches are doubled in 1 consultation room. However, 1 facility, Um' Afrika Community Health Centre, had less examination couches (3) than the total number of consultation rooms (4), with the clinician citing that in the 4th consultation room, they use a "bed".

In 10 facilities there were working examination lights in the consulting rooms that are used for examinations. In all the 4 mobile clinics, the examination lights were out of order, whilst in 2 other facilities, Kaapmuiden and Kaapsehoop, the clinicians revealed that they had placed orders for examination lights, and it was almost a year still awaiting a response. The 10 examination lights translate to only **45%** of the total examination rooms.

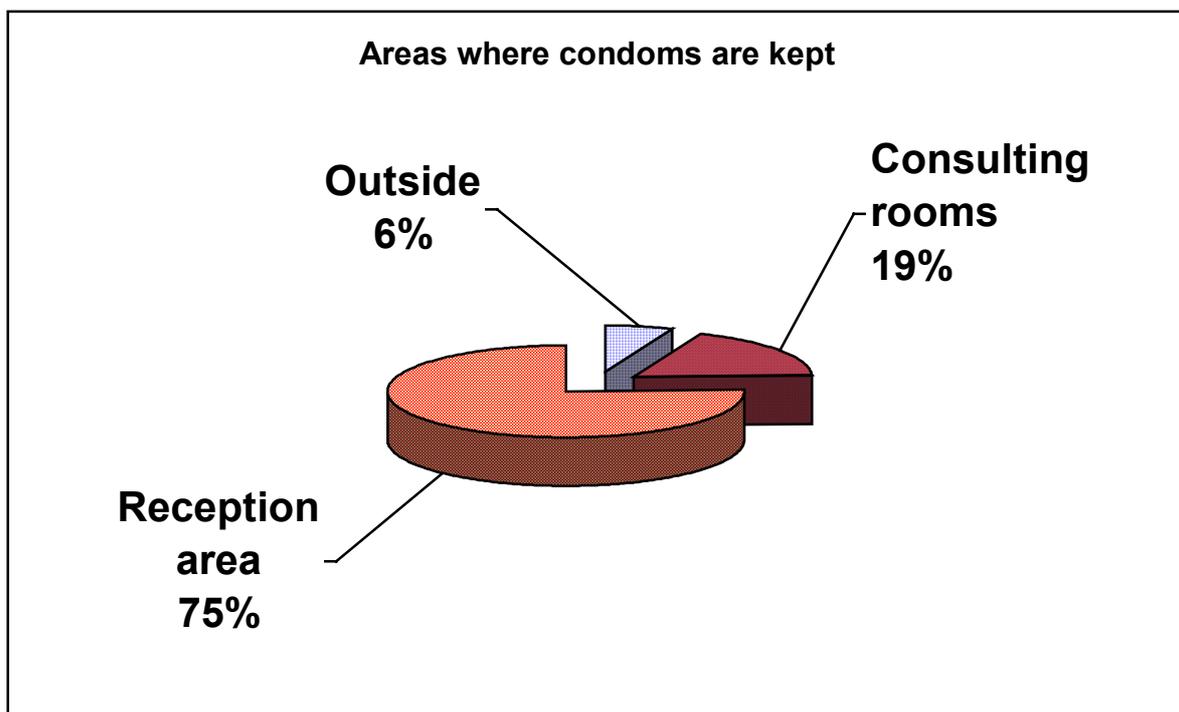
Eleven of the facilities had a total of 35 sterile speculums available amongst them, with their numbers only ranging from 1 to 9 per facility. Um' Afrika community health centre had the most number of specula available while Mobile clinics 1, 2 and 4 clinic had none. However, almost all the professional nurses interviewed (13), indicated that they can't use the available speculums, due to lack of skills. In these facilities, only doctors used vaginal speculums, during their clinics visits, which are conducted once per week. Examination gloves were available in all the facilities.

With regard to STI syndromic management guidelines, 13 facilities had syndromic management of STI guidelines and these were kept in the consulting rooms. Only one facility (Mobile 1) did not have STI syndromic management guidelines. Client information, education and communication (IEC) materials on HIV/AIDS and STIs were available in 9 facilities, but only 4 of these facilities had the IEC materials in local language.

4.2.6 Availability of condoms

Male condoms were available in all facilities. However, condoms were reported to have been out of stock for almost 2 weeks in 3 facilities (Louieville, Lows Creek and Mobile Clinic 3) in the month of September 2004. Condoms were available in the reception area in most facilities (75%) where it could be difficult for clients to access them since the area is also a waiting area for all clients. Only 6% of the condoms are kept outside of the clinic (see Figure 2).

Figure 2: Areas where condoms are kept



With regard to condom demonstration for STI clients, dildos were available in 8 of the 14 facilities whilst all the 4 mobile clinics together with Barberton Town Clinic had no dildos. In 2 of the facilities, STI clients were not shown how to use the male condom despite the lack of dildos. In the other facilities, clinicians “used hands” to demonstrate the correct use of the male condoms.

4.2.7 STI drugs availability

There are five main drugs that are used in the management of people with STIs. The record reviews showed that with the exception of Erythromycin that was only out of stock in one facility in September 2004, all STI drugs were available in the facilities.

4.2.8 Clinicians’ knowledge of correct STI treatment

Clinicians were asked to report on drug treatment for commonly presenting STI syndromes. Responses were assessed on correct adherence to the national protocol. Almost all the clinicians (13) were able to cite the correct treatment for male urethral syndrome, 11 were correct for vaginal discharge, and 12 for genital ulcers. However, the correct drug treatment for pregnant women with STI vaginal discharge was found to be the weakest (4 clinicians). Ten clinicians knew the correct substitute drug for Doxycycline in the treatment of discharges.

4.2.9 Clinicians’ workload

The clinician workload was calculated using the total number of clients seen in each facility in the month of September 2004 divided by the total number of clinicians/professional nurses working during the day of assessment, with the result divided by 20 working days. The clinicians’ workload varied between facilities. The average number of clients per clinician per day was 32. The facility with the highest workload was Cathyville (78), followed by Kaapmuiden (52), and Kaapsehoop (41). The rest of the facilities recorded clinician workload of less than 40 with Renee clinic recording the lowest clinician workload of 9 (see Table 3).

