AN EVALUATION OF THE EFFECTIVENESS OF TRAINING IN SYNDROMIC MANAGEMENT OF SEXUALLY TRANSMITTED DISEASES

by

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JANUARY 2000
DECLARATION

I declare that AN EVALUATION OF THE EFFECTIVENESS OF TRAINING IN SYNDROMIC MANAGEMENT OF SEXUALLY TRANSMITTED DISEASES is my own work and that all the sources that I have used or quoted have been indicated and acknowledged by means of complete references.

LB NGESI

DATE

28.01.2000
Summary

This study is about evaluating the effectiveness of training in syndromic management of STDs. The purpose of this study was to find out to what extent the STD training programme had been implemented.

A stratified sample of twenty-two primary health care clinics in the Port Shepstone region was used. Twenty-two professional nurses rendering STD management in the clinics were observed. Data-gathering was done through a clinic inventory obtained by interviewing the sister-in-charge, observation of professional nurses providing treatment to STD patients, interviews with professional nurses to assess their knowledge of the syndromic approach, and exit interviews with patients treated at the clinic.

The findings suggest that certain areas in the STD training need to be emphasized, such as vaginal speculum and bi-manual examinations. It is recommended that certain negative aspects which hinder effective STD management, like staff shortages and lack of equipment be given attention.

KEY CONCEPTS

Sexually transmitted diseases, syndromic management, symptoms, urethral discharge, genital ulcers, condoms, vaginal discharge, pelvic inflammatory disease, partner notification, primary health care, World Health Organization.
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<td>HIV</td>
<td>Human Immune-Deficiency Virus</td>
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<td>IEC</td>
<td>Information, Education and Communication</td>
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<td>IUCD</td>
<td>Intra Uterine Contraceptive Device</td>
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<td>PHC</td>
<td>Primary Health Care</td>
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<td>PID</td>
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CHAPTER 1

Overview of the research

Nursing is a goal-directed service that assists the individual, family and community to promote, maintain and restore health (Rand Afrikaans University, Department of Nursing Science 1992:9). This dissertation is about evaluating the effects of the in-service training that was given to clinic nurses in the Port Shepstone region at KwaZulu-Natal who deal with clients presenting with sexually transmitted diseases (STDs).

1.1 INTRODUCTION

The syndromic approach is the new approach to the management of STDs that was recommended by the World Health Organization (WHO 1995:15). The syndromic management of STDs is based on treating the client according to one of several defined syndromes rather than by identifying a specific causal organism (Department of Health 1996:2). This is because it is difficult to make an accurate disease-specific diagnosis on a clinical examination. Many
clients also have mixed infections caused by more than one organism. Using syndromic management saves time during the consultation for discussion with clients on control aspects of STDs. The KwaZulu-Natal Provincial Department of Health designed a manual to introduce Primary Health Care nurses to the new approach of the "syndromic management of STDs". After working through the training manual for the management of STDs, the clinic nurse should be able to manage an STD client comprehensively.

The components that make up comprehensive STD management are:

- gaining the trust and confidence of the client by treating him/her in an empathetic and therapeutic way
- taking a detailed history according to guidelines provided
- examining an STD client correctly according to guidelines
- information sharing about the cause and spread of STDs
- information sharing about human immuno-deficiency virus (HIV) and acquired immune-deficiency syndrome (AIDS)
- counselling STD clients on healthy and safe sexual practices
- explaining how condoms work and demonstrating their use to a client
- using contact cards to notify sexual contacts
- treating STDs according to the new protocol developed for this region (McCoy 1995:5)

This study evaluates whether training of nurses in syndromic management of STDs has resulted in an improvement in the clinical skills that these nurses were taught with reference to management of STD clients. Evaluation is often concerned not only with assessing worth or value, but also with seeking to assist in the improvement of whatever is being evaluated (Robson 1996:175).

The definition of effectiveness according to WHO (1995:27), is having a definite or desired effect. A programme is said to be effective when:

- there is increased knowledge
• improved attitudes
• healthier behaviour

The emphasis of the research was on the training programme and not on the effectiveness of the baseline information. The criteria of WHO was to research the effectiveness of training of nurses in syndromic management of STDs. It is acknowledged that a follow-up research study that evaluates the effectiveness of the training programme, would be of value and should be conducted.

1.2 BACKGROUND OF THE STUDY

The major reason for doing research in nursing is to provide the profession with a body of scientific knowledge. A scientific investigation can answer basic questions like: Am I effective? How effective am I? How can I be more effective? (Treece & Treece 1986:19)

Community Nursing is part of Nursing as a science, and the topic under investigation in this dissertation lies within this study field. Primary health care is the first level of contact of patients with health care providers. Clinical nursing research at this level is a practical way whereby individual nurses can improve the health care of patients and benefit mankind in general. The aim of research at this level of care is to generate scientific knowledge for the improvement of the care that nurses provide to patients/clients.

In a speech delivered at the forum on Primary Health Care Research at the conference centre, Pretoria, Slabber (1992:10) stated that if primary health care is our priority, we need the research findings on which to build our services. Country-specific research can inform decision-makers about a specific area's own priority problems, enhance the use of limited resources and motivate to improve health policy and management. Sexually transmitted diseases (STDs) are infections passed from one person to another through sexual intercourse (Wood 1983:5). The World Health Organization recommends a new approach in which the most common and important STDs are grouped according to their presenting clinical symptoms into a few syndromes. This approach is accepted in South Africa, and KwaZulu-Natal hospitals
and clinics now use the syndromic approach. The reasons for using the syndromic approach in managing STDs are set out below (WHO 1995:15):

- **Many STDs do not cause clear cut, easy to identify, typical symptoms**

  Genital ulcers can be difficult to diagnose on the basis of the causative organism. Chancroid is often painful, but can sometimes be painless. The presence of HIV results in atypical signs and symptoms which further complicates an accurate clinical diagnosis.

- **Mixed infection is common**

  Even genital ulcers may consist of more than one infecting organism. A person may be infected with both syphilis and chancroid at the same time. Finding a single causative organism in people with STDs is rare.

- **Expensive and difficult laboratory tests**

  The only way to make a definite and accurate diagnosis of an ulcer or discharge requires expensive and difficult laboratory tests, which would be impossible to provide in all hospitals and clinics. Most laboratory tests cannot be done on site. This means correct medication would have to be prescribed at a follow-up visit after the results are received. Many clients would not return for follow up.

- **More time for health education**

  Using syndromic management means that more time is available during the consultation for discussing on control aspects of STDs.

- **Most cost-effective method**

  The World Health Organization has also concluded from a number of studies that the syndromic
approach is the most cost-effective method of STD management.

1.3 RATIONALE OF THE STUDY

- It is now the policy of the KwaZulu-Natal Department of Health to manage STDs according to the syndromic approach.
- The majority of public sector STD services are provided in primary health care clinics rather than in specialised hospital services. The KwaZulu-Natal Department of Health and the Medical Faculty of the University of Natal developed a training manual on syndromic management for nurses.
- In 1996, intensive training in syndromic management of STDs was given to nurses in KwaZulu-Natal. Currently most of the primary health care clinics provide STD service, using one of several management protocols.
- The in-service training targeted professional nurses as they are responsible for consulting, counselling and prescribing treatment for STD patients/clients. The theoretical training was offered over a two-day period and covered the content of the training manual for the management of STDs. The practical training was given in the clinical setting and the professional nurses actually saw the clients in different clinics. Training is valuable in itself because it empowers people and enables them to work with confidence, but it is no guarantee of efficient care, thus there is a need for evaluation.

1.4 STATEMENT OF THE PROBLEM

In 1995, a base-line study of the quality of STD management in KwaZulu-Natal clinics was undertaken, and the following are some of the findings (Department of Health 1996:10):

- There was no uniformity in the management of STDs. Each clinic had a different STD management protocol.
- A large percentage (namely 65,0 percent), of service providers had never received any format STD training in the last three years.
- No counselling of STD patients as nurses lacked the counselling skill and claimed to be
too busy to do it.

- Lack of privacy during consultation.

It is important to determine the effectiveness of the training that primary health care nurses received to implement the new approach "syndromic management" of STDs. The following research questions were derived from the problem statement:

- What resources, in the form of current staff, drugs, facilities and equipment are available for STD management?
- To what extent have the nurses’ skills of performing full physical examination of an STD client been developed and improved?
- What is the extent of knowledge of STD risk factors amongst the professional nurses?
- What is the STD clients’ perception of the treatment received at the clinic?

1.5 AIM OF THE STUDY

In the light of the statement, the aim of the research is to explore and describe the effectiveness of the in-service training in enabling the clinic professional nurses to manage STD clients comprehensively.

1.5.1 Research objectives

☐ General objective

The general objective of this study is to

- explore the literature for information and research on methods of evaluation on the syndromic approach to STD management
Specific objectives

The specific objectives of this study are to

- compare the content of in-service training and the practice of clinic nurses in implementing the syndromic management of STDs
- determine the knowledge of STD risk factors amongst clinic professional nurses
- explore the extent of the skills in performing full physical examinations of STD clients by the clinic professional nurses through observation
- identify and describe the resources available for STD management
- make recommendations for further research in this field
- make recommendations to improve and update the practice of the professional nurse in the clinic

1.6 SIGNIFICANCE OF THE STUDY

This is an area-specific study. There appear to be no findings of research done in the Port Shepstone region of KwaZulu-Natal on the evaluation of the effectiveness of an STD in-service training programme. This study was prompted by the concern of the researcher as a primary health care nurse trainer to evaluate to what extent the syndromic management of STDs is implemented in all the primary health care clinics of the Port Shepstone region. Good quality information based on research and its efficient dissemination lead to more efficient and more cost-effective services. The knowledge and information acquired from this study should be valuable to policy makers who require access to good information and reliable data to use for the planning of educational programmes in an effort to improve management of STDs.

1.7 PARADIGMATIC PERSPECTIVE

To mark the interaction within the reality (needs of clients with STDs in this study), the assumptions for the study were selected from the paradigms in the human and social sciences that help us understand phenomena and are a way of looking at natural phenomena that
encompass both theories and methods and also organise thinking, observing and interpreting what is seen (Mouton & Marais 1992:21; Creswell 1994:1; Polit & Hungler 1993:648; Brink 1996:28).

This study is rooted in phenomenology and sees nursing as an experience lived by human beings (George 1985:293; Chinn & Kramer 1995:192), in this case interaction with the client who has a sexually transmitted disease. Each such experience is taken to be unique to the individual and to the time and space in which it occurs. Individuals are themselves unique and can only be experienced holistically; thus, as Rogers (George 1985:216; Chinn & Kramer 1995:178) puts it, the concern of nursing is with man in his entirety, his wholeness. In this study the paradigmatic perspective is presented by the nursing theory of the whole person and is philosophically grounded on a Judaeo-Christian view and Biblical principles (Oral Roberts University, Anna Vaughn School of Nursing 1990:136). The paradigmatic perspective consists of metatheoretical, theoretical and methodological assumptions. These are discussed below.

1.7.1 Metatheoretical assumptions

Metatheoretical statements are basic assumptions and value statements of a philosophical nature that are accepted as being true on the basis of logic and reason, without proof of verification (Polit & Hungler 1993:431; Mouton & Marais 1992:37). The metatheoretical assumptions of research are therefore not testable and deal with researchers' views on man and society and offer a framework within which theoretical statements are made. The researcher recognizes a Judaeo-Christian world-view and therefore accepts the following statements:

- **Man/a person** is a spiritual being who functions on an integrated bio-psycho-social manner in his/her quest for wholeness and therefore interacts as a whole with his/her internal and external environment. Even in traditional African cultures man is seen as a spiritual being and the traditional healing process concentrates on the facilitating process towards wholeness.
Nursing/community nursing is a purposeful service aimed to promote the health of the individual, family and community, to maintain health and to prevent illness. Central to this service is the concept of nursing for wholeness. The promotion and maintenance of health and the prevention of illness/restoration of health are seen as follows:

- The promotion of health refers to the activities in nursing that will facilitate wholeness.
- The maintenance of health refers to the nursing activities that will keep the individual, family and community healthy/whole.
- Prevention of illness/restoration of health refers to the nursing activities that will facilitate the return to acceptance levels of health of the individual, family and community (Rand Afrikaans University, Department of Nursing Science 1992:10).
- Illness is a condition that reflects the individual’s interaction with his/her internal and external environment. Illness can also be indicated qualitatively on a continuum from seriously ill to minimally ill. Any person has the potential to become ill (Oral Roberts University, Anna Vaughn School of Nursing 1990:140).

1.7.2 Theoretical assumptions

Theoretical assumptions are testable statements about social phenomena. They will therefore include all statements which form part of the models and theories (Mouton & Marais 1992:21).

This study endorses the theoretical assumption of the nursing theory for the whole person (Oral Roberts University, Anna Vaughn School of Nursing 1990:140). The following theoretical assumptions of the nursing theory for the whole person are applied to this study:

1.7.2.1 Person: STD client

The person in this research refers to the client with a sexually transmitted disease and the researcher, who are spiritual beings who function in an integrated bio-psycho-social way to achieve their quest for wholeness. As a holistic being, the STD client interacts with his/her internal and external environment. The needs of the STD client will be seen as holistic. The
interaction that takes place between the STD client and his/her external environment and within him/herself will be regarded as unique.

1.7.2.2 Objective: Health, wholeness

Health is seen as a condition of physical, psychological and spiritual wholeness of both the researcher and the participants, the STD clients. The interaction between the internal and external environment of the STD client determines this wholeness. The objective of community nursing is to facilitate wholeness in the individual, family and community.

To be healthy, not to be suffering from a sexually transmitted disease is seen as wholeness. The clinic professional nurse has the opportunity, resources and knowledge and will strive to facilitate wholeness in the STD client. The focus of this study is to evaluate whether training of nurses in syndromic management of STDs has resulted in an improvement in the STD management skills that these nurses were taught. Managing an STD client syndromically will enable him/her to become whole again and develop to his/her full potential.

1.7.2.3 Context: Environment — primary health care clinics of the Port Shepstone region of KwaZulu-Natal

This concept includes the internal and external environment of an STD client. The external environment is physical, social and spiritual in nature and in this study refers to the primary health care clinics of the Port Shepstone region of KwaZulu-Natal and the unique situation (own community and culture) the STD client finds him/herself in. The internal environment of the STD client comprises of the body, mind and spirit. The internal and external environment is integrated in order for an individual to function as a whole.

This study is based on the phenomenological approach with the following assumptions:

• The human being is a unified whole possessing an individual integrity and manifesting characteristics that are more than and different to the sum of the parts.
This study is also based on the following theories:

- **Paterson and Zderad**

  Paterson and Zderad see nursing as a response to human needs. This theory also sees the participants as human beings who make choices which are based on awareness and knowledge. Nursing is the response of one human need to another (George 1985:304; Paterson & Zderad 1985:24).

- **Martha Rogers**

  Rogers emphasizes the fact that the human being is a unified whole and is inseparable from the environment that will affect the life and choices of the human being, for example, the STD client. This theory also sees nursing as a humanistic interaction to promote and maintain health, to prevent illness and to care and rehabilitate the sick (Rogers 1980:223; George 1985:231).

1.7.3 Methodological assumptions

Methodological assumptions reflect researchers' views of the nature and structure of the discipline. The discipline of nursing needs methodological strategies that promote the study of complex and dynamic phenomena like human health behaviour (Mitchell 1986:261). Triangulation is an approach conducive to studying such complex behaviour (Jick 1979:605).

Denzin (1970:297) defines triangulation as the combination of multiple methods in a study of the same object or event to depict more accurately the phenomenon being investigated. The purpose of multiple methods in a study design is to overcome the deficiencies and biases that stem from any single method. Triangulation therefore takes advantage of the assets and neutralizes the liabilities of different methods (Creswell 1994:191). This approach, that is the mixed-methodology design, uses the advantage of both the qualitative and the quantitative paradigms. The aim of triangulation is to achieve results in which the variance that is obtained, reflects the trait being studied rather than the method being used to measure the trait.
Methodological triangulation will be used in this study, that is, several different methods or procedures of data-collection will be included within a single study. Examples of different methods or procedures are interviews, questionnaires, and direct observation. Multiple methods of data-collection are required to tap the various dimensions and to generate a rich and comprehensive picture of the phenomena under study.

1.7.4 Operational definitions

- **Syndromic management.** This term means treating a client according to one of several defined collection of symptoms rather than by identifying a specific causal organism (WHO 1995:15). In this study – syndromic management will refer to the treatment of clients with STD according to clearly defined characteristic symptoms.

- **Syndrome.** This term means a range of different diseases, symptoms or conditions (Evian 1993:262).

- **Sexually transmitted diseases (STDs).** STDs are infections passed between people through unprotected sexual intercourse (WHO 1993:32).

- **Clinic nurse/clinic sister.** For the purpose of this study, these terms are used interchangeably to denote the professional nurse at the clinic.

- **Client/patient.** For this study, these are used interchangeably to refer to a person presenting with a sexually transmitted disease.

- **Human immuno-deficiency virus (HIV).** The virus which causes AIDS (WHO 1993:59; Evian 1993:261).

- **Acquired immune-deficiency syndrome (AIDS).** This means the body loses the ability to fight infections because the immune system is weakened. AIDS is the late and most severe stage (final stage) of HIV disease and is characterized by signs and symptoms of severe immune-deficiency (Wood 1993:81).

1.8 RESEARCH DESIGN AND METHOD

This study will follow a descriptive design that will utilize triangulation, that is, a combination of both quantitative and qualitative approaches.
The quantitative approach holds that the researcher should remain distant and independent of
that being researched (Creswell 1994:6). Thus in surveys and experiments, researchers attempt
to control for bias, select a systematic sample, and be objective in assessing a situation.

The qualitative stance is different: Researchers interact with those they study, whether this
interaction assumes the form of living with or observing informants over a prolonged period or
actual collaboration. In short, the researcher tries to minimize the distance between him/herself
and those being researched (Creswell 1994:6).

The purpose of this integrated design is to increase both the reliability and the validity of the
measurement. One type of method could elicit data that suggest conclusions to which the other
might be blind. Also, by combining both qualitative and quantitative methods, a more complete
picture of phenomena can arise than if either type was used alone (Smith 1975:271). This
integration of methods can provide an expanded understanding of the scope of the phenomenon
of interest and increased confidence in the generalizability of the results.

- Research method

Using the quantitative approach, the research technique utilized is direct observation. This will
entail a detailed analysis of the activities carried out by the clinic professional nurse in her
management of an STD client. Professional nurses responsible for treating clients with STDs
are also interviewed. The interviews are done individually and in private, and follow the
observation sessions. The aim of the interview is to assess knowledge about the syndromic
approach, and to find out the extent of its implementation in the management of STD clients.

Respondents, other than those observed, complete written questionnaires, using the quantitative
approach. The questionnaires obtain information on the resources available for STD
management at the clinic, to verify whether these are appropriate and sufficient.
1.9 VALIDITY AND RELIABILITY OF THE STUDY

A pilot study was done to test the data-collecting instrument for reliability and validity. The instrument constructed was based on a literature review. Such a review would reveal the essential aspects of the variable to be included in the content. The instrument was then presented to a group of experts in the field (a group of six available trainers) to evaluate the content validity of the instrument. The experts evaluated each item on the instrument with regard to the degree to which the variable to be tested was represented, as well as the instrument's overall appropriateness for use. In examining the variable under study, they looked at not only what the instrument measured but also what it did not measure. Content validity preceded the actual collection of data (Brink & Wood 1988:188).

A statistician and supervisors reviewed the data-collection instrument and advised accordingly. Data was collected from different clinics about the same topic, at different times. Each source of data was chosen to represent dissimilar comparisons to obtain diverse data about a single topic (Denzin 1970:300). For example in this study, data was collected from males and females on different days of the week, in different months of the year. This design using data sources from different times is an example of data triangulation. The key is that all of the sources of data have a similar focus, that is, they all relate to some aspect of STD management.