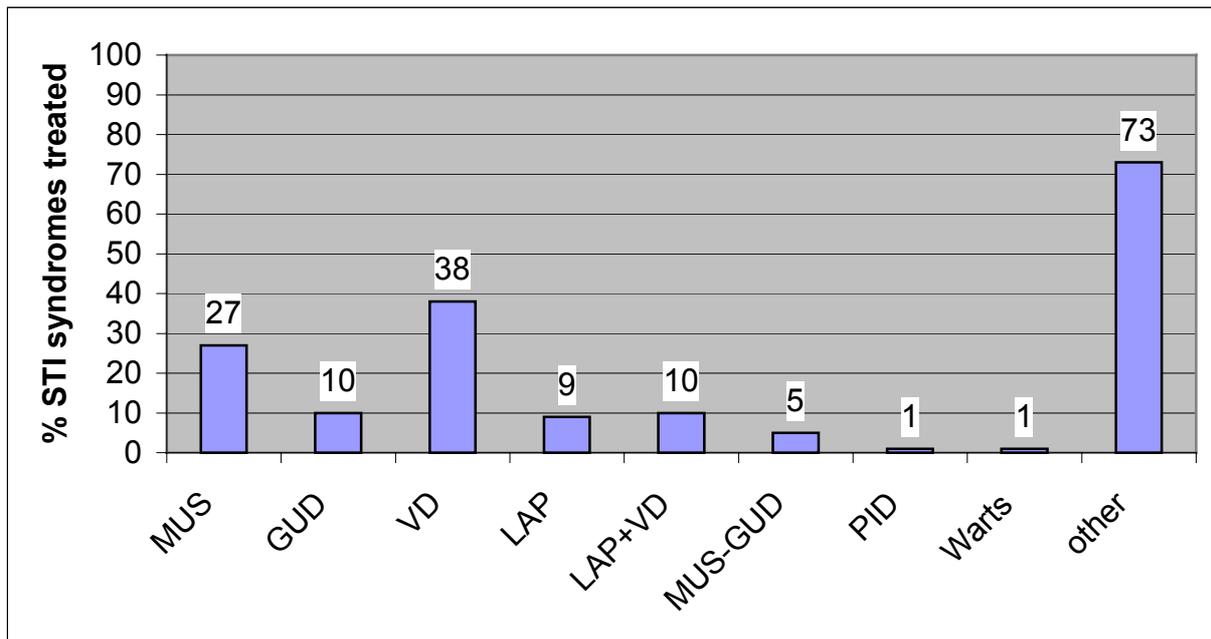
Table 3: Number of clients per clinician per day

Facility	Total number of clients seen in September 2004	Number of clinicians working on the day of assessment	Total number of clinicians working in the facility	Clinician workload
Barberton	1 964	3	3	33
Boulders	673	1	2	34
Cathyville	1 565	1	2	78
Glenthorpe	795	1	2	40
Kaapmuiden	1 044	1	3	52
Kaapsehoop	813	1	1	41
Louieville	418	1	2	21
Lows Creek	1 088	2	5	27
Mobile 1	529	1	1	26
Mobile 2	315	1	1	16
Mobile 3	462	1	1	23
Mobile 4	284	1	1	14
Renee	181	1	2	9
Um' Afrika	5 474	8	18	34
TOTAL	15 604	24	44	32 (mean)

4.2.10 STI treatment

A total of 518 clients were treated for STIs for the first time in the PHC facilities in the month of September 2004. Of these 38 were treated for male urethral syndrome (MUS), 53 for vaginal discharge, 14 for genital ulcer disease, 12 for lower abdominal pain (LAP), 14 for a combination of LAP and vaginal discharge, 7 for a combination of MUS and Genital Ulcer Disease, 1 with Pelvic Inflammatory Disease (PID) and 1 with Genital Warts.

Figure 3: Percentage STI syndromes treated in the PHC facilities in September 2004



As shown in table 4 below, thirty-three of the 518 STI clients were given incomplete treatment for the diagnosis. Of these, were 20 STI clients treated for vaginal discharge, 5 treated for LAP and 8 treated for genital ulcer disease. According to the syndromic management guidelines, the one client diagnosed with PID at Um' Afrika, was supposed to have been referred to the hospital.

Only 3 of the 14 facilities gave complete treatment to STI clients and according to the national syndromic management guidelines. Two facilities (Mobile clinics 2 and 3) had the most number of clients with incomplete treatment. A number of reasons were provided for the incomplete treatment. For example, with regard to vaginal disease, it was recorded that the reason for incomplete treatment was the side effects (particularly vomiting) reported by clients after taking Metronidazole. In the case of genital ulcer disease most the clients were reported to have adverse reaction to the injection.

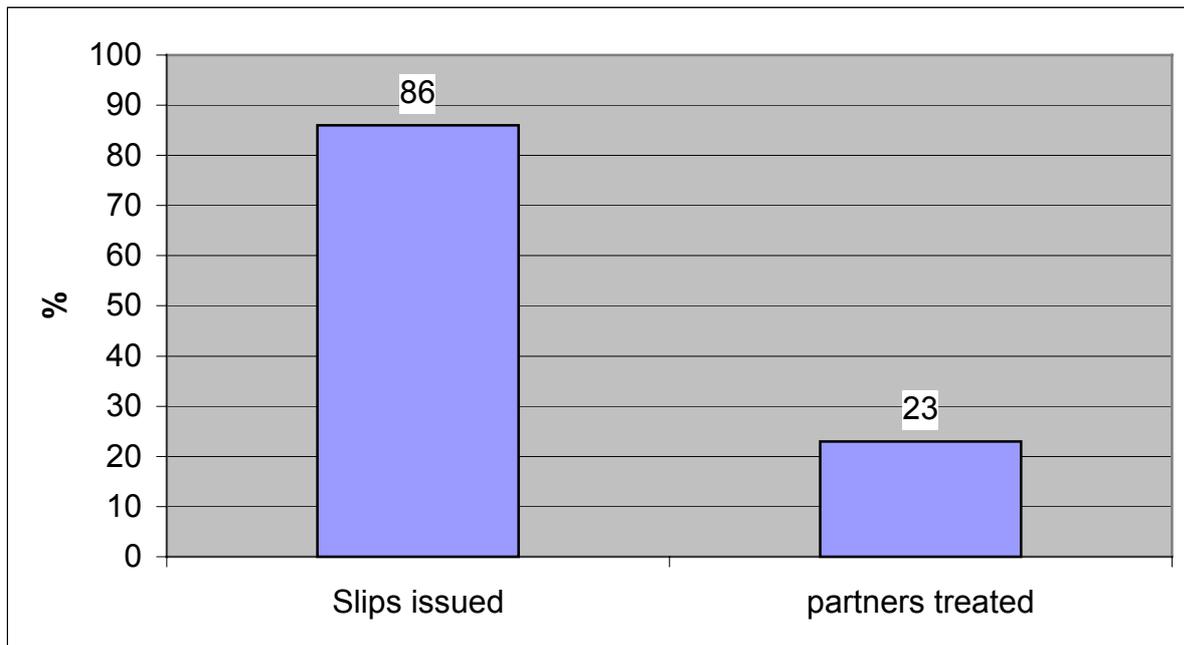
Table 4: Incomplete treatment for diagnosed STI syndromes per facility