1.10 ETHICAL CONSIDERATIONS OF THE STUDY

Subjects were selected for reasons directly related to the problem being studied, and not because they were easily available or could easily be manipulated or were poor or because the researcher liked them and wanted them to receive the specific benefits of a study (Brink 1996:140).

The right to privacy of individuals was respected. Data was not collected without the subject's knowledge and consent. The anonymity and confidentiality procedures were adhered to, to protect the right of individuals who agreed to participate in research, to ensure that the information collected from or about them remained private.
1.11 OUTLINE OF THE STUDY

Chapter 1: Overview of research
Chapter 2: Literature review
Chapter 3: Research design and/or method of investigation
Chapter 4: Data analysis and interpretation
Chapter 5: Findings, conclusions and recommendations

1.12 CONCLUSION

STDs are one of the health priorities in this country, particularly because of the interrelationship with HIV/AIDS. There is now a growing realization that more than treatment with medication is needed in STD management, hence the introduction of the syndromic approach to STD management. It is therefore important to establish which STD management strategies have been implemented in the primary health care clinics, and how effective they are in curbing the escalation of STDs in the Port Shepstone region of KwaZulu-Natal.
CHAPTER 2

Literature review

As background to this study of syndromic management of STDs, the researcher undertook extensive reading. The literature can be broadly classified into:

• an international perspective on STDs
• the epidemic of STDs in South Africa
• social and behavioural issues in STD transmission
• the diagnosis of various types of STDs in South Africa
• studies and reports on research with a similar focus to the current project
• the need for evaluation of programmes
• training and evaluation of health personnel
2.1 AN INTERNATIONAL PERSPECTIVE OF STDs

World-wide, the disease burden of STDs in women is more than five times that of men. STDs cause the second highest burden of disease for women aged 15 to 44 in developing countries, after maternal mortality and morbidity. If HIV infection is included, they account for nearly 15 percent of all health lost to people in this key productive age range. This is probably an underestimate, since until recently little attention was paid to STDs. Many sufferers are infected by more than one disease (United Nations 1996:234).

2.2 THE EPIDEMIC OF STDs IN SOUTH AFRICA

The epidemic of STDs is one of the major challenges facing the health care sector in South Africa today. It is estimated that five million South Africans are infected with at least one STD each year and a large proportion of the population has at least one STD in their lifetime (Dangor 1992:50). One of the reasons why the rate of HIV infection is so high in Africa is the high rates of persons with untreated STDs (Pham-Kanter, Steinberg & Ballard 1996:160).

One of the strategies to control this epidemic is a simple and effective programme to manage persons with STDs. The essential components of this approach include taking a good history, performing a clinical examination and providing comprehensive management that includes treatment, information, education and counselling on compliance, risk reduction, the use of barrier methods, such as condoms, and the management of sexual partners (Fehler, Duncan & Bilgeri 1984:48).

The history should include an assessment of the risk of exposure to an STD as there may be some other cause for the symptoms and signs. All patients should be thoroughly examined and a speculum examination should be performed on all women to look for other STDs within the vagina and to view the cervix in order to identify any abnormalities (O'Farrell, Hoosen & Coetzee 1994:7).
There is no national surveillance system for STDs in South Africa and therefore the only epidemiological data available comes from published studies and health facility reports. Most information is on women and studies show that over half of all antenatal clinic attendees have at least one STD. A recent review estimated that up to 15 percent of family planning and antenatal clinic attendees were seropositive for syphilis, 16 percent harbour chlamydial infections, 8 percent have gonorrhoea and as many as 20 to 50 percent have other vaginal infections (Department of Health 1996:5).

HIV seroprevalence is increasing rapidly in South Africa, and the rate is highest in KwaZulu-Natal. Sentinel surveillance of women in antenatal care in KwaZulu-Natal has shown an increase in HIV seroprevalence from 19,90 in 1996 to 26,92 in 1997. The statistics, as published in the *Epidemiological Comments* (Department of Health 1997:7), are as follows:

National HIV surveys of women attending antenatal clinics of the public health services in South Africa, 1996-1997

<table>
<thead>
<tr>
<th>Estimated (HIV+)%: 1996</th>
<th>Estimated (HIV+)%: 1997</th>
</tr>
</thead>
<tbody>
<tr>
<td>South Africa</td>
<td>14,17</td>
</tr>
<tr>
<td><strong>Provinces:</strong></td>
<td></td>
</tr>
<tr>
<td>Western Cape</td>
<td>3,09</td>
</tr>
<tr>
<td>Eastern Cape</td>
<td>8,10</td>
</tr>
<tr>
<td>Northern Cape</td>
<td>6,47</td>
</tr>
<tr>
<td>Free State</td>
<td>17,49</td>
</tr>
<tr>
<td><strong>KwaZulu-Natal</strong></td>
<td>19,90</td>
</tr>
<tr>
<td>Mpumalanga</td>
<td>15,77</td>
</tr>
<tr>
<td>Northern Province</td>
<td>7,96</td>
</tr>
<tr>
<td>Gauteng</td>
<td>15,49</td>
</tr>
<tr>
<td>North West Province</td>
<td>25,13</td>
</tr>
</tbody>
</table>
Some of the factors that contribute to the spread of STDs in this country mentioned by Wood (1983:15) are discussed below:

- **Poverty**

  People who are poor may not be able to afford transport costs to health services and therefore may remain untreated for a long time. Poverty forces many people to live in inadequate housing. Sometimes women are made to have sex with men so they can be allowed accommodation in the house. Women may have few opportunities to earn their own income, or to have control over domestic finances and may use sex as an exchange for money, clothes, protection and other favours. This makes women vulnerable to STDs, including AIDS. Hoosen (1995:20) also endorses this factor.

- **A migrant labour system**

  A migrant labour system often results in the break up of family units and relationships. The separation of family members, husbands and wives from each other for such periods causes family disorganisation. People often become more promiscuous without the security of strong family ties. Life in single hostels, where there is plenty of alcohol and few recreational opportunities promotes an environment where less safe sexual behaviour is practised (Evian 1993:11).

- **Low status of women in society**

  Many women are brought up to accept a subservient relationship with men and therefore find it difficult to ensure safe sexual behaviour. For example, women who want their partner to use a condom may often find that the man refuses, and they will consequently have to practise unprotected intercourse. If women refuse to have intercourse, they may be threatened, beaten up or even raped (Van Niftrick 1994:40).
20

Poor and inaccessible health services

In many parts of the country, people do not have adequate access to health facilities, and so have difficulty in getting treatment for their illness. Sometimes when they do have access, the quality of care is so poor that the treatment they receive does not help; or at other times the clinic may be out of the necessary drugs. Busy, overworked nurses sometimes do not have the time to do a proper examination (Department of Health 1996:4).

Incorrect beliefs and ineffective treatment

People often delay going for treatment or seek inappropriate treatment because they may have incorrect beliefs about the causes of STDs. They often believe that their condition is a result of witchcraft and go to traditional healers rather than clinics or doctors. Apart from having more faith in the traditional healer, people often feel more accepted by the traditional healer and are given more personal attention (Coetzee 1993:84).

2.3 SOCIAL AND BEHAVIOURAL ISSUES IN STD TRANSMISSION

Prevention of STD transmission through education is clearly the most positive and needed approach. However, the challenge to change behaviour so fundamental to human life touches on the satisfaction of powerful human needs, and is influenced by so many myths and taboos, misconceptions, stereotypes and stigmatization, that it becomes almost overwhelming (Mays, Albee & Schneider 1989:86). STD prevention is complicated even more by the fact that the STD epidemic in South Africa, as in other third world countries, is more than a behavioural problem. It is embedded in the socio-political context. Issues of poverty, access to food, medical care and income, the power imbalanced relationships between men and women, the relative abilities of states to provide security and services for their people, the relationships between the rich and poor, the survival and coping strategies of different communities, all impinge upon how the STD epidemic affects societies and economies (Lindegger & Wood 1995:6).
STDs in South Africa flourish most in areas that are burdened by unemployment, homelessness, welfare dependency, lack of basic services and recreational facilities, prostitution, crime, a high school drop-out rate and social unrest (Crewe 1992:52; Ratsaka & Hirschowitz 1993:15). The response of people to preventive campaigns also appears to be mediated by various personal and socio-political factors, such as locus of control, self-efficacy, defences and barriers to perception of risk, peer group norms, moral judgements opportunities to make choices about health care and life-style, power in relationships and political climate (Lindegger & Wood 1995:10).

WHO (1995:24) explains that transmission of STDs is generally easier from male to female than from female to male. In the case of HIV/AIDS, a woman is many times more likely to be infected by intercourse with a man than a woman is likely to pass on the disease to her partner. Men's concern about contracting HIV has led to increasing sexual exploitation of young women, who are presumed less likely to be infected. Some men also choose to believe that sex with a virgin can cure AIDS (Coetzee 1993:82).

Wood (1983:36) states that economic conditions and gender inequities also contribute to women's risks. Men who migrate to cities for work and are separated from their families create a demand for sexual services. Men who refuse to use condoms as part of commercial sex help spread STDs and carry infections back to their wives. Cultural expectations of female passivity and subservience to men, low control over the sexual behaviour of male partners and inability to negotiate condom use contribute to the susceptibility of women, whether as wives or as sex workers.

Sadik (1997:18) explains that women may have no symptoms of infection (half of infected women are asymptomatic), or may not recognize the symptoms they have. They may not seek care for fear of being rejected by health care providers or labelled as prostitutes in the community, or there may simply be no services available (Sadik 1997:22).

Werner and Bower (1993:24) confirm that little regard is paid to women's wishes and concerns regarding sex. Wives are often considered the sexual property of their husbands and must
comply with their wishes or risk disapproval. The penalty of refusal can be divorce, violence or worse. Even a woman whose regular partner has relationships with other women, may feel unable to ask him to use a condom with her. At the same time poverty may impel women to seek sexual partners outside marriage as a means to find a mate or to provide an income. Such women are at greater risk of disease, maltreatment and social sanction.

Van Niftrick (1994:16) explains why women lead the incidence stakes in AIDS. The writer highlights that worldwide, especially in lower socio-economic settings, young girls fall easy prey to rape, incest and early conventional sex with older men. Older men have had longer exposure to intercourse with multiple partners and therefore are more likely to harbour STDs. The lack of empowerment in women of all ages is even more deficient in adolescents.

According to Wood (1993:31), it is stated that training clinic nurses in HIV/AIDS and STD counselling is the core of primary clinical care of STDs. Nduba and Mabey (1991:20) point out that provision of patient information, education and counselling is an integral part of the syndromic management of persons with STDs. This implies that the clinic sister is responsible for ensuring that a suitable climate is provided for learning to take place. The clinic should be user-friendly and the service providers should be non-judgmental. Adequate learning and teaching facilities should be provided in the clinic. The clinic nurse herself should have the knowledge, ability, skills and sufficient enthusiasm to undertake the client teaching effectively. For this reason, participation in continuing education and self-development programmes is imperative for every nurse.

2.4 THE DIAGNOSIS OF VARIOUS TYPES OF STDs IN SOUTH AFRICA

Ahmed (1994:237) states that some STDs threaten the fertility of both men and women. In women, STD pathogen migrate up from the lower reproductive tract, causing pelvic inflammatory disease (PID) (inflammation of the uterus, fallopian tubes, ovaries, or other pelvic structures). Sexually transmitted diseases, mainly chlamydia and gonorrhoea, cause most cases of PID. Often the first symptom that women with chlamydial infection notice is the pain of
PID. At that point any damage to the fallopian tubes is irreversible. In men infertility may follow an infection that spreads from the urethra (where it is described as urethritis) to the epididymis (epididymitis) (Ballard 1991:14).

Some STDs attack the fetus and infant. In pregnant women with syphilis, the infection spreads to the amniotic sac and infects the fetus. Gonorrhoea or chlamydia may spread to the eyes of babies as they pass through the cervix and vagina. Without preventive therapy 2 to 50 percent of infants exposed to the gonorrhoea-causing bacteria during birth develop eye infections (ophthalmia neonatorum) (WHO 1995:33).

Dangor (1992:16) states that other STDs make it easier for HIV to pass from one person to another. Chancroid, chlamydia, gonorrhoea, syphilis, and trichomoniasis may increase the risk of HIV transmission by two to nine times. Carried in body fluids, HIV may leave one person's body and enter another's more easily through genital ulcers. HIV itself has been isolated from the genital ulcers of women with HIV infection. Thus the link is clearest between HIV infection and STDs that cause genital ulcers, although not all studies find an association.

Six out of ten studies in Kenya and Zaire (Grosskurth & Todd 1995:530) found that people with genital ulcers, caused mainly by chancroid, were more likely to be infected with HIV than people without ulcers. Herpes doubled the risk of HIV infection for women and heterosexual men. Infection with HIV also affects the other STDs. In people with HIV infection, other STDs may be more resistant to treatment.

Ballard (1991:18) reports that one-dose treatment for chancroid failed at least six times more often in HIV-infected patients than in patients without HIV infection. Also, syphilis lesions may last longer in people infected with HIV, and these people may get gonorrhoea more often. Thus HIV enhances its own transmission: with longer-lasting STD symptoms, people with HIV infection are more likely to transmit HIV and increase the pace of the AIDS epidemic.
Hoosen's (1995:28) states that STDs can and should be managed at the peripheral level of health care as this is the first encounter for a person with symptoms of a sexually transmitted infection. Any delay in treatment or inappropriate management facilitates the spread of infection and loss in health promotion and prevention. Furthermore, primary health care settings avoid the stigmatization attached to attending dedicated STD clinics. Such an approach makes STD services more widely available. Hoosen states further that the syndromic approach to the management of an STD patient is based on the identification of a collection of signs and symptoms that cause a particular syndrome and treatment is administered for the most likely causes of the syndrome rather than a specific disease. For example, treatment is administered for urethral discharge or genital ulcer disease rather than for gonorrhoea or syphilis. Information about the sexual history of a patient may also help in distinguishing between syndromes that are sexually transmitted or due to some other reproductive tract infections, such as candidiasis and bacterial vaginosis, which are not essentially sexually transmitted.

Latif (1990:236) goes on to state that the syndromic approach if undertaken properly, is in keeping with a world-wide effort to contain the spread of STDs. It should not be forgotten that health education, and behaviour modification are also important components of a comprehensive approach in the control of STDs and, as such, need to be employed in the overall strategy to control this rapidly spreading epidemic.

2.5 STUDIES AND REPORTS ON RESEARCH WITH A SIMILAR FOCUS TO THE CURRENT PROJECT

In his study on the impact of improved treatment of STDs, Mathews (1996:1478) puts it in a nutshell that the essential components of an STD programme include an STD awareness campaign, accessible and user-friendly STD services integrated into primary health care services, a simple and effective way to manage persons with STDs, and ways of reducing the core of carriers of STDs. Any management advised for an STD should include:

- treatment that is effective against all organisms that may cause the syndrome
• information, education and counselling on compliance and the prevention of future STD episodes
• the promotion and provision of barrier methods such as condoms and the demonstration of their use
• the notification and management of all sexual contacts or partners, both symptomatic and asymptomatic (Latif 1990:237)

A study on the Mwanza Region of Tanzania (Grosskurth & Todd 1995:530) have at last offered hope to everyone struggling to slow the spread of HIV/AIDS in developing countries. A team of investigators from the London School of Hygiene and Tropical Medicine worked together with the Tanzania Ministry of Health to see whether improved treatment of other STDs given at rural health centres, could reduce the incidence of new HIV infections. At the beginning of the study, medical assistants and nurses in six rural health centres were trained in syndromic management of STDs. This approach does not require laboratory facilities but depends on giving treatment for all likely causes of syndromes, such as genital ulcers or discharges, the first time a client is seen. Health care centre staff were also encouraged to counsel their clients, offer them condoms and ask them to refer sexual partners for treatment.

A group of 1 000 adults in the communities served by the six health centres was interviewed and tested for HIV at the beginning of the study and two years after the intervention was introduced.

The number of new cases of HIV infection occurring in this group was compared with that in another group selected from communities served by health centres where improved STD treatment had not been instituted. Overall, this simple intervention reduced the number of new HIV infections occurring over the two years of the study by 42 percent. This result was highly significant statistically (Hayes & Mosha 1995:70). Results of a survey of study and comparison group members before and after the intervention suggest that these reductions in HIV incidence were the result of improved STD treatment rather than changes in sexual behaviour. Since the cheapest effective drugs were used and treatment was given through existing health facilities, it should be possible to introduce and sustain such an intervention in any developing country
with a functioning health service.

2.6 THE NEED FOR THE EVALUATION OF PROGRAMMES

Evaluation is primarily concerned with describing and finding the effects of a particular approach, policy or programme (Robson 1996:171). Visser (1996:103) sheds some light on how to evaluate knowledge of AIDS as well as attitude towards people with AIDS. As AIDS is an educational and behavioural problem (like all other STDs are), it can be controlled by changing high-risk behaviour, and people can be empowered to control the disease (McCormick 1989:62). Robson (1996:173) explains the distinctive features of evaluations and defines an evaluation as a study which has a distinctive purpose, and is primarily concerned with describing and finding the effects of a particular approach, policy or programme. He warns, however, that a thorough knowledge of the programme being evaluated is an essential forerunner to the selection and subsequent use of the method.

2.7 TRAINING AND EVALUATION OF HEALTH PERSONNEL

Criteria and methods suitable for evaluation are: structure, process and outcome.

Structure criteria

These relate to the items of service which are in the system and are necessary for the achievement of the task described. In other words, they refer to the expected performance of the organization. Included as structure criteria are:

- physical layout
- staff members, skills mix, training, expertise
- information, policies, procedures (Sale 1990:11)
Process criteria

These relate to the actions which must be taken by staff in order to achieve the standard. In other words, they refer to what the nurse will do to achieve certain results. This also includes non-visible actions, such as decision-making. Process criteria are:

- assessment techniques
- interpretation of signs and symptoms and appropriate intervention
- informing and educating clients
- documentation of care
- utilization of resources

Outcome criteria

These refer to the expected performances of clients or the results expected after good nursing care has been rendered. Outcome criteria are:

- client behaviours and responses
- level of knowledge
- health status (Sale 1990:12)

2.8 CONCLUSION

The aim of the present study is to evaluate the effectiveness of training in the syndromic management of STDs. A programme is said to be effective when it results in

- increased knowledge
- improved attitudes
- healthier behaviour

To be able to make an effective evaluation, it was important to review what other people have written on the subject and compare it with the content of the in-service training that nurses received.
CHAPTER 3

Research design and/or method of investigation

3.1 INTRODUCTION

The research design was described in chapter 1. This chapter discusses it in more detail.

3.2 RESEARCH DESIGN

The study made use of triangulation, a descriptive design involving both quantitative and qualitative approaches. This is an after the fact (ex post facto) study because the variable, namely the training of professional nurses, has already occurred. The purpose of this evaluative study was to find out to what extent the training programme has been implemented. Brink (1996:106) states that a summative evaluation is conducted on an ongoing or completed programme to determine whether the programme has met the stated objectives.
3.3 RESEARCH METHOD

The research technique utilized was direct observation. This entailed a minute-by-minute analysis of activities carried out by the clinic professional nurse in her management of an STD client. The instruments used were observation sheets on which the observers noted every activity and the time involved in each. To assist and complement the observation technique, a written questionnaire was completed by the respondents (professional nurses) in order to assess their knowledge. The questionnaires obtained information on the resources available for STD management at the clinic, and whether these were appropriate and sufficient.

Professional nurses responsible for treating patients with STDs were interviewed. The interviews were done individually and in private, and followed the observation sessions. All STD clients observed were subsequently interviewed as they left the clinic. The basic minimum data-collection instruments were:

- a clinic inventory obtained by interviewing the sister-in-charge of the clinic (Form 1)
- observation of professional nurses providing treatment to patients with STDs (Form 2)
- interviews with professional nurses providing treatment of STDs at the clinic (Form 3)
- exit interviews with patients treated at the clinic (Form 4)

The methodology used in the study is described in the WHO/GPA publication, *Evaluation of National HIV/AIDS Programmes: A Methods Package*. The questionnaire was a modified version of the WHO questionnaires (WHO 1996:10-50).