Facility	Syndromes with incomplete treatment	Total number of syndromes with incomplete treatment
Barberton	NIL	NIL
Boulders	2 vaginal discharges	2
Cathyville	1 vaginal discharge	1
Glenthorpe	1 Lower Abdominal Pain	1
Kaapmuiden	4 Genital Ulcer Diseases 1 Lower Abdominal Pain	5
Kaapsehoop	3 Vaginal Discharges 1 Genital Ulcer Disease	4
Louieville	1 Vaginal Discharge	1
Lows Creek	4 Vaginal Discharges	4
Mobile 1	1 Genital Ulcer Disease	1
Mobile 2	7 Vaginal Discharges	7
Mobile 3	2 Lower Abdominal Pain 2 Vaginal Discharges 2 Genital Ulcer Diseases	6
Mobile 4	NIL	NIL
Renee	NIL	NIL
Um' Afrika	1 Lower Abdominal Pain ??? 1 Genital Warts	2
TOTAL	20 Vaginal Discharges 5 Lower Abdominal Pain 8 Genital Ulcer Disease	33

4.2.11 Contact tracing of STI clients

Although partner notification was high in the district, not all facilities issued slips to all STI clients to give to their partners. Only 43% of facilities issued slips to all STI clients. In addition, the return rate of partners of STI clients was low (see figure 4).

Figure 4: Partner notification rate



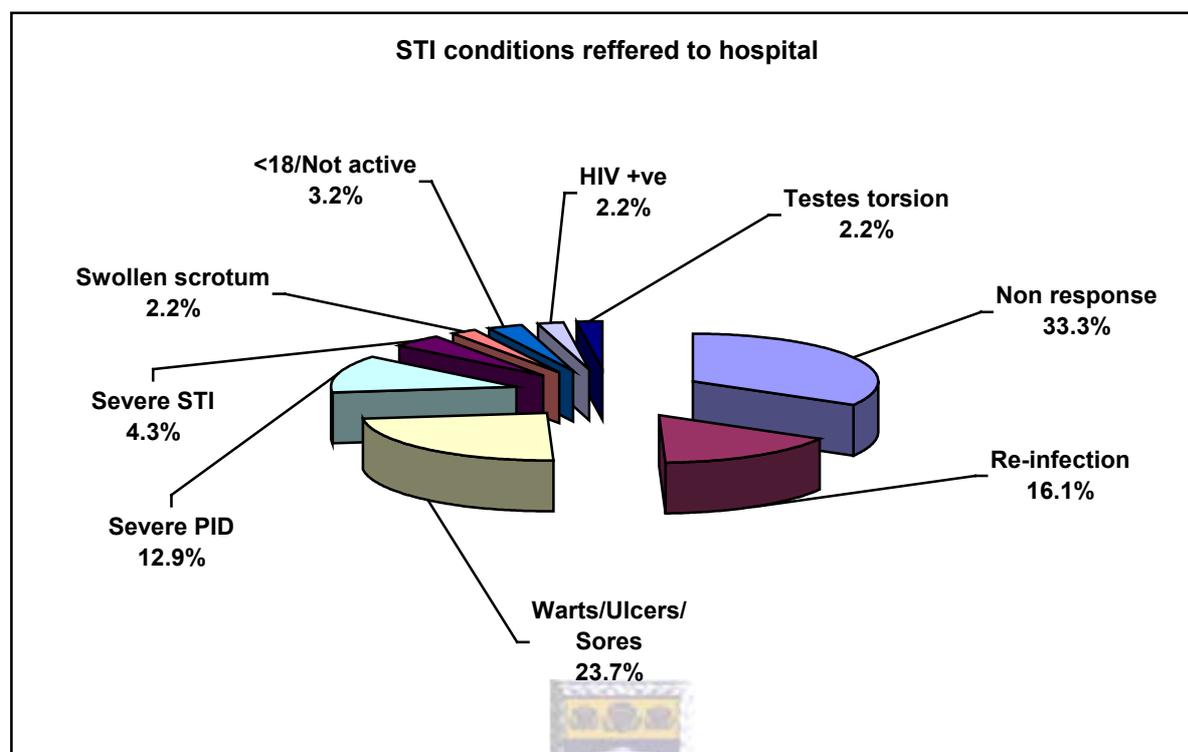
It was apparent that partner notification was not implemented routinely as part of STI case management in many facilities.

4.2.12 Syphilis screening among pregnant women

All pregnant women (368) who attended antenatal care for the first time were screened for syphilis. Of these **2.9%** tested positive for syphilis. None of the facilities had on-site laboratory testing for RPR. Blood specimen is sent to the hospital laboratory. The turn-around time for the RPR results ranged from 1 to 14 days with an average of **4 days**. The 4 facilities that had the longest turn-around time were Mobile clinic 1 at 14 days and Boulders, Kaapmuiden and Mobile no. 4, all at 7 days.

4.2.13 STI conditions referred to hospital

Figure 5: STI conditions referred to hospital



4.2.14 Other issues pertaining to STI management

The facility personnel were also asked to comment on the challenges affecting the quality of STI service provision in the facilities. Lack of skills was the main challenge reported by clinicians followed by staff shortage (see Table 5).

Table 5: Problems affecting service delivery

Problems	Number of responses
Poor client compliance	6
Poor infrastructure	5
Inadequate logistics	8
Shortage of staff	9
Inadequate staff skills	12

Clinicians were also asked to give recommendations on how to improve the quality of STIs in the facilities in which they are working and their responses are presented in Table 6 below.

Table 6: Recommendations by clinicians to improve management of STIs

Response	% Respondents
Address logistical problems	47.8
Client education	17.4
Infrastructure problems	13
Training	8.7
Adequate staff	8.7
Improve service provision	4.3

Logistics seems to be the main problem affecting the provision of high quality STI care in the facilities.



4.3 DISCUSSION OF FINDINGS

4.3.1 STI clients

Unlike in other similar studies, data were available on the total number of clients as well STI clients seen during the month of September 2004. This indicates that at least all the PHC facilities in this local municipality keep up to date and complete client records. This confirms findings of Mullick et al (2000:10) who conducted a baseline assessment of STI services in the adjacent sub-district of Tonga. Access to STI services is compromised, which could be a contributory cause of the low STI client load, which is only 5% of the total number of adults seen during the same period.

By comparison, this rate is consistent with the Mpumalanga provincial 2002 annual STI incidence rate as indicated by Funani et al (2004: 243) that it was 4.6% in 2002, whilst it was at 6.1% and 5.2% in 2001 and 2000, respectively.

This could be an indication that there are missed cases of STIs at the PHC facilities and/or that STI clients are not presenting themselves in these clinics. Hence Funani et al (2004: 235) states that, *“Even under the assumption that some 50% of the patients may be treated through the private sector, there is a general consensus among technical experts in the country that the reported number of patients with symptomatic STIs treated at public health sector facilities, is too low compared to the actual burden of disease.”*

4.3.2 Human resources

Findings from this study estimate that the average number of clients per clinician per day was 32, which is less than the recommended national norm of 35 clients per nurse per day. Based on this average, it implies that the available clinicians are enough to provide the expected STI services in these facilities. However, the break down of the number of clients seen by clinicians per each facility indicates that there is inequitable distribution of human resources in the district as a total of 4 facilities had the clinician workload way above the national norm of 35.

Notably, one facility i.e. Cathyville, had a clinician workload more than double the recommended national norm. The fact that the clinician workload was 78 in this facility, suggests that the facility should have more than double the current number of professional nurses, which is 2.

In contrary, a facility like Renee clinic which had the lowest clinician workload of 9, indicates that one professional nurse would be enough for the facility, whilst there are currently 2 professional nurses. This may be an indication that the management of the PHC facilities in this local municipality doesn't necessarily use data to make decisions on (amongst others) allocating human resources to the PHC facilities.

4.3.3 Key clinic equipment

Findings indicate that there is still a small proportion of PHC facilities that do not have the necessary equipment to conduct appropriate STI examination such as examination lights and specula. These findings are consistent with HST/Sekhukhune District Assessment (2004:8) that *“there was lack of equipment such as vaginal speculum, examination lights, etc, in the facilities, which made it difficult to conduct thorough examination to STI clients.”*

Notably, the finding that in all the mobile units examination lights were out of order during the time of the study, indicates that the most affected clients are from outreach communities that are mainly served by the mobile units.

More than three quarters of the facilities do not conduct vaginal examinations due to lack of skill among the professional nurses, despite speculums being available. Vaginal examinations are an important part of preventive health care for all adult women and are conducted to help detect (amongst others) sexually transmitted infections such as chlamydial, herpes, gonorrhoea and trichomoniasis.

According to Payne (2003: 5), *“Vaginal examinations are also used to evaluate abdominal or pelvic pain. Chronic pelvic pain may be caused by a number of conditions, including pelvic inflammatory disease. The exact cause of chronic pelvic pain is not always known.”* Based on this, we can deduce that many clients are missed and are not properly diagnosed in this local municipality because in 11 facilities nurses do not conduct vaginal examinations.

4.3.4 Privacy in consultations

According to UNAIDS (1998: 5) privacy is critically important because, *“Even with symptoms, some people may be reluctant to seek STI care because of a lack of privacy or confidentiality, or an intimidating setting of the service.”* Findings from this study estimate that in 4 facilities, there were no private consultations as conversations between the clinician and the clients could be overheard. This may indicate unsuitability of STI services within these facilities, because of stigma attached to STIs in the communities.

Paradoxically, Ramkisoorn et al (2004: 31) found that, *“Nationally, interviewers reported that consultations could be overheard in 11% of the facilities, none of which were located in Mpumalanga and the Northern Provinces.”* This could be due to the fact that in their study, entitled National Baseline Assessment of the STI and HIV Services in SA Public Sector Health Facilities, they had sampled certain facilities in the province, as opposed to this study, where all the public sector health facilities were included in the sample and were part of the study.

4.3.5 Partner notification

Partner notification slips are usually used to index STI clients in order to facilitate notification of partner(s) of the need for treatment. According to UNAIDS (1998: 5) *“Partner notification is important for interrupting the transmission of STIs and preventing possible eventual reinfection, but in practice there are obstacles.”*

Findings from this study showed that although contact slips were issued in all the facilities and were written in the local language, they were not issued to all STI clients, as findings from this study estimate that about 83% were notified with notification slips. This supports the findings of Ramkisoorn et al (2004: 32) that *“nationally, the number of contact slips issued was less than the number of STI clients seen.”*

By comparison, Funani et al (2004: 235) confirms that in Mpumalanga, the STI partner notification rate was 68% in 2000, 65% in 2001, and 95% in 2002. Notably, the partner notification rate, as estimated by the findings of this study, is lesser than the 2002 provincial average rate, which doesn't augur well for this local municipality.

A 100% notification rate would have meant that on average, each patient treated with a symptomatic STI has received one notification slip for the sexual partner.

The findings that only a mere 23% of the notified sexual partners got treatment, is lower than the findings of Funani et al (2004: 236) that in Mpumalanga, the STI partner tracing rate was 23% in 2000, 26% in 2001 and 32% in 2002, which is unacceptable as it is only equivalent to the 2000 provincial average.

4.3.6 Availability and accessibility of male condoms

According to the DoH Strategic Plan, promotion and provision of male condoms together with their correct use, is an essential part of management of STI clients. This should also be an integral part of any encounter in antenatal and family planning services, and should be easily accessible for all clients at every facility during and beyond service hours.

The study revealed that although condoms are available in the facilities, they are still not yet easily accessible to the clients because they are not kept where clients can freely access them. For example, it could always be difficult for clients to access condoms through the reception areas which are used by 75% of the facilities to keep condoms, because these areas are used as waiting rooms by everybody before consultations are done.

Although only 2 facilities reported that condoms were out of stock for almost 2 weeks during the month prior to the study, it is a point of concern because condoms should always be available and accessible to all clients to prevent the risk of HIV infection.

4.3.7 Clinicians knowledge of correct STI treatment

One of the most positive findings of this study is that almost all the clinicians cited the correct treatment for managing the male urethral syndrome. Ramkisoon et al (2004: 14) support this finding as they state that, *“treatment knowledge for urethral discharge was slightly better than for all other STI syndromes.”* However, there is still a big proportion of the clinicians who failed to cite the correct management of STI syndromes in pregnant women despite the availability of the STI treatment guidelines in the facilities. To this extent, about 71% of the clinicians failed to cite the correct STI treatment for pregnant women with vaginal discharge.

This is a serious concern that needs to be addressed since all clinicians need to have cited the correct treatment. Failure to treat the STI clients predisposes the clients to the risk of being HIV infected.

4.3.8 Availability of educational materials

It was identified that there is still a small proportion of the facilities that do not have the STI syndromic treatment guidelines. More than a 3rd of the facilities do not have IEC materials.

Furthermore, the findings that half of those facilities that had IEC materials, still do not have the IEC material in local language suggests that the available IEC material is not accessible to the local clients since the literacy rate in the district is low and only a few clients who are literate access these health messages. This is consistent with HST – Chris Hani District Assessment (2004: 13) that there was a severe shortage of STI materials in the local language in that district.