3.4 POPULATION AND SAMPLE

The population studied were all professional nurses rendering STD management in the primary health care clinics in the Port Shepstone district. Initially, only the Port Shepstone district was to be included in the study because of its accessibility, but as planning proceeded, two other districts that form part of Region A were included because when this project was presented at a regional meeting, the managers of the health services in the other two districts did not want
their services to be left out, but felt that this should be a regional rather than a district project.

3.5 OBTAINING PERMISSION

Permission to conduct the study in various primary health care clinics in the region was obtained from the Regional Director of Health in Region A. Nurse managers/clinic supervisors, were requested to select the clinics to be included in the study. The sisters-in-charge of the clinics were notified by their respective supervisors and follow-up arrangements were made through the project leader. In all instances the managing authorities welcomed the undertaking and went out of their way to assist in the planning of the project.

3.6 CHOICE OF CLINICS

A detailed list of the location of all primary health care clinics in the region is available at the office of the Regional Director of Health. The stratification of the clinic sample in the region ensured that a good geographic, locality (urban, semi-urban, rural), and type of sector (public, private), representation was achieved. A total of 22 clinics formed the sample for the project.

3.7 CHOICE OF CLINIC PERSONNEL TO BE OBSERVED

Professional nurses who provide care to clients presenting with symptoms of STDs in the sampled clinics were observed. Each professional nurse in the clinics on the day of the researcher’s visit was observed for a maximum of three STD client consultations. Observations were followed by an interview, and completion of an inventory checklist for the clinic.

3.8 THE RESEARCH TEAM

The observation of nurse-patient interaction provided most of the information on how a patient was counselled, examined, and provided with treatment. The person doing the observation needed to be medically trained and highly experienced in providing STD services. For this
reason, therefore, the research team consisted of six primary health care trainers, two for each district. Their training experience ensured that they were able to view an interaction critically, and were familiar with all the provider behaviours listed in the observation instrument.

The project leader, assisted by other personnel, planned the observer's schedule in consultation with each individual in accordance with her work commitments. The research participants included personnel who were experienced in nursing research and others who were being exposed to the practicalities for the first time and for whom this constituted a meaningful learning experience. Two observers were allocated to each district and provided with observation sheets, and the questionnaires relevant to the study.

3.9 TRAINING THE RESEARCH TEAM

The training consisted of a broad introduction to the research objectives, interviewing and observing, ethical issues and a detailed review of each question in every questionnaire so that all team members understood the meaning of each question, how to ask the question and how to record the answer. Considerable time was spent on role-playing both the interviews and the observations, with the trainees taking turns to act as the interviewer or observer and as a professional nurse at the clinic. Role-playing gave each team member a chance to practise asking questions and recording answers.

Initially, trainees frequently recorded responses differently. Discussion of these instances provided an opportunity to clarify definitions and deepen understanding. As the training programme progressed, trainees became confident with handling the data-collection instruments. Reliability between observers increased.

Time was spent planning for the fieldwork. The following fieldwork issues were finalised:

- the list of primary health care clinics to be visited per district
- transportation
- storage of completed and resupply of fresh data-collection instruments
The full importance of privacy, informed consent and protection of subjects was communicated to all involved in the study, and researchers practised how they were to communicate this to the study subjects and to others.

3.10 CONDUCTING OF THE STUDY

As stated, the primary research technique was direct observation.

(1) Observation form

This data-collection instrument was designed to help record what happens when a health provider (professional nurse) counselled and examined an STD client. Observation requires good listening and taking note of detail.

Before the first consultation, the observer had to obtain the provider's permission to sit in and observe the client-provider interaction. The provider in turn, had to ask the client whether it was acceptable for the observer to be present.

If possible, the observer had to sit in the background so that she had no direct eye contact with either the provider or the client. She had to wear appropriate clothing (own nursing uniform), and have a pleasant smile on her face. She had to keep her paper and pen resting on her lap and be discreet when noting down observations.

The provider was not supposed to ask the research observer for her opinion or advice, except in extremely serious situations; the provider had to be requested to behave as if the observer were not present.

The observation form was designed so that the observer ticked boxes that described what she had seen. Because there was no fixed order for each consultation, it was essential that the observer learned the structure of the observation form so that whenever she saw particular action or heard a specific issue being discussed, she knew exactly where to mark the form. In
some cases, it was necessary to remember what happened and to mark the form after the consultation was finished.

(2) Client exit interview

This instrument gathered information from the STD clients about the services received. This information was used to assess the quality of care that clients received from the clinic, which could be compared to the quality of care that was presented to clients. This indicates to us whether information was communicated effectively, how clients felt about the services, and how much clients understood about the process of STD counselling and prevention of further infections.

At the end of the consultation, the observer followed the client away from the provider and asked whether s/he would mind being interviewed. If s/he agreed, the client was then led to a preselected private place, away from the clinic staff and other clients. It was important that the client gave his/her informed consent to be included in the study. The client was asked whether s/he had any questions about the study. The client’s wishes were respected if s/he did not want to be interviewed.

For the rest of the interview, the client’s responses had to be recorded by circling a precoded response, ticking a box, or writing a response as instructed. At the conclusion of the interview, the coded responses had to be reviewed quickly for completeness and correctness while the client was still available. The client had to be thanked for his/her participation.

(3) Staff interview

This instrument gathered information on the training, knowledge and practices of professional nurses providing STD management. Professional nurses who were observed were also interviewed. The results of these interviews will help programme planners to design training programmes targeted to the specific needs of staff. This information was also compared with information from the observations, to see how effectively provider knowledge was translated
into provider action.

(4) Inventory

The purpose of this instrument was to assess the readiness of the clinic to provide STD services. A complete list was made of all equipment, supplies (e.g., drugs), information, education, communication materials, and other facilities that currently existed.

The observer verified that the items existed by actually observing them herself. Observing the facilities that were available completed the inventory through discussions with the person-in-charge of the clinic.

3.11 PRETESTING OF THE INSTRUMENT

Pretesting of the instruments and a trial run of the methodology was carried out at a clinic which did not fall within the sampled clinics, but offered management for clients presenting with STD symptoms. The project leader supervised the completion of the questionnaires.

3.12 DATA ANALYSIS

All the questions were analysed using descriptive statistical methods. Data was presented in the form of tables and figures.

3.13 INSTRUMENTS USED AND THE REASON FOR THEIR CHOICE

3.13.1 Inventory of resources available at clinics for the management of sexually transmitted diseases (STDs) (Form 1)

The process of conducting the inventory required making observations and asking questions from the sister-in-charge of the clinic.
1. Indicate the number of professional nurses working here today who treat patients with STDs.

This information helped to assess the practical, daily capacity of the clinic to deliver STD services (as compared to the formal capacity by number of professional nurses assigned to work full-time at the clinic). If a staff member was supposed to be on duty, but was out on the day of visit due to illness or some other reason, s/he was not counted as “on duty”.

2. What is the home language of the majority of patients who come to this clinic?

This question was to assess the language the majority of the clients speak.

3. What information and education materials are available on HIV/AIDS?

Information, education and communication (IEC) materials can be valuable aids to communication, and their presence enhances the quality of services. For each item in this question, it was important that the observer actually verified that a particular IEC item was present. To verify, she had to actually see it. Observers had to look for posters on the walls of the clinic. The person- in-charge of the clinic was asked if they had flipcharts, brochures or pamphlets.

The appropriate box was ticked only if the material was actually seen. If the clinic had a few brochures or pamphlets — not enough to distribute to clients — they were still ticked as available, since they could be used during client counselling.

4. Are educational materials on HIV/AIDS available?

This question aimed at finding out whether educational material on HIV/AIDS was available, and if so, in what language.
5. Are educational materials on STDs other than HIV/AIDS available?

This question sought to determine whether educational materials on STDs other than HIV/AIDS were available, and in what language.

6. Which of the following information and educational materials are available on STDs other than HIV/AIDS?

Here specification of the available information and educational materials was sought, namely, whether posters, pamphlets, flipcharts or other materials.

7. What separates one examination area from the other?

The condition of the examination room can dramatically affect the quality of care given as well as the client's satisfaction with the clinic. Privacy means that other clients cannot see the interaction between a client and a professional nurse. This means that there is a separate examination room that is private or there is an area with a curtain or other partition that prevents other clients from seeing what is happening.

8. Are there posters in the waiting area that encourage patients to use condoms?

Observers had to look for posters in the waiting area that encouraged condom use and note the language of the posters.

9. Data on condoms

Condoms that were in stock at the clinic on the day of visit were counted and recorded. The sister-in-charge of the clinic was asked whether condoms had ever been out of stock in the last six months. This question sought to assess the consistency of condom stock levels at the clinic.
10. Record how many of each of the following types of equipment are available and in working order at the clinic on the day of the visit.

This was one of the most important sections. Each item on the list had been identified as necessary for STD management and infection control. The presence or absence of any item would greatly affect services. The presence of each item was to be verified by actually counting all the equipment in both the clinic and the storeroom. It was extremely important to determine whether the equipment actually worked. For example, if a sterilizer was available but was not used because it did not work, then it was not recorded.

11. Record whether the clinic stocks each of the following drugs.

If yes, how often was the drug out of stock in the past six months?

The sister-in-charge of the clinic was asked whether any of the STD drugs had ever been out of stock in the last six months. The purpose of this question was to find out whether the clinic provided a particular STD drug and, if so, how reliable the drug stocks were. The stocks were particularly important because if there were no drugs, a clinic simply could not offer STD treatment, even if it was otherwise ready to do so.

3.13.2 Observation of professional nurses providing treatment to patients with STDs
(Form 2)

This instrument was designed to help record what happened when a health provider such as a professional nurse counselled and examined an STD client. The observation sheet was probably the most difficult to complete as it required good listening and observing skills.

When observing the interaction between the client and the nurse, the observer had to make notes and then record the answer to some of the items later. S/he had to try to become very familiar with the observation sheet and even memorise parts of it so that s/he knew what to look for when the nurse/client interaction took place and knew where to record the information.
1. **Patient characteristics**

- The question on gender was asked to identify whether the STD client was male or female.

- The client’s age was asked to establish which age group STDs affected.

2. **Symptoms that patient present with**

- Presenting STD complaint: This information was required to establish which STD syndrome it was.

3. **Is the presence of the observer explained?**

Adequate privacy during consultation is crucial. Without this, the client would not feel free to give an honest history and would be too embarrassed to discuss behavioural issues. For this reason, the presence of the observer had to be explained to the client. Because of the sensitive and embarrassing nature of the examinations clients faced, it was important to help them feel at ease.

4. **Is the patient questioned about the following issues?**

- Nature of the presenting symptoms

This question was asked to establish whether the client had been at risk of acquiring an STD and, if so, which STD syndrome s/he might have acquired.

- Onset or duration of symptoms

To get an idea of how recently the infection had been acquired.
• History of recent sexual contacts

To establish whether the client was sexually active and to what extent s/he was at risk of STDs.

• Previous STD treatment

To find out whether the client had already started treatment or whether that was a recurrent or resistant infection.

5. Does the nurse look at the patient's genitals with patient lying down?

All clients have to be examined. It is not acceptable to treat a client according to history alone, because the client may have problems, which s/he has not mentioned. Even in some seemingly straightforward cases, such as a client complaining of a discharge, it is important to examine the genital area carefully because there may be an ulcer present as well. In women, it is important to part the labia and inspect as much of the vagina as possible to look for ulcers or sores that may be hidden.

6. Are examination gloves used?

A thorough examination of the genital area in both men and women should always be done wearing clean latex gloves, to prevent infection.

7. Are the external genitalia thoroughly examined for any discharge and lesions?

This includes:

For uncircumcised men: Is the foreskin retracted?

For women: Are the labia separated and inspected?
To make a thorough examination of the genitals and to identify the relevant STD syndrome that the client may have acquired.

FOR WOMEN ONLY:

8. Are the external genitalia thoroughly examined?
8.1 Are the labia separated and inspected?
8.2 Is a speculum examination performed?

It is recommended that a speculum examination be done on all women with a discharge because a woman may have an ulcer on the cervix, which can only be seen using a speculum.

8.3 Is an adequate light source used?

To ascertain if there was a functioning electric light or sufficient natural light from a window when doing an adequate examination.

8.4 Is a bimanual examination performed?

To exclude pathology, like polyps, warts, cystocele, fibroids, and ovarian or tubal abnormalities.

9. Ask the nurse what his/her diagnosis is and write it down.

To finally identify what STD syndrome the client may have acquired.

10. Ask the nurse what treatment he/she is prescribing to the patient, at this consultation.
11. **Is it the correct prescription for the diagnosis?**

To compare and note whether the nurses were making the correct prescriptions according to the type of STD syndrome.

12. **Counselling issues observed**

12.1 **Discussion of preventive methods with partner/s**

All clients with STDs are to be encouraged to talk to their partner/s about their sexual behaviour. Safer sex education is not only about making sex safer, but about improving the quality of sexual relationships. Some useful general guidelines on planning safer sex education in the community include:

- Start from trust rather than fear. Safer sex education should aim to help people protect themselves and their partners from HIV infection rather than passing judgement on particular sexual needs or practices.
- Promote discussions around the most common sexual activities in any given community, including people's views about sexual satisfaction, expectations and pleasure.
- Encourage any form of sexual expression in which the risk of HIV transmission is minimised.

There are many options for safer sex and individuals will make a choice based on what is most pleasurable and acceptable to them (WHO 1995:95). Safer sex is any sexual practice that reduces the risk of passing HIV from one person to another (Wood 1993:30). The best protection is to choose sexual activities that do not allow semen, vaginal fluid or blood, including menstrual blood to enter the mouth, anus or vagina or touch the skin where there is an open cut or sore. These fluids can carry HIV.
Encouragement of appropriate prevention methods

Some people choose to abstain from sex. For those who want to continue sexual activity, specific safer sex practices include:

- a mutually faithful relationship between two uninfected partners
- reducing the number of sexual partners
- using a barrier such as a condom for all types of intercourse: vaginal, anal and oral
- non-penetrative sex practices, such as hugging, kissing, rubbing and masturbating
- avoiding sex when one has open sores or any STDs (McCoy 1995:32)

In some communities where the incidence of STDs is relatively high, the only certain way for people to avoid contracting an STD (including HIV) is for both partners in a relationship to remain faithful to one another (Visser 1996:103). Many people (especially women) get STDs despite having only one partner, because their partner has other sexual relationships. Therefore it is important for each partner to know about the other's sexual practices. Women may find it especially difficult to find out about their partner's sexual practices, but it is important for all who are engaged in a sexual relationship to have some knowledge of the health risk of their partners (Van Niftrick 1994:16).

For prevention and control of STDs, people need to know what aspects of sexual behaviour are safe and what is risk behaviour. In order to avoid becoming infected with another STD, many clients will need to change some aspect of their behaviour. The health provider's role is to give relevant information, provide various alternatives and, if necessary, assist the client to choose what course of action is most acceptable and realistic to him/her.

12.2 Availability of condoms to client

It is important that condoms are freely available at all clinics and that clients know that they may take as many condoms as they feel they need.
12.3 Instructions on condom use

It is not enough to offer condoms to clients without instructions on how to use them. The clients have to understand that it is important:

- to have a condom before one needs it
- to use a condom with every act of sexual intercourse
- not to use oil/oil-based lubricants, eg, Vaseline, on rubber condoms
- not to re-use condoms
- to check the expiry date and not to use the condom if it is damaged or expired
- to read the directions on the package
- to open the wrapper carefully to prevent damaging the condom
- to be careful of sharp fingernails and rings which may tear the condom
- to hold the tip, roll the condom down the full length of the erect penis, before there has been any sexual contact. (Use teat-ended condoms or leave room at the tip to collect the semen.)
- to use lubricated condoms, or water-based lubricants, like glycerine or KY jelly on the outside, to prevent the condom tearing
- after making love, that is, after ejaculation, to withdraw the penis slowly, holding on the condom at the base of the penis
- to remove the condom carefully and dispose of it in a toilet, or burn it, or bury it (ie, to make sure it is not left anywhere where children can play with it)
- to wash hands and penis (McCoy 1995:107)

12.4 Demonstration on the use of a condom

It is important for a professional nurse to demonstrate the correct way to put on a condom to patients.
12.5 Advice on abstinence from intercourse and

12.6 Practice safe sex until symptoms disappear or treatment is complete

- Advise the patient to abstain from intercourse until treatment has been completed, and until completely cured.
- Explain to the patient that this will reduce the chance of failed treatment, and that intercourse in the presence of an active infection carries a high risk of contracting HIV infection.
- Discuss with the patient to what extent s/he will be able to meet this requirement. If necessary, other methods of sexual expression apart from penetrative sex must be discussed.

Touch in the form of caressing, massaging and rubbing one another is one way to give and receive love and sexual pleasure. Thigh sex (ukusoma) where ejaculation occurs against the woman's thighs or mutual masturbation (manual genital stimulation) are also alternatives to penetrative sex (McCormick 1989:70).

Only if the patient is unable to abstain, can condoms be used until the patient is fully cured and the treatment completed. It had to be stressed that it was far safer for the client to abstain from sexual intercourse until s/he was fully cured. It was very important for patients to come back if the problem was not completely cleared.

12.7 Encouraging sexual partner(s)/contacts to have treatment

It had to be explained to the client that all sexual partners, including casual contacts, within the last three months should be treated for the following reasons:

- If they are not treated, they may remain with an asymptomatic infection, which could lead to serious complications at a later stage.
- If they are not treated, they may pass on the infection to other people without realizing it (including their unborn child).
• The client may become re-infected if his or her sexual partner is not also treated (Mathews 1996: 1478).

Some STDs can take a long time before becoming apparent, therefore all sexual partners in the previous three months should be considered as sexual contacts requiring treatment. It is recommended that STD contact management cards be given to the clients with the instructions that they should bring their sexual partners to the clinic or give a contact card to each sexual partner and ask him or her to go to the nearest clinic for treatment.

The clinic nurse needs to find out whether the clients have any problems about speaking to their partner/s about having an STD. If necessary, the clients have to be helped to plan the task of informing their partner/s.

12.8 Providing patients with STD contact cards

Each patient presenting with an STD has to be given STD contact cards for his/her sexual partner/s. Partner notification therefore needs to be considered an integral part of clinical management. These cards contain information aimed at encouraging partners to seek appropriate treatment.

12.9 People with STDs may be asymptomatic

It was necessary to explain to the client that many STDs are "silent" infections. In other words, a person may have an infection but it does not produce any signs or symptoms. In this way the client can remain infected without getting the correct treatment. Women, in particular, develop asymptomatic infections. Often they will remain asymptomatic until they develop a serious complication, such as infertility (Hoosen 1995:39).

12.10 Completion of all prescribed medication

It is important to emphasize that the patient must complete all the treatment correctly. Even
when the client feels better, s/he is not to stop taking treatment until it is all completed. It is important that clinic nurses always explain to clients how and when they are to take their medicines. The clients were to be made aware that their sexual partners need their own course of treatment. Sharing the pills would mean that neither person was effectively treated.

12.11 Effects and contra-indications of medications

It is necessary to explain effects and contra-indications of each medication prescribed to improve patient compliance.

12.12 STDs increase the chance of contracting HIV/AIDS

The following are the key health education messages about AIDS that have to be passed on to clients with STDs:

- AIDS is already present in the community. The sexually active population with HIV infection is increasing all the time.
- HIV infection is transmitted mostly through sexual intercourse.
- STDs are the major co-factor of the HIV epidemic. Many people who are HIV positive have had a previous STD. STDs increase the risk of contracting AIDS.
- Most of the people who are infected with HIV at present are healthy and asymptomatic and may remain so for several years.
- Unlike many other types of infection, there is no cure for AIDS.
- The more sexual partners a person has, the higher the risk of contracting the disease. Even someone with only one partner, can still contract AIDS if the partner is involved in other sexual relationships. HIV/AIDS knows no social boundaries and any person who practises or whose partner practises unsafe sex, is at risk.
- There are many options for decreasing the risk of acquiring AIDS, including the following:
  — Be in a mutually faithful sexual relationship.
  — Limit the number of sexual partners.
— Use condoms.
— Get early treatment for STDs.
— Abstain from intercourse if you have any signs or symptoms of a STD (Coetzee 1993:82).