4.3.9 Staff training

Data were obtained on the number of professional nurses at the PHC facilities who had been on a formal STI training course in syndromic management and it was found that, unlike in the Sekhukhune district where 34.2% of nurses had been trained in syndromic management of STIs (HST – Sekhukhune District Assessment, 2004:8), in Umjindi Local Municipality, not a single professional nurse had been on such training. However, almost 50% of the professional nurses got in-service training in syndromic management of STIs, and that training was just a component of a comprehensive training programme.

Paradoxically, Ramkisoan et al (2004:18) found that *“in Mpumalanga, 45% of professional nurses had been trained in syndromic management in July 2002.”* Their finding could be owed to the fact that in their study, they interpreted “ever trained” in a comprehensive manner, which included cascaded, pre- and in-service training. Based on the information, we can deduce that the 50% of the respondents that had been trained in STI syndromic management is more or less the same as the 45% of respondents “trained” according to Ramkisoan’s findings.

The DoH Strategic Plan, 2000 – 2005, encourages utilization of STI services to prevent HIV acquisition to identify those that are infected with HIV through appropriate counseling and testing. Essentially, prompt and effective treatment of STIs in HIV infected people should be initiated in order to prevent transmission of HIV from those infected with STIs. This augurs well as all the professional nurses interviewed in this study revealed that they had been trained on HIV/AIDS counseling.



4.3.10 STI drug stock outs

There are five main drugs that are used in the management of people with STIs. Each facility was asked whether any of these drugs (metronidazole, ciprofloxacin, erythromycin, doxycycline, benzathine-penicillin) was out of stock during September 2004 and/or October 2004.

Findings indicated that all the facilities had adequate STI drug supply in this local municipality. The identified problem in 2 facilities (14%) where erythromycin was out of stock during the month prior to the time of the assessment was attributed to its unavailability at the hospital pharmacy that supply all the facilities. This finding is similar to the finding of Ramkisoan et al (2004:16) because in their study, out of all the STI drugs, the most drug that was out of stock in Mpumalanga was erythromycin at 11% of the PHC facilities in July 2002.

4.3.11 STI referrals

Funani et al (2004: 230) states that, *“Referrals have to be according to defined criteria: In the public sector, the first line management of patients with symptomatic STIs is provided by professional nurses. In case of treatment failure or clinical complications, patients are referred to doctors.”*

Seemingly, there was no clear case referral system in the facilities. In the facilities where they refer clients such as those under the age of 18 who are not sexually active and those with ulcers/warts as indicated in figure 5, which may be due to poor history taking and lack of examination of the clients.

This may be attributed to lack of knowledge and skills on syndromic management of STIs. Furthermore, it is expected that all PHC facilities have a copy of the National Guideline: First Line Comprehensive Management and Control of Sexually Transmitted Infections, developed by the National Department of Health. The guideline defines the criteria for referral from PHC facilities to district hospitals.

4.3.12 Syphilis screening

Screening for syphilis facilitates early detection and treatment of asymptomatic infections in antenatal services and is important for the secondary prevention of syphilis during pregnancy, and for control of congenital syphilis. In South Africa, the public sector antenatal screening programme has been in existence for over 20 years.

The National ANC Guidelines published in 2000, specify that syphilis is an essential screening investigation at first ANC visit. The guidelines recommended that the results be made available prior to the completion of this first ANC visit since, if required, the first dose of treatment can be administered that day. The finding that all the facilities confirmed collecting blood is consistent with the findings of Ramkisoan et al (2004:17) that *“in Mpumalanga, almost 100% of the facilities offered syphilis screening in July 2002.”*

However, the long average turn around time of 4 days could be attributed to (inter alia) the long distance between the PHC facilities and the hospital where the laboratory is based and the transport problems within the local municipality. If the RPR results are not available, the treatment of syphilis cannot be initiated. During that period, the client may spread the infection and have a high risk of being infected by HIV.

4.3.13 STI diagnosis and treatment

Despite the fact that from the record reviews, all STI clients were given the correct drug according to their diagnosis, the study found that about 32 STI clients had been given incomplete treatment according to the diagnosis. This translates to about 22.8% of the total STI clients whose files were reviewed, and does not augur well for STI management in the local municipality.

Furthermore, despite this proportion being lesser than the 33% revealed by Mullick et al (2000:10) in the adjacent sub-district of Tonga, it is an area of concern as the other study was conducted almost four years ago. In these clients, it was found that on records, one or two drugs were not written down as prescribed for the STI clients.

The recorded diagnosis was compared with the national STI syndromic management guidelines, and conclusion was made that the treatments were not complete. It is also noted that this may also be due to inappropriate record keeping in the facilities.

CHAPTER 5: CONCLUSION AND RECOMMENDATIONS

5.1 Conclusion

Quality of STI care that is provided in most of the facilities in this local municipality is sub optimal. Some facilities lack the necessary equipment and supplies as well as the necessary skills to provide quality HIV/AIDS services. In addition, STI services are provided separate from the HIV/AIDS services whereas they are the entry point into the comprehensive HIV/AIDS programme. There is interest shown by clinicians in the provision of quality STI services, however, the environment in which they work is not always conducive to sustaining that interest.

In general, although the principles of syndromic management are well understood by most clinicians, there are no systems in place to support the use of the guidelines. In addition, there are no reliable equipments and supplies, as well as efficient management of STI clients and their partners.

5.2 Recommendations

In order to improve management of STIs, a comprehensive, integrated approach is required. This allows STI management to become part of reproductive health, youth friendly services and as well as part of all efforts to mitigate impact of HIV/AIDS.

Management of STI services

The role of the LSA health management team is to provide facilities with the required resources to provide STI services. In addition, the health management team has a responsibility to strengthen the capacity of facilities to provide high quality STI services. More efforts should be made to create an enabling environment in which high quality STI services can be provided by the PHC facilities. This includes availability of all the necessary equipment and supplies, improvement of infrastructure as well as training of clinicians on the syndromic approach.

STI service delivery

STIs services need to be improved and marketed so that more people access the services. The links between STIs, PMTCT and VCT need to be strengthened. Innovative strategies need to be implemented to educate the public about the relationship between HIV and STIs. The use of lay counselors who are already promoting VCT and PMTCT is recommended for marketing of STI services. In addition, IEC material in local language can have more impact where language is a barrier to effective communication.

Routine follow up of partners of STI clients needs to be implemented in all facilities, and health workers need to be encouraged to refer all STI clients for HIV testing and keep a record of such referrals.

Further research is recommended to investigate the causes of low STI caseload in the PHC facilities and to identify barriers to accessing treatment by STI clients.