12.13 Complications of STDs

One of the most common causes of infertility in this country is the damage caused by infection due to STDs. In women, pelvic inflammatory disease causes scarring of the fallopian tubes and blockage so that sperm and ovum cannot meet. Scarring of the fallopian tubes can result in ectopic pregnancies in women. In men, epididymo-orchitis can occasionally cause scarring and blockage of the vas deferens and other structures so that sperm production and movement are impaired (Evian 1993:27).

If a mother is infected with an STD during pregnancy, this can lead to a number of serious complications including:

- increased chance of spontaneous abortions
- premature rupture of membranes and premature labour
- intra-uterine deaths and stillbirths
- increased rates of abruptio placentae
- post-partum pyrexia and sepsis (Ahmed 1994:237)

A mother can pass on syphilis to her newborn, resulting in congenital syphilis. During vaginal delivery, discharges caused by gonorrhoea and chlamydia in the mother can lead to neonatal conjunctivitis, which may result in permanent blindness if not treated early and properly (Ahmed 1994:238).

12.14 Follow-up treatment

It is very important for clients to come back if the problem was not completely cleared.
13. Was privacy maintained during consultation?

Privacy means that other clients cannot see the interaction between a client and a nurse.

14. What was the duration of the patient counselling?

To find the duration of the interaction, the time the observation began was noted and checked against the time the observation was finished. The aim was to observe whether the counselling time was too short, too long or satisfactory.

3.13.3 Interview with professional nurses providing treatment of STDs at the clinic (Form 3)

The first person to be interviewed was the sister-in-charge of the clinic. It was necessary to obtain her permission to interview other professional nurses. Nurses’ names were not to be recorded on any of the interview questionnaires. The sister-in-charge of the clinic was also asked to assist in conducting the inventory. The informed consent of each professional nurse was obtained before starting the interview.

1. Approximately how many STD patients do you personally treat at this clinic in an average month?

The aim of this question was to determine the nurse/STD patient load in an average month.

2. What do you think increases the chance of contracting STDs?

The reason for asking this question was to obtain the nurses’ perception of the risk factors for contracting STDs.
3. Do you think a person can be infected with an STD and not show any symptoms or signs of being ill?

This question sought to ascertain whether the professional nurses themselves were aware of asymptomatic STD infections.

4. If you were to take 100 randomly chosen pregnant women from this area, how many, on average, do you think might have HIV?

5. If you were to take 100 randomly chosen men employed in this area, how many, on average, do you think might have HIV?

These two questions sought to determine the level of HIV infection rate in the community, and also whether there was a difference in the rate of HIV infection between males and females.

6. Do you think STDs increase the risk of contracting AIDS?

This was to assess whether professional nurses were aware that having STDs could increase the risk of getting AIDS.

7. Do you perform physical examinations on male STD patients?

The aim of this question was to establish whether a physical examination was routinely performed on a male STD client.

8. If always/sometimes, please describe each step of how you would examine a male STD patient?

Responses were not to be read but probed by asking "anything else?" and ticked, if mentioned. The interviewer has to be aware that the nurse may not use exactly the same language listed in the form, and so try to select the most appropriate response.
9. Do you perform physical examination on female STD patients?

This was to establish whether a physical examination was routinely performed on a female STD patient.

10. If always/sometimes, please describe each step of how you would examine a female STD patient.

Responses were not to be read, but probed by asking “Anything else?” and ticked, if mentioned.

11. Questions 11, 12, 13, and 14 are asked for information on drug prescription.

The aim of these questions was to elicit information on drug prescription: drug name, quantity, dosage, route of administration and duration of treatment. Each STD syndrome has a specific drug protocol.

15. What STD issues are routinely part of your counselling?

Responses were not to be read but probed by asking “Anything else?” and ticked, if mentioned.

16. Do you provide condoms to your STD patients?

Condoms reduce the risk of transmission of STDs and AIDS in all types and groups of people, therefore they must always be provided to all STD patients.

17. If always or often:

How many condoms each time?

The aim of this question was to assess the availability of condoms and the willingness of the health service provider to offer condoms according to the patient's need.
18. Do you provide instructions to your patients on how to use condoms?

The aim of this question was to assess whether nurses instruct patients on how to use condoms.

19. Do you demonstrate how to use a condom to patients?

This was to enquire whether patients had demonstrations on how to put on a condom.

20. Have you received any training in the syndromic management of STDs?

The purpose of this question was to determine whether the nurse had any training in the syndromic management of STDs.

21. What are the main constraints on your work with STDs?

This was an open-ended question for the nurse to explore what could be the main problems or barriers in her work with STDs.

3.13.4 Exit interview with patients treated at the clinic (Form 4)

When a patient had finished the consultation with the professional nurse, s/he was asked if s/he was willing to answer a few questions about the service received. It was essential to obtain informed consent before beginning the interview.

1. Do you feel your consultation with the nurse was too short, too long, or satisfactory?

The actual amount of time involved could be obtained by comparing the actual length of the consultation (from the observation to the end of interaction) to discover the length of time that clients were most comfortable with. Also, to check the cost-effectiveness.
2. During the visit, did the nurse ... 

2.1 listen to your health problems to your satisfaction?
2.2 let you ask questions you thought were important?
2.3 respond to your questions to your satisfaction?
2.4 adequately explain to you the results of any examinations?
2.5 adequately explain to you about sexually transmitted diseases?

These questions examined the issue of whether the client felt comfortable asking for the information they needed. When clients feel free to ask questions and are responded to satisfactorily, it is a strong indicator of quality in interpersonal relations, and also probably affects a client’s continued use of a health facility.

Clients’ questions can be on any subject, such as how STDs are contracted, or where to obtain condoms. Questions may also include concerns, which include but are not limited to worries or rumours of health risks, side effects of STD drugs, and partner reactions. Examinations — include genital examination, and speculum examination in females. It is believed that if clients are aware of examinations, they will be more at ease during their visit. An explanation of the examination involves telling the client what the nurse is about to do, why she is doing it, and what the client could expect to feel. Explaining the results of the examination involves telling the client if the nurse comes to any conclusions or diagnosis based on the examination.

3. Did you have enough privacy during your visit with the nurse?

This was the client's opinion, however s/he determined it.

4. How well did you understand what the nurse explained to you?

This was the client's opinion, however s/he determined it.
FOR MEN ONLY:

5. Why did you come to the clinic today?

The aim of this question was to correctly identify the client's main reason for attending the clinic.

6. For how many days have you had this problem in your genital area?

To determine whether it was an acute infection or a chronic infection, which might not have responded to treatment.

7. Before coming to this clinic, what did you do about this problem in your genital area?

A client's choice of options is important because it might have been motivated by the quality of service s/he experienced.

FOR WOMEN ONLY:

The reasons for asking questions 8, 9 and 10 were the same as those for men only. However, they are specific to women only.

11. Any suggestions as to how you would like to see STD patients treated at this clinic.

This question allowed the clients to mention something that bothered them about the experience, without being critical. It had to be probed with supportive comments, such as: "Anything you would like to suggest is fine."
3.14 CONCLUSION

In this chapter, the research method and the basic data-collection instruments were discussed in detail. Chapter 4 deals with the statistical analysis of the data.
CHAPTER 4

Data analysis and interpretation

4.1 INTRODUCTION

During this study the work of the professional nurse in her management of STD clients was put under scrutiny. What she does in the normal day-to-day clinical consultation was observed and recorded by a team of trainers who, as nurses, should be capable of objective, accurate recording.

A record was obtained of what she says she does, and what she actually does in reality. Using the objectives of the study, the following questions were answered:

- What resources, in the form of current staff, drugs, facilities and equipment are available for STD management?
- To what extent have the nurses’ skills of performing full physical examination of an STD client been developed and improved?
• What is the extent of knowledge of STD risk factors amongst the professional nurses?
• What is the STD clients' perception of the treatment received at the clinic?

4.2 SAMPLING

A total of 22 clinics in Region A, that provide care to clients presenting with symptoms of STDs were surveyed. The sample was as follows:

<table>
<thead>
<tr>
<th>Category</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban</td>
<td>5</td>
</tr>
<tr>
<td>Rural</td>
<td>4</td>
</tr>
<tr>
<td>Semi-Urban</td>
<td>2</td>
</tr>
<tr>
<td>Mobile clinics</td>
<td>8</td>
</tr>
<tr>
<td>Private Urban Clinics</td>
<td>3</td>
</tr>
</tbody>
</table>

The stratification of the clinic sample by districts ensured that a good geographic and locality (urban, semi-urban, rural) representation was achieved. The deliberate inclusion of the Transitional Local Council (TLC) and private clinics was necessary because of their important role in STD services in the Region. As a result, the findings are readily generalisable to the entire region.

4.3 DISCUSSION OF RESULTS

<table>
<thead>
<tr>
<th>Category</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of clinics visited</td>
<td>22</td>
</tr>
<tr>
<td>Number of professional nurses observed</td>
<td>22</td>
</tr>
<tr>
<td>Number of professional nurses interviewed</td>
<td>22</td>
</tr>
<tr>
<td>Number of patient exit interviews</td>
<td>66</td>
</tr>
</tbody>
</table>

The data-collection instruments were divided into four sections as follows:
4.3.1 Inventory of resources available at clinics for the management of sexually transmitted diseases (STDs) (Form 1)

An inventory of the resources available for STD management was checked in each of the clinics surveyed, by means of an interview with the sister-in-charge, and by observation.

Item 1.1: Number of professional nurses

The clinics had an average of two professional nurses who were treating STD patients on the day of visit.

Item 1.2: Home language of the majority of the patients who come to this clinic

![Figure 4.1: Home language of the majority of the patients at the clinics (n = 66)](image)

Figure 4.1 indicates that the majority of the patients, namely 77,3 percent (n = 51) who came to the clinic spoke Zulu as a home language, while 22,7 percent (n = 15) spoke Xhosa.
Item 1.3: Information and educational materials on HIV/AIDS

Information, education and communication (IEC) materials can be valuable aids to communication, and their presence enhances the quality of services (Hoosen 1995:40).

Table 4.1: Information and educational materials on HIV/AIDS (n = 22)

<table>
<thead>
<tr>
<th>Information and education materials</th>
<th>% Yes</th>
<th>f</th>
<th>% No</th>
<th>f</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIV posters in waiting room</td>
<td>50,0</td>
<td>11</td>
<td>50,0</td>
<td>11</td>
</tr>
<tr>
<td>HIV posters in examination area</td>
<td>22,2</td>
<td>5</td>
<td>77,8</td>
<td>17</td>
</tr>
<tr>
<td>HIV pamphlets</td>
<td>57,9</td>
<td>13</td>
<td>42,1</td>
<td>9</td>
</tr>
<tr>
<td>HIV flipchart</td>
<td>11,1</td>
<td>2</td>
<td>88,9</td>
<td>20</td>
</tr>
</tbody>
</table>

Table 4.1 indicates that HIV posters were displayed in the waiting rooms of 50,0 percent (n = 11) of the clinics, while 50,0 percent (n = 11) of the clinics did not have HIV posters in the waiting rooms. Only 22,2 percent (n = 5) of the clinics had HIV posters in the examination area, and the majority of the clinics, namely 77,8 percent (n = 17), did not have HIV posters in the examination area. HIV pamphlets were available in 57,9 percent (n = 13) of the clinics and 42,1 percent (n = 9) did not have HIV pamphlets. Only 11,1 percent (n = 2) of the clinics had HIV flipcharts and 88,9 percent (n = 20) did not have HIV flipcharts.
Item 1.4: Language of educational materials on HIV/AIDS

Figure 4.2: Language of educational materials on HIV/AIDS

Figure 4.2 indicates that only a small percentage of educational materials on HIV/AIDS, namely 11.0 percent, were available in Zulu, while 94.0 percent were in English.

Item 1.5: Educational materials on STDs other than HIV/AIDS

It was important to determine whether educational materials on STDs other than HIV/AIDS were available at the clinics. It was noted that 54.5 percent (n = 12) of the clinics had educational materials on STDs other than HIV/AIDS, while 45.5 percent (n = 10) of the clinics did not have educational materials on STDs other than HIV/AIDS. All the educational materials, namely 100 percent, on STDs other than HIV/AIDS were in English only. Nothing was available in Zulu and Xhosa.

Item 1.6: Information and educational materials on STDs other than HIV/AIDS

Specification of the available information and educational materials was hereby sought, that is, whether it was in the form of posters, pamphlets, flipcharts and/or other materials.
Table 4.2: Information and educational materials on STDs other than HIV/AIDS

<table>
<thead>
<tr>
<th>Information and education materials</th>
<th>% Yes</th>
<th>f</th>
<th>% No</th>
<th>f</th>
</tr>
</thead>
<tbody>
<tr>
<td>Posters in waiting room</td>
<td>25,0</td>
<td>5</td>
<td>75,0</td>
<td>17</td>
</tr>
<tr>
<td>Posters in examination area</td>
<td>18,8</td>
<td>4</td>
<td>81,3</td>
<td>18</td>
</tr>
<tr>
<td>Pamphlets</td>
<td>56,3</td>
<td>12</td>
<td>43,8</td>
<td>10</td>
</tr>
<tr>
<td>Flipcharts</td>
<td>12,5</td>
<td>3</td>
<td>87,5</td>
<td>19</td>
</tr>
</tbody>
</table>

Table 4.2 shows that posters in waiting room were displayed in 25,5 percent (n = 5) of the clinics, while 75,0 percent (n = 17) did not have posters displayed in the waiting rooms. Only 18,8 percent (n = 4) of the clinics had posters in the examination area, while 81,3 percent (n = 18) did not have posters in the examination area.

Pamphlets on STDs other than HIV/AIDS were available in 56,3 percent (n = 12) of the clinics while 43,8 percent (n = 10) did not have such pamphlets. Flipcharts on STDs other than HIV/AIDS were available in 12,5 percent (n = 3) of the clinics, while 87,5 percent (n = 19) did not have flipcharts.

**Item 1.7: Separation between examination areas**

The condition of the examination rooms was checked as they can dramatically affect the quality of care given as well as the clients’ satisfaction with the clinic.
The majority of the examination rooms, namely 90.9 percent (n = 20), had walls and a door. This meant that privacy in those examination rooms was adequate. Only 9.1 percent (n = 2) of examination rooms were separated by curtains, which meant privacy was not adequate, and a conversation in that consulting room could be overheard by other clients outside the area of consultation.

**Item 1.8: Posters in the waiting room that encourage patients to use condoms**

More than half the clinics, namely 55.6 percent (n = 12), had posters that encourage patients to use condoms displayed in the waiting rooms, while 44.4 percent (n = 10) of clinics did not have such posters displayed in the waiting rooms. All the posters on condom use that were found in 55.6 percent (n = 12) of clinics were in English.
Item 1.9: Data on condoms

All clinics, 100 percent (n = 22), had condoms in stock on the day of visit, and none reported being out of stock always or often during the preceding six months. (This was encouraging!)

Item 1.10.1: Equipment

Each item on the list of equipment was identified as necessary for STD management and infection control. The presence or absence of any item greatly affects services. The presence of each item was verified by actually counting all the equipment in each clinic.

Table 4.3: Equipment

<table>
<thead>
<tr>
<th>Type of equipment</th>
<th>% Available</th>
<th>f</th>
<th>% Unavailable</th>
<th>f</th>
</tr>
</thead>
<tbody>
<tr>
<td>Examination couch</td>
<td>100,0</td>
<td>22</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Re-usable vaginal speculum</td>
<td>82,0</td>
<td>18</td>
<td>18,0</td>
<td>4</td>
</tr>
<tr>
<td>Disposable needles</td>
<td>100,0</td>
<td>22</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Disposable syringes</td>
<td>100,0</td>
<td>22</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Containers for sharps disposal</td>
<td>95,5</td>
<td>21</td>
<td>4,5</td>
<td>1</td>
</tr>
</tbody>
</table>

Table 4.3 indicates that all the clinics, 100 percent (n = 22), had examination couches available in the examination rooms. The majority of the clinics, namely 82,0 percent (n = 18), had re-usable vaginal speculums available, while 18,0 percent (n = 4) of the clinics did not have vaginal speculums. All the clinics, 100 percent (n = 22), had adequate stocks of disposable syringes and needles available on the day of visit. The majority of the clinics, namely 95,5 percent (n = 21), had containers for sharps disposal available, while 4,5 percent (n = 1) did not have a container for sharps disposal.
Item 1.10.2: Disposable examination gloves

All the clinics, 100 percent (n = 22) had disposable examination gloves available. Clinics had an average of four full boxes of examination gloves on the day of visit.

Item 1.10.3: Availability of certain items

It was important to verify whether certain items of equipment that enhance STD management were available.

Table 4.4: Certain items of equipment

<table>
<thead>
<tr>
<th>Items of equipment</th>
<th>% Yes</th>
<th>f</th>
<th>% No</th>
<th>f</th>
</tr>
</thead>
<tbody>
<tr>
<td>Angle lamp</td>
<td>77,3</td>
<td>17</td>
<td>22,7</td>
<td>5</td>
</tr>
<tr>
<td>Penis models</td>
<td>18,2</td>
<td>4</td>
<td>81,8</td>
<td>18</td>
</tr>
<tr>
<td>Contact cards</td>
<td>100,0</td>
<td>22</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Table 4.4 indicates that Angle lamps used in vaginal examinations were available in 77.3 percent (n = 17) of clinics, while 22.7 percent (n = 5) did not have such lamps. Penis models for nurses to demonstrate to patients the correct way to use a condom were available in only 18.2 percent (n = 4) of the clinics, while 81.8 percent (n = 18) of the clinics did not have such models. All the clinics, 100 percent (n = 22) had contact cards available for sexual partner notification.

Item 1.10.4: Sterilization of re-usable vaginal speculum

It is important to sterilize the re-usable vaginal speculums to prevent cross infection. The most reliable method of sterilization is autoclaving followed by boiling for 10 minutes and lastly soaking in sterile fluid.
Figure 4.4: Sterilization of re-usable vaginal speculums

Figure 4.4 shows that in the majority of the clinics, namely 77.8 percent (n = 17), vaginal speculums were sterilized by autoclaving, while in 16.7 percent (n = 4), they were soaked in sterile fluid, and in 5.6 percent (n = 1), they were boiled for 10 minutes.

Item 1.11: Drugs

The availability of certain STD drugs was assessed at the clinics on the day of visit. The sister-in-charge of the clinic was asked whether any of the STD drugs were ever out of stock in the last six months. The purpose of this question was to find out whether the clinic provided STD drugs, and if so, how reliable the drugs stocks were. The stocks are particularly important because if there are no drugs, a clinic simply cannot offer STD treatment, even if it is otherwise ready to do so.
Table 4.5: Availability of drugs

<table>
<thead>
<tr>
<th>Name of drug</th>
<th>% Yes</th>
<th>f</th>
<th>% No</th>
<th>f</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benzathine Penicillin (vials)</td>
<td>95,5</td>
<td>21</td>
<td>4,5</td>
<td>1</td>
</tr>
<tr>
<td>Doxycycline (caps)</td>
<td>100,0</td>
<td>22</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Erythromycin (tabs)</td>
<td>86,4</td>
<td>19</td>
<td>13,6</td>
<td>3</td>
</tr>
<tr>
<td>Cyprofloxacin (tabs)</td>
<td>95,5</td>
<td>21</td>
<td>4,5</td>
<td>1</td>
</tr>
<tr>
<td>Metronidazole (tabs)</td>
<td>100,0</td>
<td>22</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Imidazole (pessaries)</td>
<td>73,3</td>
<td>17</td>
<td>22,7</td>
<td>5</td>
</tr>
</tbody>
</table>

Table 4.5 indicates that benzathine penicillin was in stock in 95,5 percent (n = 21) of the clinics and only 4,5 percent (n = 1) of the clinics did not have this drug in stock. All the clinics, 100 percent (n = 22), had doxycycline in stock on the day of visit. Erythromycin tablets were available in 86,4 percent (n = 19) of the clinics, and 13,6 percent (n = 3) did not have these tablets in stock. Cyprofloxacin tablets were available in 95,5 percent (n = 21) of the clinics, while 4,5 percent (n = 1) did not have such tablets. All the clinics, 100 percent (n = 22), had metronidazole tablets in stock. Imidazole (pessaries) were available in 77,3 percent (n = 17) of the clinics, while 22,7 percent (n = 5) of the clinics did not have these pessaries.

4.3.2 Observation of professional nurses providing treatment to patients with STDs (Form 2)

Twenty-two professional nurses providing STD management in primary health care clinics were observed during consultation for a maximum of three client appointments.

Item 2.1: Patient characteristics

The question on gender was asked to identify whether the STD client was male or female.
Figure 4.2.1: Gender distribution of STD patients observed

Figure 4.2.1 indicates that a total of 66 patients were treated for STDs. Women comprised 66.7 percent (n = 44), and males 33.3 percent (n = 22) of the total number of patients treated. Age of the client was asked to establish which age group was affected by STDs.

Figure 4.2.2: Age categories of STD patients
Figure 4.2.2 shows that the age group 21-25 years was the hardest hit at 46,9 percent (n = 31), followed by the age group 26-30 at 27,3 percent (n = 18), the age group 31 years and above at 18,1 percent (n = 12), and lastly the age group under 21 years at 7,5 percent (n = 5).

**Item 2.2: Symptoms that patients present with**

The symptoms that patients presented with were determined through questioning and observation, to establish which STD syndrome they had.

**Table 4.2.1: Symptoms of STD patients (n = 66)**

<table>
<thead>
<tr>
<th>Symptoms patients present with</th>
<th>% Yes</th>
<th>f</th>
<th>% No</th>
<th>f</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pain</td>
<td>13,6</td>
<td>9</td>
<td>86,4</td>
<td>57</td>
</tr>
<tr>
<td>Discharge</td>
<td>69,7</td>
<td>46</td>
<td>30,3</td>
<td>20</td>
</tr>
<tr>
<td>Ulcer</td>
<td>30,2</td>
<td>20</td>
<td>69,7</td>
<td>46</td>
</tr>
<tr>
<td>Swollen inguinal gland</td>
<td>3,0</td>
<td>2</td>
<td>97,0</td>
<td>64</td>
</tr>
</tbody>
</table>

Table 4.2.1 indicates that the majority of the patients in this study presented with a discharge, namely 69,7 percent (n = 46), some 30,2 percent (n = 20) had ulcers, 13,6 percent (n = 9) had pain and only 3,0 percent (n = 2) had swollen inguinal glands.

**Item 2.3: Presence of the observer explained**

It is crucial that there is adequate privacy during consultation. Without this, the client does not feel free to give an honest history and will be too embarrassed to discuss behavioural issues. For this reason, the presence of the observer must be explained to the client.
Table 4.2.2: Presence of the observer explained

<table>
<thead>
<tr>
<th>Presence of the observer explained</th>
<th>%</th>
<th>f</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>97,0</td>
<td>64</td>
</tr>
<tr>
<td>No</td>
<td>3,0</td>
<td>2</td>
</tr>
<tr>
<td>Total</td>
<td>100,0</td>
<td>66</td>
</tr>
</tbody>
</table>

Table 4.2.2 indicates that the presence of the observer was explained to 97,0 percent (n = 64) of the clients, while 3,0 percent (n = 2) of the clients were not given an explanation.

**Item 2.4: Is the patient questioned about the following particular issues?**

- *Nature of the presenting symptoms*

  The reason for this question was to establish whether the client had been at risk of acquiring an STD and, if so, which STD syndrome s/he might have acquired.

- *Onset or duration of symptoms*

  To get an idea of how recently the infection was acquired.

- *History of recent sexual contacts*

  To establish whether the client was sexually active and to what extent s/he was at risk of STDs.

- *Previous STD treatment*

  To find out whether the client had already started treatment or whether this was a recurrent or resistant infection.
Table 4.2.3: Is patient questioned about particular issues?

<table>
<thead>
<tr>
<th>Questions</th>
<th>% Yes</th>
<th>f</th>
<th>% No</th>
<th>f</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nature of the presenting symptoms</td>
<td>93,9</td>
<td>62</td>
<td>6,1</td>
<td>4</td>
</tr>
<tr>
<td>Onset of symptoms</td>
<td>97,0</td>
<td>64</td>
<td>3,0</td>
<td>2</td>
</tr>
<tr>
<td>Duration of symptoms</td>
<td>95,5</td>
<td>63</td>
<td>4,5</td>
<td>3</td>
</tr>
<tr>
<td>History of recent sexual contact</td>
<td>77,3</td>
<td>51</td>
<td>22,7</td>
<td>15</td>
</tr>
<tr>
<td>Previous STD treatment</td>
<td>65,2</td>
<td>43</td>
<td>34,8</td>
<td>23</td>
</tr>
</tbody>
</table>

Table 4.2.3 indicates that the majority of the patients, namely 93,9 percent (n = 62), were questioned about the nature of the presenting symptoms, while 6,1 percent (n = 4) were not. About 97,0 percent (n = 64) of the patients were asked about the onset of symptoms, while 3,0 percent (n = 2) were not. Almost all the patients, namely 95,5 percent (n = 63), were asked about the duration of symptoms, while 4,4 percent (n = 3) were not. History of recent sexual contacts was verified from 77,3 percent (n = 51) of the patients, while 22,7 percent (n = 15) were not questioned about this history. More than half the patients, namely 65,2 percent (n = 43) were questioned about previous STD treatment, while 34,8 percent (n = 23) were not.

Item 2.5: Examination of the patient’s genitals while the patient is lying down

It is not acceptable to treat a client according to history alone. The reason is that the client may have problems which s/he has not mentioned (WHO 1995: 18). The majority of the patients, namely 86,4 percent (n = 57) were examined lying down, while 13,6 percent (n = 9) were not examined.

Item 2.6: Examination gloves

A thorough examination of the genital area in both men and women should be done wearing clean latex gloves, to prevent infection. In this study, examination gloves were used with 92,4 percent (n = 61) of the patients, and not used in 7,6 percent (n = 5).
Item 2.7: Are the external genitalia thoroughly examined?

For uncircumcised men: Is the foreskin retracted?

The foreskin was retracted in 95.5 percent (n = 21) of the men, and not in 4.5 percent (n = 1).

Item 2.8: Are the external genitalia thoroughly examined (for women)?

Table 4.2.4: Thorough examination of external genitalia

<table>
<thead>
<tr>
<th>For women</th>
<th>% Yes</th>
<th>f</th>
<th>% No</th>
<th>f</th>
</tr>
</thead>
<tbody>
<tr>
<td>Are the labia separated and inspected?</td>
<td>84,1</td>
<td>37</td>
<td>15,9</td>
<td>7</td>
</tr>
<tr>
<td>Is speculum examination performed?</td>
<td>65,9</td>
<td>29</td>
<td>34,1</td>
<td>15</td>
</tr>
<tr>
<td>Is adequate light source used?</td>
<td>56,8</td>
<td>25</td>
<td>43,2</td>
<td>19</td>
</tr>
<tr>
<td>Is a bimanual examination performed?</td>
<td>34,1</td>
<td>15</td>
<td>65,9</td>
<td>29</td>
</tr>
</tbody>
</table>

Table 4.2.4 indicates that the majority of the women, namely 84.1 percent (n = 37), had their labia separated and inspected, while 15.9 percent (n = 7) did not. Speculum examination was performed with 65.9 percent (n = 29) of the women, and 34.1 percent (n = 15) did not have speculum examination. Adequate light source was used in 56.8 percent (n = 25) of the women, and not in 43.2 percent (n = 19). A bimanual examination was performed in 34.1 percent (n = 15) of the women and not in 65.9 percent (n = 29).

Item 2.9: Nurse’s diagnosis

After asking questions and doing a thorough examination the nurse finally identifies the STD syndrome the client may have acquired.
Table 4.2.5: Diagnosis

<table>
<thead>
<tr>
<th>Diagnosis</th>
<th>% Yes</th>
<th>f</th>
</tr>
</thead>
<tbody>
<tr>
<td>Genital discharge</td>
<td>65,2</td>
<td>43</td>
</tr>
<tr>
<td>Genital ulcer</td>
<td>31,8</td>
<td>21</td>
</tr>
<tr>
<td>PID</td>
<td>3,0</td>
<td>2</td>
</tr>
</tbody>
</table>

Table 4.2.5 indicates that 65,2 percent (n = 43) of the patients were diagnosed as having a genital discharge, while 31,8 percent (n = 21) as genital ulcer and 3,0 percent (n = 2) as PID.

Item 2.10: Prescribed treatment

The purpose of asking diagnosis and treatment was to compare whether the nurses are making the correct prescriptions according to the type of STD syndrome diagnosed.

Item 2.11: Correct prescription for diagnosis?

The nurses made correct prescriptions for diagnosis in 87,9 percent (n = 58) of the patients. The prescriptions were not correct in 12,1 percent (n = 8) of the patients.

Item 2.12: Counselling issues observed

Certain STD issues were observed to be part of the nurse’s counselling to the patient.
### Table 4.2.6: STD counselling issues

<table>
<thead>
<tr>
<th>Counselling issues observed</th>
<th>% Yes</th>
<th>t</th>
<th>% No</th>
<th>f</th>
</tr>
</thead>
<tbody>
<tr>
<td>Can patient discuss prevention methods with partner</td>
<td>80,3</td>
<td>53</td>
<td>19,7</td>
<td>13</td>
</tr>
<tr>
<td>Offers condoms to patient</td>
<td>100,0</td>
<td>66</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Offers instructions on condom use</td>
<td>66,7</td>
<td>44</td>
<td>33,3</td>
<td>22</td>
</tr>
<tr>
<td>Demonstrates how to use condoms</td>
<td>34,8</td>
<td>23</td>
<td>65,2</td>
<td>43</td>
</tr>
<tr>
<td>Advises patient to abstain from intercourse</td>
<td>21,2</td>
<td>14</td>
<td>78,8</td>
<td>52</td>
</tr>
<tr>
<td>Practise safe sex until symptoms disappear or treatment is completed</td>
<td>86,4</td>
<td>57</td>
<td>13,6</td>
<td>9</td>
</tr>
<tr>
<td>Advises patient to tell sexual contacts to have treatment</td>
<td>100,0</td>
<td>66</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Provides patient with STD contact cards</td>
<td>98,5</td>
<td>65</td>
<td>1,5</td>
<td>1</td>
</tr>
<tr>
<td>Advises patient that people with STDs may be asymptomatic</td>
<td>37,9</td>
<td>25</td>
<td>62,1</td>
<td>41</td>
</tr>
<tr>
<td>Urges patient to take all prescribed medication</td>
<td>65,2</td>
<td>43</td>
<td>34,8</td>
<td>23</td>
</tr>
<tr>
<td>Explains effects and contra-indications of medication</td>
<td>13,6</td>
<td>9</td>
<td>86,4</td>
<td>57</td>
</tr>
<tr>
<td>Informs patient that STDs increase the chance of contracting HIV/AIDS</td>
<td>98,5</td>
<td>65</td>
<td>1,5</td>
<td>1</td>
</tr>
<tr>
<td>Urges patient to return for follow-up, if necessary</td>
<td>57,6</td>
<td>38</td>
<td>42,4</td>
<td>28</td>
</tr>
</tbody>
</table>

Table 4.2.6 indicates that 80,3 percent (n = 53) of the patients were asked whether they could discuss prevention methods with their partners, while 19,7 percent (n = 3) were not asked. All the patients, 100 percent (n = 66), were offered condoms. Instructions on condom use were offered to 66,7 percent (n = 44) of the patients, while 33,3 percent (n = 22) were not offered instructions on condom use. Less than half, namely 34,8 percent (n = 23) of the patients had demonstrations on how to use condoms, while 65,2 percent (n = 43) did not have such demonstrations. The majority of the patients, namely 78,8 percent (n = 52), were not advised to abstain from intercourse until healed, while 21,2 percent (n = 14) were advised. The majority of the patients, namely 86,4 percent (n = 57), were advised to practise safe sex until the symptoms disappear, while 13,6 percent (n = 9) were not given that advice. All the patients, 100
percent (n = 66), were advised to tell their sexual contacts to have treatment. The majority of the patients, namely 98.5 percent (n = 65), were provided with STD contact cards, while 1.5 percent (n = 1) were not provided with contact cards. Less than half the number of patients, namely 37.9 percent (n = 25), were advised that people with STDs may be asymptomatic while 62.1 percent (n = 41) did not get that advice. Most of the patients, namely 65.2 percent (n = 43) were urged to take all the prescribed medication, while 34.8 percent (n = 23) were not. Only 13.6 percent (n = 9) of the patients had effects and contra-indications of medications explained, while 86.4 percent (n = 57) were not given any explanation. The majority of the patients, namely 98.5 percent (n = 65), were informed that STDs increase the chance of contracting HIV/AIDS, and only 1.5 percent (n = 1) were not given that explanation. About 33.3 percent (n = 22) of the patients were informed about STD complications, while 66.7 percent (n = 44) were not informed. More than half, namely 57.6 percent (n = 38) of the patients were urged to return for a follow-up if necessary, while 42.4 percent (n = 28) were not urged to return for a follow-up.

**Item 2.13: Privacy maintained during the consultation**

Privacy means that other clients cannot see the interaction between a client and a nurse. In this study 98.5 percent (n = 65) of the clients considered privacy to have been maintained during consultation, while 1.5 percent (n = 1) felt it was not.

**Item 2.14: Duration of patient consultation**

To determine the duration of the interaction, the time the observation began is noted and checked against the time the observation was finished. The duration of the patient consultation was found to be an average of 15 minutes.

**4.3.3 Interview with professional nurses providing treatment of STDs at the clinic (Form 3)**

The professional nurses who were observed during client consultation were also interviewed, using mostly closed questionnaires. All the respondents were female professional nurses. The
interview was about the professional nurses’ knowledge of STD risk factors, and their descriptions of typical consultations, for comparison with what was actually observed.

**Item 3.1: Number of STD patients treated at this clinic per month**

The responses obtained from professional nurses who were interviewed indicated that, on average, 58 STD patients were treated by each professional nurse per month.

**Item 3.2: Perception of increasing the chance of contracting STDs**

The reason for this question was to obtain the nurses’ perception of the risk factors for contracting STDs. According to McCoy (1995:15), nurses’ perceptions on the STD risk factors have an influence on how they counsel patients.

**Table 4.3.1: STD risk factors**

<table>
<thead>
<tr>
<th>What increases the chance of contracting STDs?</th>
<th>% Yes</th>
<th>f</th>
<th>% No</th>
<th>f</th>
<th>% Don’t know</th>
<th>f</th>
</tr>
</thead>
<tbody>
<tr>
<td>Having multiple sexual partners</td>
<td>100,0</td>
<td>22</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Unprotected intercourse</td>
<td>100,0</td>
<td>22</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Having sex at an early age</td>
<td>86,4</td>
<td>19</td>
<td>9,1</td>
<td>2</td>
<td>4,5</td>
<td>1</td>
</tr>
<tr>
<td>Heavy alcohol consumption</td>
<td>68,2</td>
<td>15</td>
<td>27,3</td>
<td>6</td>
<td>4,5</td>
<td>1</td>
</tr>
<tr>
<td>IUCDs</td>
<td>9,1</td>
<td>2</td>
<td>90,9</td>
<td>20</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Prostitution</td>
<td>95,5</td>
<td>21</td>
<td>4,5</td>
<td>1</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Migrant labour</td>
<td>95,5</td>
<td>21</td>
<td>4,5</td>
<td>1</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Poverty</td>
<td>77,3</td>
<td>17</td>
<td>18,2</td>
<td>4</td>
<td>4,5</td>
<td>1</td>
</tr>
<tr>
<td>Being HIV positive</td>
<td>59,1</td>
<td>13</td>
<td>40,9</td>
<td>9</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Being wealthy</td>
<td>45,5</td>
<td>10</td>
<td>45,5</td>
<td>10</td>
<td>9,1</td>
<td>2</td>
</tr>
<tr>
<td>Contraception</td>
<td>27,3</td>
<td>6</td>
<td>72,7</td>
<td>16</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>
Table 4.3.1 indicates that all the professional nurses, 100 percent (n = 22), believed that having multiple sexual partners and unprotected intercourse increase the chance of contracting STDs. The majority of the nurses, namely 86.4 percent (n = 19), believed that having sex at an early age is a risk factor, while 9.1 percent (n = 2) believed it was not, and 4.5 percent did not know. Heavy alcohol consumption was perceived by 68.2 percent (n = 15) as a risk factor, while 27.3 percent (n = 6) did not and 4.5 percent (n = 1) did not know. Of the nurses, 95.5 percent (n = 21) perceived prostitution and migrant labour as STD risk factors, while 4.5 percent (n = 1) did not. Of the nurses, 77.3 percent (n = 17) considered poverty a factor that increases the chance of contracting STDs, while 18.2 percent (n = 4) did not, and 4.5 percent (n = 1) did not know.

More than half, namely 59.1 percent (n = 13) of nurses believed that being HIV positive increases the chance of contracting STDs and 40.9 percent (n = 9) did not think so. Of the nurses, 45.5 percent (n = 10) considered being wealthy an STD risk factor, while 45.5 percent (n = 10) did not, and 9.1 percent (n = 2) did not know. Only a few of the nurses, 27.3 percent (n = 6) considered contraception a factor that increases the chance of contracting STDs, while 72.7 percent (n = 16) did not.

Item 3.3: Asymptomatic STD

The majority of the nurses, namely 95.5 percent (n = 21), believed a person can be infected with an STD and not show any symptoms of being ill and only 4.5 percent (n = 1) did not.

Item 3.4: Average of HIV positive pregnant women out of 100

The average rate of HIV positive pregnant women in the area was estimated to be 30 per 100.

Item 3.5: Average of HIV positive men out of 100

The average rate of HIV positive men in the area was estimated to be 20 per 100. These findings determine the level of HIV infection rate in the community, and also that there is a difference in the rate of infection between males and females.
Item 3.6: STDs increasing the risk of contracting AIDS

All the respondents, 100 percent (n = 22), were of the opinion that STDs can increase the risk of contracting AIDS.

Item 3.7: Physical examination on male STD patients

The response to this question was that all the nurses, 100 percent (n = 22), always perform physical examinations on male STD patients.

Item 3.8: Steps of examining a male STD patient

Table 4.3.2: Physical examination of a male STD patient

<table>
<thead>
<tr>
<th>Description of each step</th>
<th>% Yes</th>
<th>f</th>
<th>% Pbd Yes</th>
<th>f</th>
<th>% No</th>
<th>f</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patient asked to undress so that genitals are fully exposed</td>
<td>95,5</td>
<td>21</td>
<td>4,5</td>
<td>1</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Patient examined for a urethral discharge</td>
<td>90,9</td>
<td>20</td>
<td>9,1</td>
<td>2</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Genitals examined for lesions after retracting foreskin</td>
<td>68,2</td>
<td>15</td>
<td>18,2</td>
<td>4</td>
<td>13,6</td>
<td>3</td>
</tr>
</tbody>
</table>

Table 4.3.2 shows that the majority of the respondents, namely 95,5 percent (n = 21), would ask patients to undress so that their genitals are fully exposed, while 4,5 percent (n = 1) had a probed yes. The majority of the nurses, namely 90,9 percent (n = 20), would examine a patient for a urethral discharge, while 9,1 percent (n = 2) had a probed yes. More than half, namely 68,2 percent (n = 15) of the nurses would examine for lesions after retracting the foreskin, while 18,2 percent (n = 4) had a probed yes and 13,6 percent (n = 3) would not retract the foreskin to examine for lesions.
Item 3.9: Physical examination on female STD patients

The majority of the nurses, namely 95,5 percent (n = 21) said, they always perform physical examination on female STD patients and only 4,5 percent (n = 1) said sometimes.