REFERENCES

1. CDC (1998) HIV prevention through early detection and treatment of other STDs: The role of STD detection and treatment in HIV prevention.
Available: CDC National Centre for HIV, STD and TB prevention.
http://www.cdc.gov/nchstp/dstd/MMWRs/HIV_Prevention_Through_Early_Detection.htm
2. CDC (1998) STD treatment to prevent HIV infection: Implications for recent community-level studies.
Available: CDC National Centre for HIV, STD and TB prevention
http://www.cdc.gov/nchstp/dstd/Facts_Treatment_Prevention_HIV_Infection.htm
3. Coetzee N, Magwaza S (1998) Assessing Quality of Care delivered to patients with STDs in Primary Health Care clinics: The development of an instrument for use by the district clinic supervisors. Health Systems Trust; Durban.
URL: <http://www.hst.org.za>
4. Department of Health (1998) South Africa Demographic and Health Survey. DoH, Pretoria
5. Family Health International (2003) Innovative Approaches to STD Control. HIV/AIDS Prevention and Care Department. FHI, Arlington.
6. Family Health International (2001) Sexually Transmitted Infections – a Strategic Framework. HIV/AIDS Prevention and Care Department. FHI, Arlington.
7. Family Health International/USAID (2003) STDs: Global Burden and Challenges for Control. HIV/AIDS Prevention and Care Department. FHI, Arlington.
8. Gilson L, Mkanje R, Grosskurth H, et al (1997) Cost Effectiveness of Improved Treatment Services for Sexually Transmitted Diseases in Preventing HIV-1 Infection in Mwanza Region, Tanzania. The Lancet, Volume 350, Issue 9094, pp 1805 – 1809, National Library of Medicine, NIH, Bethesda.
9. Grosskurth H, Mosha F, Todd J, et al. (1995) Impact of Improved Treatment of Sexually Transmitted Diseases on HIV in Rural Tanzania: Randomised Control Trial. The Lancet, Volume 346, Issue 8974, pp 517 – 584. National Library of Medicine, NIH, Bethesda.
10. Health Systems Trust (2002) South Africa Health Review. In:
Sonko R; McCoy D; et al Sexually Transmitted Infections. SAHR – Chapter 14, HST, Durban.
11. Health Systems Trust (2004) South African Health Review. In:
Funani I, Sonko R, et al: Routine Monitoring and Clinical Sentinel Surveillance of Sexually Transmitted Infections. SAHR – Chapter 16, HST, Durban
12. Heiby J. (1995) Quality of Health Services. In:
Janovsky K (Ed) Health Policy and Systems Development: An Agenda for Research, World Health Organisation, Geneva.

13. Jackson D & Dallabetta G. (2004) Sexually Transmitted Infections: Prevention and Management. HIV/AIDS Institute, Family Health International: Arlington.
14. Magwaza S, Cooper D, Coetzee N (2002), Improving Care for Patients with Sexually Transmitted Infections in South Africa, Nursing Standard, Volume 17, Chapter 8, pp 33-38,
15. Moodley P. (2002) The Syndromic Management of Sexually Transmitted Diseases: Clinical and Microbiological Response in Relation to Aetiology, Susceptibility Patterns and Co-infection with HIV-1. [PhD thesis], University of Natal, Submitted Feb. 2002.
16. Moys A. et al (2002) Evaluating the Quality of STI Management at a Regional Level Using the District Quality of Care Assessment Tool – DISCA, RHRU/HST, Durban.
17. Mullick S, McCoy D. et al. (2000) Evaluating the Quality of Care for Sexually Transmitted Infections using the DISCA: A report from 3 health districts. Reproductive Health Research Unit (RHRU) and Initiative for Sub-District Support (ISDS). Press Gang. Durban.
18. National Department of Health (2001) Developing and implementing an HIV/AIDS plan at district level. Government Printers. Pretoria.
19. National Department of Health (2000) HIV/AIDS and STD Strategic Plan for South Africa 2000 – 2005. Department of Health, Pretoria.
20. National Department of Health (2000; 2001 & 2002) National HIV and Syphilis Sero-Prevalence Surveys of women attending Public Antenatal Clinics in South Africa, Government Printers, Pretoria.
21. National Department of Health (1998) Protocols for the Management of a Person with a Sexually Transmitted Disease According to the Essential Drugs List. Department of Health; Pretoria.
22. National Department of Health (2004) Strategic Plan for 2004/5 – 2006/7. Department of Health; Pretoria.
23. Payne K. (2003) Health Guide A-Z – Pelvic Examination, Healthwise Incorporated, Boise, ID 83701
24. Ramkisoan A. et al. (2002) National Baseline Assessment of Sexually Transmitted Infections and HIV Services in South African Public Sector Health Facilities. Reproductive Health Research Unit. Durban.
25. Shisana O, Simbayi L. (2002) Nelson Mandela/HSRC Study of HIV/AIDS – South African National HIV Prevalence, Behavioural Risks and Mass Media Household Survey. HSRC, Publishers Cape Town
26. Turner CF, Rogers SM, Miller HG, et al. (2002) Untreated gonococcal and chlamydial infection in a probability sample of adults – Unveiling the Hidden Epidemic of Sexually Transmitted Diseases. Journal of American Medical Association (JAMA).

27. UNAIDS (1998) The Public Health Approach to STI Control, UNAIDS Technical Update, May 1998
28. WHO (1998) Global Prevalence and Incidence of Selected Curable Sexually Transmitted Diseases: Overview and Estimates. World Health Organisation, Geneva.
29. Wilkinson D, Connolly AM, Harrison A, et al: (1998) Sexually Transmitted Disease Syndromes in Rural South Africa: Results from Health Facility Surveillance. *Sexually Transmitted Diseases*, 25: 20 –25, MRC, Cape Town.



APPENDIX A

**District STI Quality of Care Assessment
DISCA**

INSTRUCTIONS:

Please fill out this evaluation by:

1. Interviewing a senior clinician
2. Inspecting the facilities, equipment and supplies, and
3. Examining the laboratory specimen register and patient medical records

Province:

District:.....



Health facility name:

Telephone:Fax:

Date of visit:///
Day month year

Time of visit:h.....

Name and title of district clinic supervisor:

.....

Name and designation of person filling out the evaluation:

.....