Item 3.10: Steps of examining a female STD patient

Table 4.3.3: Physical examination of a female STD patient

<table>
<thead>
<tr>
<th>Description of each step</th>
<th>% Yes</th>
<th>f</th>
<th>% Pbd Yes</th>
<th>f</th>
<th>% No</th>
<th>f</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patient asked to undress so that genitals are fully exposed</td>
<td>95,5</td>
<td>21</td>
<td>4,5</td>
<td>1</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Patient asked to lie down</td>
<td>100,0</td>
<td>22</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Patient examined for lesions on vulva</td>
<td>86,4</td>
<td>19</td>
<td>9,1</td>
<td>2</td>
<td>4,5</td>
<td>1</td>
</tr>
<tr>
<td>Patient examined for vaginal discharge</td>
<td>77,3</td>
<td>17</td>
<td>4,5</td>
<td>1</td>
<td>18,2</td>
<td>4</td>
</tr>
<tr>
<td>Speculum examination performed</td>
<td>50,0</td>
<td>11</td>
<td>13,6</td>
<td>3</td>
<td>36,4</td>
<td>8</td>
</tr>
<tr>
<td>Bimanual examination performed</td>
<td>27,3</td>
<td>6</td>
<td>18,2</td>
<td>4</td>
<td>54,5</td>
<td>12</td>
</tr>
</tbody>
</table>

Table 4.3.3 shows that the majority of the nurses, namely 95,5 percent (n = 21), would ask the patient to undress so that genitals are fully exposed, while 4,5 percent (n = 1) had a probed yes. All the nurses, namely 100 percent (n = 22), would ask a patient to lie down. The majority of nurses, namely 86,4 percent (n = 19) would examine a patient for lesions on the vulva, while 9,1 percent (n = 2) had a probed yes and 4,5 percent (n = 1) would not examine for lesions on vulva. More than half, namely 77,3 percent (n = 17) of the nurses would examine a patient for a vaginal discharge, while 4,5 percent (n = 1) had a probed yes and 18,2 percent (n = 4) would not examine for a vaginal discharge. Half the number of the nurses, namely 50,0 percent (n = 11), would perform a speculum examination, while 13,6 percent (n = 3) were probed to say so, and 36,4 percent (n = 8) would not perform a speculum examination. Less than half, namely
27.3 percent (n = 6) of the nurses would perform a bimanual examination, while 18.2 percent (n = 4) were probed to agree and 54.5 percent (n = 12) would not perform a bimanual examination.

**Item 3.11: Drugs prescribed for a male patient with a urethral discharge**

All the nurses, namely 100 percent (n = 22) prescribed the correct drugs for a male patient with a urethral discharge.

**Item 3.12: Drugs prescribed for a male patient with a genital ulcer**

All the nurses, namely 100 percent (n = 22), prescribed the correct drugs for a male patient with a genital ulcer.

**Item 3.13: Drugs prescribed for a female patient with a vaginal discharge**

All the nurses, namely 100 percent (n = 22), prescribed the correct drugs for a female patient with a vaginal discharge.

**Item 3.14: Treatment for PID**

The majority of the nurses, namely 81.8 percent (n = 18), gave the correct treatment for PID, and only 18.2 percent (n = 4) did not.

**Item 3.15: STD issues routinely part of counselling**
Table 4.3.4: STD issues that are part of routine counselling

<table>
<thead>
<tr>
<th>STD issues</th>
<th>% Yes</th>
<th>f</th>
<th>% Pbd Yes</th>
<th>f</th>
<th>% No</th>
<th>f</th>
</tr>
</thead>
<tbody>
<tr>
<td>Encourage use of condoms</td>
<td>100,0</td>
<td>22</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Abstain from intercourse until healed</td>
<td>54,5</td>
<td>12</td>
<td>36,4</td>
<td>8</td>
<td>9,1</td>
<td>2</td>
</tr>
<tr>
<td>Tell sexual partner to have treatment</td>
<td>100,0</td>
<td>22</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>People with STDs may be asymptomatic</td>
<td>40,9</td>
<td>9</td>
<td>31,8</td>
<td>7</td>
<td>27,3</td>
<td>6</td>
</tr>
<tr>
<td>Need to take all the prescribed medication</td>
<td>40,0</td>
<td>9</td>
<td>27,3</td>
<td>6</td>
<td>31,8</td>
<td>7</td>
</tr>
<tr>
<td>STDs increase chance of contracting HIV</td>
<td>95,4</td>
<td>2</td>
<td>4,5</td>
<td>1</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Complications of STDs, eg, infertility</td>
<td>18,2</td>
<td>4</td>
<td>50,0</td>
<td>11</td>
<td>31,8</td>
<td>7</td>
</tr>
</tbody>
</table>

Table 4.3.4 indicates that all the nurses in this study, namely 100 percent (n = 22), encouraged the use of condoms as part of their routine counselling. More than half of the nurses, namely 54,5 percent (n = 12), encouraged patients to abstain from intercourse until completely healed, while 36,4 percent (n = 8) had a probed yes and 9,1 percent (n = 2) did not encourage patients to abstain from intercourse until healed. All the nurses, namely 100 percent (n = 22), asked patients to tell their sexual partner(s) to have treatment.

Only 40,9 percent (n = 9) explained that people with STDs may be asymptomatic, while 31,8 percent (n = 7) had a probed yes, and 27,3 percent (n = 6) did not counsel on this issue. The need to take all the prescribed medication was mentioned by 40,9 percent (n = 9) of the nurses, while 27,3 percent (n = 6) had a probed yes, and 31,8 percent (n = 7) did not mention this need. The majority of the nurses, namely 95,4 percent (n = 21), mentioned that STDs increase the chance of contracting HIV, and only 4,5 percent (n = 1) had a probed yes. Complications of STDs, such as infertility, were mentioned by 18,2 percent (n = 4) while 50,0 percent (n = 11) had a probed yes and 31,8 percent (n = 7) did not mention this issue.

Item 3.16: Provision of condoms to STD patients

All the respondents, namely 100 percent (n = 22), indicated that they always provide condoms
to STD patients.

**Item 3.17: Number of condoms with each visit**

The findings were that an average of 20 condoms were provided to an STD patient each time.

**Item 3.18: Instructions on the use of condoms**

The aim of this question was to assess whether nurses provide instruction to patients on how to use condoms.

![Figure 4.3.1: Instruction on the use of condoms](image)

**Figure 4.3.1: Instruction on the use of condoms**

Figure 4.3.1 indicates that 54.5 percent (n = 12) of the nurses always provided instructions, while 40.9 percent (n = 9) often provided instruction and 4.5 percent (n = 1) seldom provided instruction on how to use a condom.
Item 3.19: Demonstration on the use of a condom

This was to enquire whether patients do have demonstrations on how to put on a condom.

![Bar Chart](image)

**Figure 4.3.2: Demonstration on the use of a condom**

Figure 4.3.2 shows that less than half, namely 31.8 percent ($n = 7$) of the nurses always did a condom demonstration, while 63.6 percent ($n = 14$) often demonstrated, and only 4.5 percent ($n = 1$) seldom demonstrated how to use a condom to patients.
Figure 4.3.3: Training in syndromic management of STDs

Figure 4.3.3 indicates that 90.5 percent (n = 20) of the nurses received training in the syndromic management of STDs, while 9.5 percent (n = 2) did not.

Item 3.21: Constraints of work with STDs

Difficulties experienced with STD clients

- Resistance to condom use

Even though condoms are freely available at all the clinics, there are still STD clients who are reluctant to use them because of certain myths and misconceptions.
• Failure to bring sexual partner(s)/contacts

STD clients are counselled on partner notification and given contact cards for sexual partners, but it is noted that only a small number of partners are coming for treatment.

• Not returning for follow-up care

Even though clients are advised to come back for follow-up, if necessary, they either stop treatment when feeling better, or share it with a partner, and come back much later with complications of STDs.

_Difficulties experienced with the service_

• Staff shortages

The nurses at the clinics stated that they are overloaded with patients – especially those clinics where only two professional nurses staff the clinic. With a crowd of patients waiting to be seen, it is not possible to do a thorough physical examination and counselling. Free medical care in primary health care services has contributed to increasing patient numbers.

• Shortage of drugs

This problem is experienced by the system where clinics order through a pharmacist at a hospital. Drugs for those clinics are rationed according to the previous month’s STD statistics.

It was noted that primary health care clinics who order drugs directly from the Provincial Medical Supply Centre (PMSC) have no problems with drugs and are therefore advantaged.

• Lack of vaginal speculums

Some of the clinics just do not have vaginal speculums.
• Lack of training

There were a few professional nurses from the sampled clinics, 9.5 percent (n = 2), who mentioned that they use prescribed STD protocols but were not trained in the syndromic management of STDs.

4.3.4 Exit interview with patients treated at the clinic (Form 4)

An exit interview of patients treated at the clinic was carried out. When a patient had finished the consultation with the professional nurse, s/he was asked whether s/he was willing to answer a few questions about the service received. Informed consent was obtained before beginning the interview. Interviewing patients after they had received health care provided information about what the patient had learned during the encounter.

Item 4.1: Duration of the consultation

The actual amount of time was obtained by comparing the actual length of the consultation (from the beginning to the end of interaction) to discover the length of time that clients were most comfortable with.
Figure 4.4.1: Duration of consultation

Figure 4.4.1 shows that 77.3 percent (n = 51) of the patients felt that the duration of consultation was about the right amount of time, while 15.2 percent (n = 10) felt it was too short and 7.6 percent (n = 5) felt it was too long.

Item 4.2: Patient's perception of clinic visit

The questions asked dealt with the issue of whether the clients felt comfortable asking for the information they needed.
Table 4.4.1: Perception of clinic visit

<table>
<thead>
<tr>
<th>During the visit, did the nurse</th>
<th>% Yes</th>
<th>f</th>
<th>% No</th>
<th>f</th>
</tr>
</thead>
<tbody>
<tr>
<td>listen to your health problems to your satisfaction</td>
<td>97,0</td>
<td>64</td>
<td>3,0</td>
<td>2</td>
</tr>
<tr>
<td>let you ask questions you thought were important</td>
<td>80,3</td>
<td>53</td>
<td>19,7</td>
<td>13</td>
</tr>
<tr>
<td>respond to your questions to your satisfaction</td>
<td>77,3</td>
<td>51</td>
<td>22,7</td>
<td>15</td>
</tr>
<tr>
<td>adequately explain the results of any examination</td>
<td>66,7</td>
<td>44</td>
<td>33,3</td>
<td>22</td>
</tr>
<tr>
<td>adequately explain about STDs</td>
<td>86,4</td>
<td>57</td>
<td>13,6</td>
<td>9</td>
</tr>
</tbody>
</table>

Table 4.4.1 indicates that 97,0 percent (n = 64) of the patients felt that the nurses listened to their health problems to their satisfaction, while 3,0 percent (n = 2) felt that the nurses did not listen to their health problems to their satisfaction. The majority of the patients, namely 80,3 percent (n = 53), felt that the nurses allowed them to ask questions they thought were important, while 19,7 percent (n = 13) did not feel that way. More than half of the patients, namely 77,3 percent (n = 51), felt that the nurses responded to their questions to their satisfaction, while 22,7 percent (n = 15) did not. About 66,7 percent (n = 44) of the patients felt that the nurses adequately explained the results of any examinations, while 33,3 percent (n = 22) felt that the results of examinations were not adequately explained. The majority of the patients, namely 86,4 percent (n = 57), felt that the nurses adequately explained about STDs, while 13,6 percent (n = 9) did not perceive STDs to have been adequately explained.
Item 4.3: Privacy during visit with the nurse

Figure 4.4.2: Privacy during patient visit

Figure 4.4.2 shows that privacy during visits with the nurses was perceived as sufficient by 93.9 percent (n = 62) of patients, while 6.1 percent (n = 4) felt it was not sufficient.

Item 4.4: Understanding of nurse’s explanations

Table 4.4.2: Understanding of nurse’s explanations

<table>
<thead>
<tr>
<th>Understanding</th>
<th>%</th>
<th>f</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very well</td>
<td>78,8</td>
<td>52</td>
</tr>
<tr>
<td>More or less</td>
<td>19,7</td>
<td>13</td>
</tr>
<tr>
<td>Not at all</td>
<td>1,5</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>100,0</td>
<td>66</td>
</tr>
</tbody>
</table>
Table 4.4.2 indicates that the majority of the patients, namely 78.8 percent (n = 52), understood very well what the nurse explained to them, while 19.7 percent (n = 13) understood more or less and 1.5 percent (n = 1) did not understand at all.

**Item 4.5: Reason for clinic visit**

**Table 4.4.3: Reason for clinic visit (men only)**

<table>
<thead>
<tr>
<th>Reason for clinic visit</th>
<th>% Yes</th>
<th>f</th>
<th>% No</th>
<th>f</th>
</tr>
</thead>
<tbody>
<tr>
<td>• pain during urination</td>
<td>68.2</td>
<td>15</td>
<td>31.8</td>
<td>7</td>
</tr>
<tr>
<td>• a discharge from the penis</td>
<td>27.3</td>
<td>6</td>
<td>72.7</td>
<td>16</td>
</tr>
<tr>
<td>• sores in the genital area</td>
<td>31.8</td>
<td>7</td>
<td>68.2</td>
<td>15</td>
</tr>
<tr>
<td>• partner recently treated for STDs</td>
<td>-</td>
<td>-</td>
<td>100.0</td>
<td>22</td>
</tr>
</tbody>
</table>

Table 4.4.3 indicates that more than half of the males, namely 68.2 percent (n = 15), came to the clinic because they had pain during urination. Only 27.3 percent (n = 6) had a discharge from the penis, and 31.8 percent (n = 7) had sores in the genital area. None, that is, 100 percent (n = 22), came to the clinic because a partner had recently been treated for STDs.

**Item 4.6: Duration of symptoms**

It was found that, on average, the patients had problem in their genital area for four days.

**Item 4.7: Action before attending the clinic**
Table 4.4.4: Action with regard to problem in genital area (men only)

<table>
<thead>
<tr>
<th>Action with regard to problem</th>
<th>% Yes</th>
<th>f</th>
<th>% No</th>
<th>f</th>
</tr>
</thead>
<tbody>
<tr>
<td>sought advice from a friend</td>
<td>36,4</td>
<td>8</td>
<td>63,6</td>
<td>14</td>
</tr>
<tr>
<td>sought advice from a relative</td>
<td>-</td>
<td>-</td>
<td>100,0</td>
<td>22</td>
</tr>
<tr>
<td>used medicine that you had at home</td>
<td>40,9</td>
<td>9</td>
<td>59,1</td>
<td>13</td>
</tr>
<tr>
<td>sought advice from a traditional healer</td>
<td>4,5</td>
<td>1</td>
<td>95,5</td>
<td>21</td>
</tr>
<tr>
<td>sought advice from another clinic</td>
<td>-</td>
<td>-</td>
<td>100,0</td>
<td>22</td>
</tr>
<tr>
<td>attended a private doctor</td>
<td>4,5</td>
<td>1</td>
<td>95,5</td>
<td>21</td>
</tr>
<tr>
<td>nothing</td>
<td>72,7</td>
<td>16</td>
<td>27,3</td>
<td>6</td>
</tr>
</tbody>
</table>

Table 4.4.4 shows that only 36,4 percent (n = 8) of the men sought advice from a friend, none of the 22 men sought advice from a relative. Less than half, namely 40,9 percent (n = 9), used medicine that they had at home. Only 4,5 percent (n = 1) of the men sought advice from a traditional healer, the majority, namely 95,5 percent (n = 21), did not. None of the male patients sought advice from another clinic. Only 4,5 percent (n = 1) attended a private doctor. The majority of the male patients, namely 72,7 percent (n = 16), did nothing with regard to the problem in the genital area before coming to the clinic.

Item 4.8: Reason for clinic attendance

Table 4.4.5: Reason for clinic visit (women only)

<table>
<thead>
<tr>
<th>Reason for clinic visit</th>
<th>% Yes</th>
<th>f</th>
<th>% No</th>
<th>f</th>
</tr>
</thead>
<tbody>
<tr>
<td>a discharge from the vagina</td>
<td>68,2</td>
<td>30</td>
<td>31,8</td>
<td>14</td>
</tr>
<tr>
<td>itching in the vagina</td>
<td>20,5</td>
<td>9</td>
<td>79,5</td>
<td>35</td>
</tr>
<tr>
<td>sores in the genital area</td>
<td>25,0</td>
<td>11</td>
<td>75,0</td>
<td>33</td>
</tr>
<tr>
<td>partner recently treated for STDs</td>
<td>4,5</td>
<td>2</td>
<td>95,5</td>
<td>42</td>
</tr>
</tbody>
</table>
Table 4.4.5 indicates that the majority of the women, namely 68.2 percent (n = 30), came to the clinic because they had a discharge from the vagina. Less than half, namely 20.5 percent (n = 5), had itching in the vagina, while 25.0 percent (n = 11) had sores in the genital area and 4.5 percent (n = 2) came because their partners had recently been treated for STDs.

Item 4.9: Duration of symptoms

It was found that, on average, the patients had the problem in their genital area for five days.

Item 4.10: Action before attending the clinic

Table 4.4.6: Action with regard to problem in genital area (women only)

<table>
<thead>
<tr>
<th>Action with regard to problem</th>
<th>% Yes</th>
<th>f</th>
<th>% No</th>
<th>f</th>
</tr>
</thead>
<tbody>
<tr>
<td>sought advice from a friend</td>
<td>20.5</td>
<td>9</td>
<td>79.5</td>
<td>35</td>
</tr>
<tr>
<td>sought advice from a relative</td>
<td>-</td>
<td>-</td>
<td>100.0</td>
<td>44</td>
</tr>
<tr>
<td>used medicine that you had at home</td>
<td>47.4</td>
<td>21</td>
<td>52.3</td>
<td>23</td>
</tr>
<tr>
<td>sought advice from a traditional healer</td>
<td>11.4</td>
<td>5</td>
<td>88.6</td>
<td>39</td>
</tr>
<tr>
<td>sought advice from another clinic</td>
<td>2.3</td>
<td>1</td>
<td>97.7</td>
<td>43</td>
</tr>
<tr>
<td>attended a private doctor</td>
<td>-</td>
<td>-</td>
<td>100.0</td>
<td>44</td>
</tr>
<tr>
<td>nothing</td>
<td>70.5</td>
<td>31</td>
<td>29.5</td>
<td>13</td>
</tr>
</tbody>
</table>

Table 4.4.6 indicates that 20.5 percent (n = 9) of the women sought advice from a friend, none of the 44 women sought advice from a relative. Nearly half, namely 47.7 percent (n = 21) of the women used medicine that they had at home. Only 11.4 percent (n = 5) of the women sought advice from a traditional healer, and 2.3 percent (n = 1) sought advice from another clinic. None of the 44 women attended a private doctor. The majority of the women, namely 70.5 percent (n = 31), did not do anything with regard to the problem in their genital area before coming to the clinic.
Item 4.11: Suggestions for the treatment of STD patients at the clinic

The following were spontaneous responses from the STD clients:

- would like to have a fixed clinic in the area, have problems waiting for a mobile clinic visit
- if mobile clinic could visit more often rather than once a month only
- if there could be more nurses consulting as the waiting time is too long before being seen as the clinic is always full
- would like to be treated by nurses who speak their language
- males would like to be examined by male nurses and not expected to undress in front of a female nurse
- if females could have female condoms
- if STD medicine could always be in stock at the clinic
- if nurses could stop threatening them about AIDS
- if nurses could stop being judgmental about contracting STDs
- wish to be treated like adults and be respected

4.4 CONCLUSION

This chapter discussed the statistical analysis of the data obtained from the inventory checklist, observations and staff and patient interviews. Questions asked at the beginning of the chapter were answered by the statistical analysis of data.