ACCESSIBILITY

1. Does this facility offer STI treatment **at all times** between 8am and 4pm on all week No
2. Does this facility offer STI treatment as part of **after clinic hours** services? Yes No
3. How many **consultation rooms** are there in this facility? _____
4. a. Does this facility use **all consultation** rooms to treat clients with STIs? No
 b. If no, how many consultation rooms are used for STI care? _____
5. Please **observe** whether this facility offers **consultation in private** for all STI clients i.e. consultations cannot be observed by other clients and providers? Yes No
6. Please request a caseload book or register and record the following figures for the last month:
 - a. Total number of clients seen _____
 - b. Total number of adult clients (13-15 years and older) _____
 - c. Total family planning clients: _____
 - d. Total ante-natal clients _____
 - e. Total number of clients with an STI _____



SAFE EXAMINATION

7. Are the following pieces of equipment available in all adult consultation rooms?

Total number in this facility:

- | | | | |
|-------------------------------------|------------------------------|-----------------------------|-------|
| Examination couch | <input type="checkbox"/> Yes | <input type="checkbox"/> No | _____ |
| a. (i) Examination light | <input type="checkbox"/> Yes | <input type="checkbox"/> No | _____ |
| (ii) How many are in working order? | | | _____ |
| b. Vaginal specula | <input type="checkbox"/> Yes | <input type="checkbox"/> No | _____ |
| c. Examination gloves | <input type="checkbox"/> Yes | <input type="checkbox"/> No | |
8. Speculum examinations are done on all women with STI all most a few none

PROVISION OF SAFE TREATMENT:

- 9. a. Are there current STI syndromic management guidelines at this facility?

Yes	No
-----	----

- b. Are STI syndromic management guidelines in all adult consultation rooms?

Yes	No
-----	----

- c. Are there individual client education materials about STI/HIV prevention and treatment available in this facility?

Yes	No
-----	----

- d. Are these educational materials written in a local language?

Yes	No
-----	----

10. How are specula sterilised in this facility?

.....

- 11. a. Is syphilis RPR testing done **on site** in this health facility?

Yes	No
-----	----

- b. If not, what is the **turn-around time** *for the RPR test results?

(*The time elapsed between taking blood for RPR from the client and getting the results back from the laboratory.)

12. Has there been any occasions over the last month when male **condoms ran out**?

Yes	No
-----	----

13. Whereabouts in the clinic are condoms available?

.....

.....

14. a. Are STI clients **shown** how to use condoms in this facility?

Yes	No
-----	----

b. Is there a **dildo** available for condom demonstrations in this facility?

Yes	No
-----	----

c. If no, how do you make sure that a client knows how to use condoms in this facility?

.....

.....

15. Which clients with STIs would you **refer** for treatment?

.....

.....

16. Partner Notification

a. Are Partner Notification cards / letters available in all adult examination rooms?

Yes	No
-----	----

b. Are the cards written in a local language?

Yes	No
-----	----

c. How many partner notifications were issued in the last month? _____

d. How many partners came for treatment in the last month? _____

17. a. Is blood taken for RPR (syphilis) test from all STI clients?

Yes	No
-----	----

b. If not, for which conditions do STI clients have blood taken for RPR test?

.....
.....



ANTENATAL SCREENING AND STI TREATMENT

18. a. Is **syphilis screening** done on all pregnant clients who attend antenatal care for the first time?

Yes	No
-----	----

b. How many first time antenatal clients were seen last month? _____

c. How many tested positive for syphilis? _____

19. Do you examine and treat pregnant clients for STIs other than syphilis?

Yes	No
-----	----

20. Which pregnant women with STIs do you refer for treatment?

.....
.....

STAFF TRAINING

21. a. What is the total number of professional nurses working at this clinic? _____
- b. How many clinicians working here have been on a formal _____ training course in STI syndromic management?
- c. How many clinicians working here have been on a formal HIV/AIDS counselling course? _____
- d. How many clinicians (doctors or nurses who examine and treat clients) _____ are working today?
22. If you had a problem about STI management who would you consult?
(State name and designation of this person) _____
-

STI DRUGS AND TREATMENT



23. Visit the pharmacy or drug store room. Ask the pharmacist or nurse in charge of drugs the following:

Drugs	Is it currently in stock? Yes / No	Over the last month has the drug run out? Yes / No	State the reasons for drugs running out.
1. Ciprofloxacin 250mg tabs			
2. Metronidazole 400mg tabs			
3. Erythromycin 250mg tabs			
4. Doxycycline 100mg tabs			
5. Benzathine Penicillin 2.4mu			

24. Fill in the information below for the 10 most recent clients treated for an STI. Use the client cards, daily register or pharmacy records to obtain the information

STI clients	Syndrome See codes below	What type of drugs did the patient receive? State the type, dose and duration	Correct drug Yes/No	Correct dosage Yes/No	Correct frequency & duration Yes/No	RPR test requested Yes/No
1.						
2.						
3.						
4.						
5.						
6.						
7.						
8.						
9.						
10.						

Syndromic Codes: (to be used in the 2nd column above);

1 – Penile discharge 2 – Vaginal discharge 3 – Pelvic inflammatory disease (PID) 4 – Genital Ulcers 5 – Genital warts 6 – Other STI (specify)

25. Ask a clinician the following questions:

(check answer with STI syndromic management guidelines)

(a) What drugs (type, dosage, frequency and duration) would you use to treat:

(i) a man with penile urethral discharge?

.....

(ii) a woman complaining of a vaginal discharge?

correct

incorrect

.....

(iii) a man or a woman with a genital ulcer?

correct

incorrect

.....

(b) How would you treat a pregnant woman with an STI vaginal discharge?

.....

correct

incorrect

(c) If doxycycline was out of stock what would you use in its place for discharges?
(give drug, dosage and duration)



.....

correct

incorrect

The first version of this tool was developed by Nicol Coetzee and Sphindile Magwaza.

This version is the result of further work by the **National STI Initiative**

The DISCA has been approved by the Department of Health

Further copies available from National STI Initiative (Telephone 031-332 8315)

or

Health Systems Trust (Telephone 031- 307 2954)

This questionnaire may be photocopied for further distribution.



APPENDIX B

DISCA Limitations

The DISCA is a useful tool for evaluating quality of STI care at a clinic level, but it is not able to give information on all aspects of STI care.

What the DISCA cannot do:

- It does not give information on the quality of history taking.
- It does not show whether clients are properly examined, or even whether they are examined at all.
- It does not indicate whether clinicians screen other clients for STIs. For example do they establish whether clients coming for other reasons might also be at risk of having an STI? Particular categories of clients, who might be at risk, because they are obviously sexually active, are those coming for contraception or for antenatal care.
- It indicates whether the correct drugs have been prescribed according to the diagnosis, but it cannot indicate whether that diagnosis was correct.
- It does not identify how well health education is done – whether it is done at all, whether it is relevant to the client or whether the manner of communicating is appropriate. It does not establish whether the client has understood any of the health education that might have been given.
- It provides no information on whether clients have been offered an HIV test or whether they have been tested.
- It gives limited information about infection control.
- It does not indicate whether clients are actually using condoms.
- It does not assess whether the clients feel satisfied with their visit.
- It indicates the number of people, who have been trained in STI management and HIV counselling, but it does not provide information on the quality of the training, nor does it indicate whether the training is being effectively implemented.
- It does not identify the causes of the problems revealed e.g. why there are drug shortages, why only some (or no) women have speculum examinations.

For a more comprehensive evaluation of the quality of STI care, other methods could be used such as:

- Observation of a consultation;
- Discussions with staff to identify the causes of a problem;
- Client exit interviews;
- Role plays and case studies;
- Community surveys e.g. to find out the level of knowledge of people in the community about STIs and where most people would first seek treatment if they thought they had an STI.

APPENDIX C

Mpumalanga Department of Health Approval Letter

MPUMALANGA PROVINCIAL GOVERNMENT

Building No 3
No. 7 Government Boulevard
Riverside Park Extension 2
Nelspruit
1200
South Africa



Private Bag X 11213
Nelspruit
1200
(013) 766-3186
(013) 766-3474

Department of Health and Social Services

Litiko Letemphilo
Nemisebenti Yenhlalakahle Yesive

Umyango Wezamaphilo ne
WezomPhakathi

Departement van Gesondheid
en Maatskaplike Dienste

Enq.: Ms T.E Maseko
Reference: Research & Quality Improvement

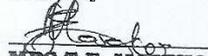
30 July 2004

Mr Ntayiya, W.S

EVALUATING THE QUALITY OF CARE FOR SEXUALLY TRANSMITTED INFECTIONS (STI) IN 14 PRIMARY HEALTH CARE FACILITIES (PHC) IN UMJINDI LOCAL MUNICIPALITY, MPUMALANGA PROVINCE.

1. Permission is hereby granted to Mr. Ntayiya to conduct a study on 'Evaluating the Quality of Care for Sexually Transmitted Infections (STI) in 14 Primary Health Care facilities (PHC) in Umjindi Local Municipality, Mpumalanga Province.
2. Because of the importance of this research topic, it is recommended that the researcher collaborates with the Local Service Area (LSA) health team management members e.g the Communicable Disease Control (CDC) Coordinator, the local Health Information System Officer, and clinic supervisors.
3. The Department of Health needs a copy of the research findings for its own resource centre.
4. The researcher should be prepared to assist interpretation and implementation of the recommendations where possible.
5. Implications: The researcher's presence should be reported to institutional management in order to conduct the research

Sincerely


MRS T.E. MASEKO
PHC-MANAGER

APPENDIX D

Action Plan to correct provision of STI services

Problem	Cause	Action	By whom	When	Evaluation
Low attendance of STI clients in PHC facilities.	Inactive STI case finding.	Organise ongoing in-service education and training sessions for nurses on good history taking and conducting physical examinations.	LSA Health Manager STI Coordinator Clinic Supervisors	Quarterly with effect from March 2005	September 2005 and six monthly
Inadequate lighting facilities.	No lighting equipment like torches, side lamps, and batteries.	<p>Arrange a meeting with the Stores Manager and order needed equipment.</p> <p>Follow-up on orders that have already been done.</p> <p>Send equipment that is out of order for repairs.</p> <p>Condemn equipment that is beyond repairs.</p>	STI Coordinator Clinic Managers	End March 2005	End June and then Quarterly

Problem	Cause	Action	By whom	When	Evaluation
PHC nurses not trained in the syndromic management of STIs	Insufficient trainers and/or facilitators within the local municipality.	Facilitate training for local Master Trainers/Trainer of Trainers (TOTs) Conduct training for all the clinicians from the 14 PHC facilities.	LSA Health Manager STI Coordinator	End March 2005	Quarterly
STIs not properly managed.	Non-adherence of PHC nurses to STI protocols. Poor/incomplete recording of drugs prescribed.	Reinforce the use of STI protocols by all clinicians and ensure that they stick to them when diagnosing patients. In-service and monitor clinicians on proper recording of treatment in the client files.	Clinic Supervisors STI Coordinator Health Information Systems (HIS) Officer	End March 2005	Quarterly

Problem	Cause	Action	By whom	When	Evaluation
Condoms not accessible for 24 hours	Condoms kept inside the clinic where clients cannot freely access them.	Place condom distributors outside of the clinic. Increase condom distribution points e.g. spazza shops, taverns, public facilities (community halls and youth centres), etc. Reinforce educational messages on accessibility and correct use of condoms. Store condoms in all consulting rooms.	Clinic supervisors Clinic nurses Health Promotion Officers	End March 2005	Quarterly
Inadequate supply of dildos for proper demonstration of condom use.	Clinic nurses not knowing how to access dildos.	Supply dildos to all facilities without them.	STI Coordinator Health Promotion Coordinator	End March 2005	Quarterly

Problem	Cause	Action	By whom	When	Evaluation
Poor turn around time of laboratory specimen for RPR	Lack of dedicated transport for laboratory specimen No personnel allocated to collect specimen from clinics.	Draft motivation for extra transport and personnel, and prepare a submission to the Senior Management Team (SMT) Arrange a meeting with the Transport Manager and senior District Management Team	LSA Health Manager	End March 2005	September 2005, then quarterly
Incorrect STI referrals to the hospital.	Poor history taking and not performing vaginal examinations lead to wrong diagnosis of STI clients	Integrate STI referral criteria into the in-service training sessions. Ensure use of, and adherence to STI management protocols by all the clinicians.	Clinic Supervisors STI Coordinators STI Trainers	End March 2005	Quarterly

APPENDIX E

Information sheet for interviewee

Mr. W.S. Ntayiya is currently a registered student at the School of Public Health, University of the Western Cape. He is registered for the Masters in Public Health (MPH), student number: 2036207. As part of his studies, he is conducting the evaluation of the quality of care for Sexually Transmitted Infections (STIs) services in all the 14 Primary Health Care facilities in Umjindi Local Municipality. The purpose of this research is to conduct a baseline assessment that will be used as a benchmark for future assessment in improving the quality of care in STI services.

Permission to conduct this study has already been obtained from the provincial and district level of the Department of Health, to ensure confidentiality, but they will not be informed as to who has been approached and actually interviewed.

Your permission to be involved in the interview is therefore requested. Your comments will be treated in the strictest of confidence. Only a small research team shall know names of persons interviewed. Your participation in the research is entirely voluntary. There will be absolutely no penalties should you wish to withdraw at any stage.

Should you have any questions please feel free to ask me now or at any time.

Thank you.



Sakumzi Ntayiya

Nelson Mandela Children's Fund
21 Eastwold Way
Off Oxford Road
Saxonwold
2196

Telephone (w): (011) 274 5600
Cellphone: 083 458 7474

APPENDIX F

Consent Form

I have read the above information sheet, and give my consent to be interviewed. I understand that any comments that I make, or answers that I give, will be used as the basis for the improvement of the quality of care for the STI management programme in Umjindi Local Municipality.

This consent is given on the condition that no comments will be directly attributed to myself, nor can they be traced back to myself, and that the interview will be treated in strictest confidence by the research team.

Signed

Date.....

Signed