Chapter 5 covers the findings, conclusions and recommendations arising from the study.
CHAPTER 5

Findings, conclusions and recommendations

5.1 SUMMARY

Primary health care trainers of the KwaZulu-Natal Department of Health carried out this study in selected public and private clinics from the rural, urban and semi-urban areas of the three districts of 1, 2 and 3, which form part of Region A. The purpose of the study was to evaluate the effectiveness of training in the syndromic management of STDs, by finding out what the professional nurse does when carrying out an STD client consultation, how much time she spends on her activities and what circumstances prevail in her area of practice.

The objectives of this study were:

- to identify and describe the resources available for STD management
- to explore the extent of the skills of performing full physical examination of STD clients by the professional nurses through observation
- to determine the knowledge of STD risk factors amongst the professional nurses
- to obtain the STD clients’ perception about the treatment received at the clinic
As explained in chapter 1, the theoretical assumptions of the study endorsed the nursing theory for the whole person. In demonstrating and applying the necessary knowledge and skills of comprehensive STD management, the professional nurses promote the holistic approach by rendering service to the whole STD client. They did so by:

- explaining the presence of the observer to the client, thus treating the client in an empathetic manner
- taking a detailed history of the client’s illness
- performing a full physical examination of an STD client correctly
- sharing information about the cause and spread of STDs
- sharing information about HIV and AIDS
- counselling the STD client on healthy and safe sexual practices
- explaining how condoms work, and demonstrating their use to the client
- using contact cards to notify sexual contacts
- prescribing the correct treatment for the STD syndrome diagnosed

Chapter 4 presented the findings of the statistical analysis of data obtained from the inventory checklist, observation of the professional nurse and interview responses from questionnaires. Chapter 5 discusses the conclusions and recommendations according to the research questions and objectives presented in chapter 1.

5.1.1 What resources, in the form of current staff, drugs, facilities and equipment are available for STD management?

- The clinics had a median of 2,000 professional nurses treating STD clients on the day of visit.
- The majority of the STD clients who presented at the clinics had Zulu and Xhosa as a home language, yet the educational materials on HIV/AIDS and other STDs displayed in the waiting areas and/or examination rooms were in English. This factor has negative implications in that the majority of clinic clients may not understand the health education messages on the educational materials.
• All the clinics, 100 percent (n = 22), had examination couches available in the examination rooms.

• All the clinics, 100 percent (n = 22), had adequate stocks of disposable syringes and needles available on the day of visit.

• All the clinics, 100 percent (n = 22), had disposable examination gloves available. The clinics had an average of four full boxes of examination gloves on the day of visit.

• All the clinics, 100 percent (n = 22), had contact cards available for sexual partner notification.

• Equipment was found to be adequate in the majority of the clinics. Only a few, namely 18.0 percent (n = 4), did not have re-usable vaginal speculums, while 4.5 percent (n = 1) did not have sharps disposal containers and 22.7 percent (n = 5) did not have angle lamps that are used during vaginal speculum examination.

• The majority of the clinics, namely 81.8 percent (n = 18), did not have penis models for condom demonstration. It is important that STD clients are given proper demonstration of condom use, as this can greatly help in preventing recurrent STD infections, including HIV/AIDS.

• All the clinics, 100 percent (n = 22), had condoms in stock on the day of visit; some even had condom dispensers at the clinic exit door for clients to help themselves.

• Drugs stock levels were found to be reliable in most of the clinics, but:
  — Benzathine Penicillin vials were out of stock in 4.5 percent (n = 1) of the clinics
  — Erythromycin tablets were not available in 13.6 percent (n = 3) of the clinics
  — Ciprofloxacin tablets were not available in 4.5 percent (n = 1) of the clinics
  — Imidazole vaginal pessaries were out of stock more than twice in the preceding six months in 22.7 percent (n = 5) of the clinics

• The problem of a shortage of drugs was experienced by the system where clinics order through a pharmacist at a hospital. Drugs are rationed according to the previous month's STD statistics. These were mostly rural clinics.
5.1.2 To what extent have the nurse’s skills in performing a full physical examination of STD clients been developed and improved?

Here it was found that:

- A total of 66 clients were treated for STDs. Women comprised 66,7 percent (n = 44), and males 33,3 percent (n = 22) of the total number of clients treated (see figure 4.2.1).
- The majority of the clients, namely 86,4 percent (n = 57), were examined lying down, while 13,6 percent (n = 9) were not examined.
- A thorough examination of the genital area both in men and women should be done, wearing clean latex gloves to prevent infection (WHO 1995:20). In this study, examination gloves were used in the case of 92,4 percent (n = 61) of clients and not used in 7,6 percent (n = 5).
- For the examination of external genitalia, the foreskin was retracted in 95,5 percent (n = 21) of the men, and not in 4,5 percent (n = 1).
- The majority of the women, namely 84,1 percent (n = 37), had their labia separated and inspected, while 15,9 percent (n = 7) did not.
- Speculum examination was performed in the case of 65,9 percent (n = 29) of the women, and not in 34,1 percent (n = 15).
- Adequate light source was used in the case of 56,8 percent (n = 25) of the women, and not in 43,2 percent (n = 19).
- A bimanual examination was performed in the case of 34,1 percent (n = 15) of the women and not in 65,9 percent (n = 29) (see table 4.2.8).

5.1.3 What is the extent of knowledge of STD risk factors amongst the professional nurses?

- All the professional nurses, 100 percent (n = 22), believed that having multiple sexual partners increases the chance of contracting STDs.
- All the professional nurses, 100 percent (n = 22), believed that unprotected intercourse increases the chance of contracting STDs.
• The majority of the nurses, namely 86.4 percent (n = 19), indicated that having sex at an early age is a risk factor, while 9.1 percent (n = 2) indicated that it was not and 4.5 percent did not know.

• Of the nurses, 68.2 percent (n = 15) perceived heavy alcohol consumption as a risk factor, while 27.3 percent (n = 6) perceived it as not and 4.5 percent (n = 1) did not know.

• Of the nurses, 95.5 percent (n = 21) perceived prostitution as a STD risk factor, while 4.5 percent (n = 1) believed it was not.

• The majority of the nurses, 95.5 percent (n = 21) perceived migrant labour as a STD risk factor, while 4.5 percent (n = 1) did not.

• Most of the nurses, 77.3 percent (n = 17), considered poverty a factor that increases the chance of contracting STD while 18.2 percent (n = 4) did not and 4.5 percent (n = 1) did not know.

• More than half, namely 59.1 percent (n = 13) of the nurses indicated that being HIV-positive increases the chance of contracting STDs and 40.9 percent (n = 9) did not.

• Several of the nurses, 45.4 percent (n = 10), considered being wealthy as an STD risk factor, while 45.5 percent (n = 10) did not and 9.1 percent (n = 2) did not know.

• Only a few of the nurses, 27.3 percent (n = 6) considered contraception as a risk factor that increases the chance of contracting STDs, while 72.7 percent (n = 16) did not (see table 4.3.1).

5.1.4 What is the STD clients' perception of the treatment received at the clinic?

Duration of consultation

The actual amount of time was obtained by comparing the actual length of the consultation (from the beginning to the end of interaction), to discover the length of time that clients were comfortable with.

• The majority of the clients, namely 77.3 percent (n = 51), felt that the duration of the consultation was about right while 15.2 percent (n = 10) felt it was too short and 7.6
percent (n = 5) felt it was too long (see figure 4.4.1).

- The duration of the client consultation was found to be an average of 15 minutes (see item 2.14).

**Clients' perception of clinic visit**

- The majority of the clients, namely 97,0 percent (n = 64), felt that the nurse listened to their health problems to their satisfaction, while 3,0 percent (n = 2) felt that the nurses did not listen to their health problems to their satisfaction.

- The majority of the clients, namely 80,3 percent (n = 53), felt that the nurses allowed them to ask questions they thought were important, while 19,7 percent (n = 13) did not feel that way.

- More than half of the clients, namely 77,3 percent (n = 51), felt that the nurses responded to their questions to their satisfaction, while 22,7 percent (n = 15) did not.

- About 66,7 percent (n = 44) of the clients indicated that the nurse adequately explained the results of any examination, while 33,3 percent (n = 22) felt that results of examination were not adequately explained.

- The majority of the clients, namely 86,4 percent (n = 57), felt that the nurse adequately explained about STDs, while 13,6 percent (n = 9) did not perceive STDs to have been adequately explained (see table 4.4.1).

- The majority of the clients, namely 78,8 percent (n = 52), understood fully what the nurse explained to them, while 19,7 percent (n = 13) understood more or less and 1,5 percent (n = 1) did not understand at all (see table 4.4.2).

**Privacy during client visit**

- The majority of the clients, 93,9 percent (n = 62) perceived privacy during the visit with the nurse as sufficient, while 6,1 percent (n = 4) felt it was not sufficient (see figure 4.4.3).
5.2 LIMITATIONS OF THE STUDY

The most important limitation of this study is that it can only serve as a sampling of the work of one member of the clinic team, that is, the professional nurse, while other categories whose functions should be reviewed in relation to hers, could not be included. Other limitations were time, finance and available personnel, which precluded a more comprehensive study.

5.3 CONCLUSION

In the final consideration of the reality of the activities of a professional nurse in the syndromic management of STDs, the following conclusions were drawn:

- All the primary health care clinics in Region A have implemented the syndromic approach to STD management, as recommended by the World Health Organization.
- The professional nurses in all the clinics sampled, provided health education and counselling for STD clients (see table 4.2-12).
- Educational material on HIV/AIDS was readily available at the clinics, but there was a need for more material in Zulu.
- There was a lack of educational material on STDs other than HIV/AIDS.
- A few of the professional nurses, namely 9.5 percent (n = 2), had not received training in the syndromic management of STDs.
- There was a lack of penis models for condom demonstration. Nurses were using their fingers. Having a penis model would make the demonstration real.
- There were still some primary health care clinics which did not have vaginal speculums.
- There was not adequate privacy in 9.1 percent (n = 2) of the clinics, where examination rooms were separated by curtains only. This meant that conversation in those consulting rooms could be overheard by other clients outside the area of consultation.
- It was encouraging to observe that:
  - All the clinics, 100 percent (n = 22), had condoms in stock on the day of visit, and none reported being out of stock always or often during the preceding six months.
  - All the nurses, 100 percent (n = 22) prescribed the correct drugs for a male client
with a urethral discharge (see item 3.11).

— All the nurses, 100 percent \( (n = 22) \), prescribed correct drugs for a male client with a genital ulcer. This indicates that the nurses are familiar with the drugs for genital ulcers (see item 3.12).

— All the nurses, 100 percent \( (n = 22) \), prescribed the correct drugs for a female client with a vaginal discharge (see item 3.13). This indicates that the nurses know what to prescribe for each condition.

It can safely be concluded that training in the syndromic management of sexually transmitted disease was effective in enabling primary health care nurses in these clinics, to provide a safe practice, though there is still room for improvement.

5.4 RECOMMENDATIONS ARISING FROM THE RESEARCH PROJECT

5.4.1 Recommendations for nursing practice

It is recommended that:

• Urgent attention should be given to the many negative aspects that hamper the professional nurse in the execution of her task, for example:
  — staff shortages where they exist
  — lack of equipment, for example vaginal speculum
  — shortage of drugs

• The lack of STD drugs at the clinics who order through hospital pharmacists should be reviewed and corrective measures taken, where possible.

• The information and educational materials, for example HIV/AIDS pamphlets and posters should be written in the language that the people of the area understand for effective communication of health education messages.

• Educational materials on STDs other than HIV/AIDS must also be made available in local languages.

• Privacy needs to be improved in the 9.1 percent \( (n = 2) \) of the examination rooms that
were separated by curtains only. It is not acceptable to discuss sensitive issues like STDs in a consulting room where the conversation can be overheard by other clients outside the area of consultation.

- Penis models should be obtained for proper condom demonstration to clients.
- A mop-up STD training campaign should be done by area trainers to cover the other professional nurses who missed the initial training.
- Certain areas in the STD training need to be emphasized, for example:
  - vaginal speculum examination
  - a bi-manual examination

5.4.2 Recommendations for health education and counselling

- Education, counselling and health care should be sensitive to culture, language and social circumstances of all people at all times.
- Innovative and culturally appropriate health promotion messages to encourage partner notification should be developed. This includes the use of mass media to promote and explain the purpose and importance of partner notification. Frank and full explanations of STDs must be introduced into the school curriculum.
- When providing STD counselling:
  - Time should be taken to listen rather than just give blind advice.
  - Personal bias, judgmental attitudes, or attempts to scare the client must be avoided.
  - With regard to AIDS, misconceptions, denial or failure to believe they are personally at risk should be probed for. Make sure the clients understand:
    • the asymptomatic carrier stage
    • that AIDS is not curable
- There should be an on-going supervision and support of all health personnel providing syndromic management to STD clients.
5.4.3 Recommendations for further research

- In this study, the tool used to evaluate posters and other educational materials in the waiting room was the same for the fixed as well as the mobile clinics which do not have a waiting room. In future studies, mobile clinics must be evaluated differently from the fixed clinics in this regard.
- This study may be used as a tool in the re-evaluation, and as a basis for further in-depth research on innumerable aspects of STD client management.
- It would be an interesting follow-up study to investigate what happens to condoms when they leave the clinic premises. Are they actually used for safer sex?
- Further research needs to determine what the social and cultural constraints on partner notification are.

Table 5.1: Relationship of the research questions, conclusions and recommendations

<table>
<thead>
<tr>
<th>OBJECTIVES AND RESEARCH QUESTIONS</th>
<th>CONCLUSIONS</th>
<th>RECOMMENDATIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>What resources in the form of current staff, drugs, facilities and equipment are available for STD management?</td>
<td>The clinics generally had adequate equipment in stock for the management of STDs (see table 4.3). Human resources were short in some clinics.</td>
<td>Local clinic management should look into their situation and improve shortages accordingly. Where staff shortages exist, they should be dealt with by local management.</td>
</tr>
<tr>
<td>To what extent have the nurses’ skills in performing a full physical examination of STD clients been developed and improved?</td>
<td>The nurses’ full physical examination skills were generally good (see table 4.2.8), but certain areas, such as vaginal speculum and bi-manual examination, were not well performed.</td>
<td>Area trainers will have to give follow-up training and ongoing support to nurses who have not mastered the skills.</td>
</tr>
<tr>
<td>What is the extent of knowledge of STD risk factors amongst the professional nurses?</td>
<td>The professional nurses had a good knowledge of STD risk factors (see table 4.3.1), but it was noted with concern that 27.3% (n = 6) of the nurses considered contraception, a risk factor that increases the chance of contracting STDs.</td>
<td>On-going in-service training of health care personnel will have to be done to keep them supported with correct and relevant information.</td>
</tr>
</tbody>
</table>
What is the STD clients' perception of the treatment received at the clinic?

<table>
<thead>
<tr>
<th>OBJECTIVES AND RESEARCH QUESTIONS</th>
<th>CONCLUSION</th>
<th>RECOMMENDATIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>The majority of the clients expressed satisfaction with treatment received at the clinic (see table 4.4.2), but 6,1% (n = 4) felt that privacy during the visit was not sufficient.</td>
<td>Health care personnel need to have on-going motivation and support to maintain the good standard of client care. Privacy will have to be improved in the 9,1% (n = 2) examination rooms that were separated by curtains only.</td>
<td></td>
</tr>
</tbody>
</table>

In conclusion, the World Health Organization also concludes that the syndromic approach is the most effective method of STD management (WHO 1995:15).
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Dangor, Y. 1992. Sexually transmitted diseases and their interaction with HIV infection. Unpublished study by postgraduate student of Department of Medical Microbiology, South African Institute for Medical Research, Johannesburg.


Evian, C. 1993. *Primary clinical care of sexually transmitted diseases*. Department of Community Health, University of the Witwatersrand, Medical School, Johannesburg.


Hoosen, AA. 1995. *Treatment of sexually transmitted diseases: the syndromic approach.* Department of Medical Microbiology, University of Natal, Durban.


Annexure 1

Form 1  Inventory of resources available at clinics for the management of sexually transmitted diseases (STDs)

Form 2  Observation of professional nurses providing treatment to patients with STDs

Form 3  Interviews with professional nurses providing treatment of STDs at the clinic

Form 4  Exit interview with patients treated at the clinic
Form 1

Inventory of resources available at clinics for the management of sexually transmitted diseases (STDs).

**Instructions:**

This inventory should be completed by observing the materials and equipment that are available, and by discussions with the nurse in charge of the clinic on the day of the visit. In all cases verify that the items exists by actually observing and counting them yourself.

**Instructions:**

Kindly respond to the following questions by ticking (X) the appropriate numbered circle or filling in the appropriate block.

<table>
<thead>
<tr>
<th>FOR OFFICE USE ONLY</th>
</tr>
</thead>
<tbody>
<tr>
<td>□ □ 1-2</td>
</tr>
</tbody>
</table>

(i) Clinic visited (name) .................................................................

(ii) District ..............................................................................................

(iii) Type of locality (tick only one choice)

- Rural  ①
- Urban  ②
- Semi-urban  ③

(iv) Name of observer ..............................................................................
<table>
<thead>
<tr>
<th>(v) Type of sector</th>
<th>1 Public</th>
<th>2 Private</th>
<th>5</th>
</tr>
</thead>
</table>

### Inventory

<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Indicate the number of professional nurses working here today who treat patients with STDs</td>
<td></td>
</tr>
<tr>
<td>2. What is the home language of the majority of patients who come to this clinic?</td>
<td>Zulu 1, English 2, Xhosa 3, Other (specify) 4</td>
</tr>
<tr>
<td>3. What information and educational materials are available on HIV/AIDS?</td>
<td>Posters in the waiting room: Yes = 1, No = 2</td>
</tr>
<tr>
<td>4. If yes under 3, in what language are educational materials on HIV/AIDS presented?</td>
<td>Zulu: Yes = 1, No = 2</td>
</tr>
</tbody>
</table>
5 Are educational materials on STDs other than HIV/AIDS available? Yes = 1, No = 2

5.1 If yes, in what language are information and educational materials on STDs other than HIV/AIDS available?

<table>
<thead>
<tr>
<th>Language</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zulu</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>English</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Xhosa</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Other (specify)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

6 Which of the following information and educational materials are available on STDs other than HIV/AIDS?

<table>
<thead>
<tr>
<th>Material</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Posters in the waiting room</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Posters in the examination area</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Pamphlets</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Flipchart</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Other materials (specify)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

7 What separates one examination area from the other?

<table>
<thead>
<tr>
<th>Separation</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Nothing</td>
<td>1</td>
</tr>
<tr>
<td>Curtains</td>
<td>2</td>
</tr>
<tr>
<td>Walls but no doors</td>
<td>3</td>
</tr>
<tr>
<td>Walls and a door</td>
<td>4</td>
</tr>
</tbody>
</table>

8 Are there posters in the waiting room that encourage patients to use condoms? Yes = 1, No = 2
8.1 If yes, in what language are the posters that encourage condom use presented?

<table>
<thead>
<tr>
<th>Language</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zulu</td>
<td></td>
<td></td>
</tr>
<tr>
<td>English</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Xhosa</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Other (specify) ..................................

9 Data on condoms

Count and record how many condoms are in stock at the clinic today .......................................... .

Was this clinic ever out of stock of condoms in the last six months?

Yes = 1  No = 2

If yes, how often was the clinic out of condoms in the last six months?

Once 1
Twice 2
Three times 3
More than three times 4

10.1 Count and record how many of each of the following types of equipment are in working order at the clinic on the day of visit:

<table>
<thead>
<tr>
<th>Type of equipment</th>
<th>Number in working order</th>
</tr>
</thead>
<tbody>
<tr>
<td>Examination couch</td>
<td></td>
</tr>
<tr>
<td>Re-usable sterile vaginal speculum</td>
<td></td>
</tr>
<tr>
<td>Disposable needles: boxes</td>
<td></td>
</tr>
<tr>
<td>Disposable syringes: boxes</td>
<td></td>
</tr>
<tr>
<td>Container for disposable of sharps, eg needles</td>
<td></td>
</tr>
</tbody>
</table>
### 10.2 Disposable examination gloves

How many gloves are in a box when the box is full? □□□

46-48

How many full boxes are in the clinic today? □□

49-50

### 10.3 Are the following available at the clinic today?

- **Angle lamp to use in vaginal speculum examination**
  - Yes = ①  
  - No = ②

- **Penis models for nurses to demonstrate to patients the correct way to use a condom**
  - Yes = ①  
  - No = ②

- **Contact cards**
  - Yes = ①  
  - No = ②

### 10.4 How are the re-usable vaginal speculums sterilised in this clinic?

- Soaked in a sterilising fluid ①
- Boiled for 10 minutes ②
- Autoclaved ③

□ 54
11 Record whether the clinic stocks each of the following drugs, and if yes, the number of dosage units available. One dosage unit is one tablet, one vial, one vaginal pessary.

<table>
<thead>
<tr>
<th>DRUG</th>
<th>IN STOCK TODAY</th>
<th>MG OR GM PER DOSAGE UNIT</th>
<th>NUMBER OF DOSAGE UNITS AVAILABLE TODAY</th>
<th>HOW OFTEN WAS DRUG OUT OF STOCK IN THE PAST SIX MONTHS?</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) Benzithine Penicillin</td>
<td>Yes No</td>
<td>..........................................................</td>
<td>..........................................................</td>
<td>Never (1) Once (2) Twice (3) 3 or more times (4)</td>
</tr>
<tr>
<td>(b) Doxycycline</td>
<td>Yes No</td>
<td>..........................................................</td>
<td>..........................................................</td>
<td>Never (1) Once (2) Twice (3) 3 or more times (4)</td>
</tr>
<tr>
<td>(c) Erythromycin</td>
<td>Yes No</td>
<td>..........................................................</td>
<td>..........................................................</td>
<td>Never (1) Once (2) Twice (3) 3 or more times (4)</td>
</tr>
<tr>
<td>(d) Cyprofloxain</td>
<td>Yes No</td>
<td>..........................................................</td>
<td>..........................................................</td>
<td>Never (1) Once (2) Twice (3) 3 or more times (4)</td>
</tr>
<tr>
<td>(e) Metronidazole</td>
<td>Yes No</td>
<td>..........................................................</td>
<td>..........................................................</td>
<td>Never (1) Once (2) Twice (3) 3 or more times (4)</td>
</tr>
<tr>
<td>(f) Imidazole</td>
<td>Yes No</td>
<td>..........................................................</td>
<td>..........................................................</td>
<td>Never (1) Once (2) Twice (3) 3 or more times (4)</td>
</tr>
<tr>
<td>DRUG</td>
<td>IN STOCK TODAY</td>
<td>MG OR GM PER DOSAGE UNIT</td>
<td>NUMBER OF DOSAGES AVAILABLE TODAY</td>
<td>HOW OFTEN WAS DRUG OUT OF STOCK IN THE PAST SIX MONTHS</td>
</tr>
<tr>
<td>-------------------</td>
<td>---------------</td>
<td>--------------------------</td>
<td>----------------------------------</td>
<td>---------------------------------------------</td>
</tr>
<tr>
<td>(a) Benzathine Penicillin</td>
<td>□ 55</td>
<td>□□□□□□ 56-58</td>
<td>□</td>
<td>□ 59</td>
</tr>
<tr>
<td>(b) Doxycycline</td>
<td>□ 60</td>
<td>□□□□□□ 61-63</td>
<td>□</td>
<td>□ 64</td>
</tr>
<tr>
<td>(c) Erythromycin</td>
<td>□ 65</td>
<td>□□□□□□ 66-68</td>
<td>□</td>
<td>□ 69</td>
</tr>
<tr>
<td>(d) Cyprofloxin</td>
<td>□ 70</td>
<td>□□□□□□ 71-73</td>
<td>□</td>
<td>□ 74</td>
</tr>
<tr>
<td>(e) Metronidazole</td>
<td>□ 75</td>
<td>□□□□□□ 76-78</td>
<td>□</td>
<td>□ 79</td>
</tr>
<tr>
<td>(f) Imidazole</td>
<td>□ 80</td>
<td>□□□□□□ 81-83</td>
<td>□</td>
<td>□ 84</td>
</tr>
</tbody>
</table>
Form 2

Observation of professional nurses providing treatment to patients with STDs.

*Instruction to observer:*

Prior to observing a nurse, please explain that you are seeking the nurses’ assistance in evaluating the implementation and effectiveness of the syndromic approach in the management of STDs, and ask what problems they encounter, if any.

Use a separate form for each patient.

*Instructions:*

Kindly respond to the following questions by ticking (X) the appropriate numbered circle or filling in the appropriate block.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th>FOR OFFICE USE ONLY</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>□ 1-2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>□ 3-4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>□ 5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>□ 6</td>
</tr>
</tbody>
</table>

(i) Patient number ............................................

(ii) Clinic visited (name) ....................................

(iii) District .....................................................

(iv) Name of observer .........................................

(v) Type of locality
   - Rural ....................................................... ①
   - Urban ....................................................... ②
   - Semi-urban ................................................. ③
<table>
<thead>
<tr>
<th>(vi) Type of sector</th>
<th>For Office Use Only</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public</td>
<td>☐ 7</td>
</tr>
<tr>
<td>Private</td>
<td></td>
</tr>
</tbody>
</table>

### Observation

<table>
<thead>
<tr>
<th>1</th>
<th>Patient characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Male ☐ 1</td>
</tr>
<tr>
<td>Age (in years)</td>
<td>☐ ☐</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2</th>
<th>Symptoms that patient present with</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pain</td>
<td>Yes ☐ 1</td>
</tr>
<tr>
<td>Discharge</td>
<td>Yes ☐ 1</td>
</tr>
<tr>
<td>Ulcer</td>
<td>Yes ☐ 1</td>
</tr>
<tr>
<td>Swelling of inguinal gland</td>
<td>Yes ☐ 1</td>
</tr>
<tr>
<td>Other (specify)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>3</th>
<th>Is the presence of the observer explained?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes ☐ 1</td>
<td>No ☐ 2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>4</th>
<th>Is the patient questioned about the following issues:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nature of the presenting symptoms</td>
<td>Yes ☐ 1</td>
</tr>
<tr>
<td>Onset of symptoms</td>
<td>Yes ☐ 1</td>
</tr>
<tr>
<td>Duration of symptoms</td>
<td>Yes ☐ 1</td>
</tr>
<tr>
<td>History of recent sexual contacts</td>
<td>Yes ☐ 1</td>
</tr>
<tr>
<td>Previous STD treatment</td>
<td>Yes ☐ 1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>5</th>
<th>Does the nurse look at the patient’s genitals with the patient lying down?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes ☐ 1</td>
<td>No ☐ 2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>6</th>
<th>Are examination gloves used?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes ☐ 1</td>
<td>No ☐ 2</td>
</tr>
</tbody>
</table>
7  Are the external genitalia thoroughly examined? For uncircumcised men:
   Are the foreskin retracted
   Yes = 1  No = 2

8  Are the external genitalia thoroughly examined? For women:

8.1 Are the labia separated and inspected?  Yes = 1  No = 2

8.2 Is a speculum examination performed?  Yes = 1  No = 2

8.3 If yes, is an adequate light source used?  Yes = 1  No = 2

8.4 Is a bimanual examination performed?  Yes = 1  No = 2

9  Ask the nurse what his/her diagnosis is and write it down.
   Genital discharge 
   Genital ulcer
   PID
   Other (specify) ............................................

10 Ask the nurse what treatments/he is prescribing to the patient, at this consultation.

Drug 1: Name ..........................................
   *Quantity ...........................................
   *Dosage  daily [ ] bd [ ] tds [ ] qid [ ]
   *Route  im [ ] oral [ ] topical [ ]
   *Duration of treatment (days) ......................

Drug 2: Name ..........................................
   *Quantity ...........................................
   *Dosage  daily [ ] bd [ ] tds [ ] qid [ ]
   *Route  im [ ] oral [ ] topical [ ]
   *Duration of treatment (days) ......................
Drug 3: Name ............................................
*Quantity ............................................
*Dosage daily □ bd □ tds □ qid □
*Route im □ oral □ topical □
*Duration of treatment (days) ............................................

11 Is it the correct prescription for the diagnosis?
   Yes = ① No = ② □ 30

12 Which of the following STD issues are observed to be part of the nurse’s counselling to the patient?

   12.1 Asks patient whether s/he can discuss prevention methods with his/her partner/s
       Yes = ① No = ② □ 31

   12.2 Offers condoms to patient
       Yes = ① No = ② □ 32

   12.3 Offers instructions on condom use
       Yes = ① No = ② □ 33

   12.4 Demonstrates how to use a condom
       Yes = ① No = ② □ 34

   12.5 Advises patient to abstain from intercourse
       Yes = ① No = ② □ 35

   12.6 Practise safe sex until symptoms disappear or treatment is complete
       Yes = ① No = ② □ 36

   12.7 Advises patient to tell sexual partner’s contacts to have treatment
       Yes = ① No = ② □ 37

   12.8 Provides patient with STD contact cards
       Yes = ① No = ② □ 38

   12.9 Advises patient that people with STDs may be asymptomatic
       Yes = ① No = ② □ 39

   12.10 Urges patient to take all the prescribed medication
       Yes = ① No = ② □ 40
<table>
<thead>
<tr>
<th>12.11 Explains effects and contra-indications of medication</th>
<th>Yes = ①  No = ②</th>
</tr>
</thead>
<tbody>
<tr>
<td>12.12 Informs patient that STDs increase the chance of contracting HIV/AIDS</td>
<td>Yes = ①  No = ②</td>
</tr>
<tr>
<td>12.13 Informs patient about complications of STDs, eg infertility</td>
<td>Yes = ①  No = ②</td>
</tr>
<tr>
<td>12.14 Urges patient to return for follow-up, if necessary</td>
<td>Yes = ①  No = ②</td>
</tr>
<tr>
<td>13 Was privacy maintained during the consultation?</td>
<td>Yes = ①  No = ②</td>
</tr>
<tr>
<td>14 What was the duration of the patient consultation?</td>
<td>........................ minutes</td>
</tr>
</tbody>
</table>
Form 3

Interview with professional nurses providing treatment of STDs at the clinic.

**Instructions to interviewer:**

Professional nurses who are responsible for treating patients with STDs should be interviewed. The interviews should be done individually and in private, and should follow the observation schedule. The aim is to assess the knowledge about the syndromic approach and to find out if it is implemented in the management of STI patients.

**Instructions:**

Finally respond to the following questions by ticking (X) the appropriate numbered circle or filling in the appropriate block.

<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>(i) Clinic visited (name)</td>
<td>.................................</td>
</tr>
<tr>
<td>(ii) District</td>
<td>................................</td>
</tr>
<tr>
<td>(iii) Name of interviewer</td>
<td>................................</td>
</tr>
<tr>
<td>(iv) Type of locality</td>
<td>Rural  ①  Urban  ②  Semi-urban  ③</td>
</tr>
<tr>
<td>(v) Type of sector</td>
<td>Public  ①  Private  ②</td>
</tr>
</tbody>
</table>
### Staff interview

1. How many STD patients do you personally treat at this clinic per month (give an average figure)? ........................................ 6-8

2. Do you think the following increases the chance of contracting STDs?

<table>
<thead>
<tr>
<th>Factor</th>
<th>Yes</th>
<th>No</th>
<th>Don't know</th>
</tr>
</thead>
<tbody>
<tr>
<td>Having multiple sexual partners</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unprotected intercourse</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Having sex at an early age</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Heavy alcohol consumption</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IUCDs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prostitution</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Migrant labour</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Poverty</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Being HIV positive</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Being wealthy</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Contraception</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3. Do you think a person can be infected with an STD and not show any symptoms or signs of being ill? Yes □ No □ Don’t know □ 20

4. If you were to take 100 randomly chosen pregnant women from this area, how many on average, do you think might have HIV? ............................ 21-22

5. If you were to take 100 randomly chosen men in this area, how many, on average, do you think might have HIV? ................................................ 23-24

6. Do you think STDs increase the risk of contracting AIDS? Yes □ No □ Don’t know □ 25
7. Do you perform physical examinations on male STD patients?

- Always
- Sometimes
- Never

8. If always/sometimes, please describe each step of how you would examine a male STD patient:

*(Do not read, but probe by asking “anything else?”, and tick, if mentioned).*

8.1 Patient asked to undress so that genitals are fully exposed

- Yes
- Probed
- Yes
- No

8.2 Patient examined for a urethral/penile discharge

- Yes
- Probed
- Yes
- No

8.3 Genitals examined for lesions after retracting the foreskin

- Yes
- Probed
- Yes
- No

9. Do you perform physical examination on female STD patients?

- Always
- Sometimes
- Never

10. If always/sometimes, please describe each step of how you would examine a female STD patient:

10.1 Patient asked to undress so that genitals are fully exposed

- Yes
- Probed
- Yes
- No

10.2 Patient asked to lie down

- Yes
- Probed
- Yes
- No

10.3 Patient examined for lesions on vulva and labia

- Yes
- Probed
- Yes
- No

10.4 Patient examined for vaginal discharge

- Yes
- Probed
- Yes
- No

10.5 Speculum examination performed

- Yes
- Probed
- Yes
- No

10.6 Bimanual examination performed

- Yes
- Probed
- Yes
- No
11 Which drugs do you prescribed for:

a male patient with an urethral discharge?

<table>
<thead>
<tr>
<th>Drug 1: Name</th>
<th>*Quantity</th>
<th>*Dosage</th>
<th>*Route</th>
<th>*Duration of treatment (days)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>daily □ bd □ tds □ qid □</td>
<td>im □ oral □ topical □</td>
<td></td>
</tr>
</tbody>
</table>

Correct prescription for the diagnosis? Yes = ☑ No = ☒ □ 37

12 Which drugs do you prescribed for:

a male patient with a genital ulcer?

<table>
<thead>
<tr>
<th>Drug 1: Name</th>
<th>*Quantity</th>
<th>*Dosage</th>
<th>*Route</th>
<th>*Duration of treatment (days)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>daily □ bd □ tds □ qid □</td>
<td>im □ oral □ topical □</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Drug 2: Name</th>
<th>*Quantity</th>
<th>*Dosage</th>
<th>*Route</th>
<th>*Duration of treatment (days)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>daily □ bd □ tds □ qid □</td>
<td>im □ oral □ topical □</td>
<td></td>
</tr>
<tr>
<td>Correct prescription for the diagnosis?</td>
<td>Yes = 1</td>
<td>No = 2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-----------------------------------------</td>
<td>---------</td>
<td>--------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FOR OFFICE USE ONLY</td>
<td></td>
<td>38</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**13** Which drugs do you prescribe for:

a female patient with a vaginal discharge?

**Drug 1:** Name ........................................

*Quantity ...........................................

*Dosage*  
- daily  
- bd  
- tds  
- qid

*Route*  
- im  
- oral  
- topical

*Duration of treatment (days) ..........................

**Drug 2:** Name ........................................

*Quantity ...........................................

*Dosage*  
- daily  
- bd  
- tds  
- qid

*Route*  
- im  
- oral  
- topical

*Duration of treatment (days) ..........................

<table>
<thead>
<tr>
<th>Correct prescription for the diagnosis?</th>
<th>Yes = 1</th>
<th>No = 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>FOR OFFICE USE ONLY</td>
<td></td>
<td>40</td>
</tr>
</tbody>
</table>

**14** What treatment do you give for PID?

**Drug 1:** Name ........................................

*Quantity ...........................................

*Dosage*  
- daily  
- bd  
- tds  
- qid

*Route*  
- im  
- oral  
- topical

*Duration of treatment (days) ..........................

**Drug 1:** Name ........................................

*Quantity ...........................................

*Dosage*  
- daily  
- bd  
- tds  
- qid

*Route*  
- im  
- oral  
- topical

*Duration of treatment (days) ..........................
<table>
<thead>
<tr>
<th>Question</th>
<th>Yes</th>
<th>Probed</th>
<th>No</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Correct prescription for the diagnosis?</td>
<td>Yes = 1</td>
<td>No = 2</td>
<td></td>
<td>41</td>
</tr>
<tr>
<td>15. What STD issues are routinely part of your counselling?</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td><em>(Do not read, but probe by asking, &quot;any other issues?&quot;, tick if mentioned).</em></td>
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<tr>
<td>15.1 Encourage use of condoms</td>
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<tr>
<td>Yes □ Probed Yes □ No □</td>
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<tr>
<td>15.2 Abstain from intercourse until completely healed</td>
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<tr>
<td>Yes □ Probed Yes □ No □</td>
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<tr>
<td>15.3 Tell their sexual partner(s)/contacts to have treatment</td>
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<td>44</td>
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<tr>
<td>Yes □ Probed Yes □ No □</td>
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<td>15.4 People with STDs may be asymptomatic</td>
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<td>Yes □ Probed Yes □ No □</td>
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<tr>
<td>15.5 Need to take all the prescribed medication</td>
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<td>46</td>
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<td>Yes □ Probed Yes □ No □</td>
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<tr>
<td>15.6 Inform that STDs increase the chance of contracting HIV/AIDS</td>
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<tr>
<td>Yes □ Probed Yes □ No □</td>
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<td>15.7 Complications of STDs, eg infertility</td>
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<tr>
<td>Yes □ Probed Yes □ No □</td>
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<td>16. Do you provide condoms to your STD patients?</td>
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<td>49</td>
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<tr>
<td>Never □</td>
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<tr>
<td>Seldom □</td>
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<td>Often □</td>
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<td>Always □</td>
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<tr>
<td>17. If always/often:</td>
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<tr>
<td>How many condoms each time</td>
<td></td>
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<td></td>
<td>Do you provide instructions to your patient on how to use condoms?</td>
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<tr>
<th></th>
<th>Do you demonstrate to patients, how to use a condom to patients?</th>
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<table>
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<tr>
<th></th>
<th>Have you received any training in the syndromic management of STDs?</th>
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<tr>
<td></td>
<td>Yes = ① No = ②</td>
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</table>

|   | What are the main constraints of your work with STDs?              |   |   |   |   |   |   |
|   |                                                                      |   |   |   |   |   |   |
|   |                                                                      |   |   |   |   |   |   |
|   |                                                                      |   |   |   |   |   |   |
|   |                                                                      |   |   |   |   |   |   |

FOR OFFICE USE ONLY

□ 52

□ 53

□ 54
**Form 4**

Exit interview with patients treated at the clinic.

---

**Instructions to Interviewee**

When a patient has finished the consultation with the professional nurse, ask if she is willing to answer a few questions about the service received. It is essential to obtain informed consent before beginning the interview, so the following instructions should be given:

---

**Instructions:**

Hello, we want to improve the health programmes in our region. To help us improve health programmes, we would like to ask you some questions. I will not write down your name, and everything you tell me will be kept confidential. Your participation is voluntary and you are not obliged to answer any questions if you do not want to. Do I have your permission to continue?

Kindly respond to the following questions by ticking (X) the appropriate numbered circle.

---

| (i) Interview number .................................................. | □ □ 1-2 |
| (ii) Clinic visited (name) ............................................. | □ □ 3-4 |
| (iii) District ............................................................... | □ 5 |
| (iv) Name of interviewer ................................................ |     |
| (v) Type of locality                                         |     |
| Rural                                                       | 1 |
| Urban                                                       | 2 |
| Semi-urban                                                  | 3 |

---

**FOR OFFICE USE ONLY**
(vi) Type of sector

| Public | ① |
| Private | ② |

### Exit interview questionnaire

1. How do you feel about the duration of consultation?
   - Too short | ① |
   - Too long | ② |
   - About right | ③ |

2. During the visit, did the nurse
   - listen to your health problems to your satisfaction?
     - Yes = ① | No = ② |
   - let you ask questions you thought were important?
     - Yes = ① | No = ② |
   - respond to your questions to your satisfaction?
     - Yes = ① | No = ② |
   - adequately explain to you the results of any examinations?
     - Yes = ① | No = ② |
   - adequately explain to you about STDs?
     - Yes = ① | No = ② |

3. Did you have enough privacy during your visit with the nurse?
   - Yes = ① | No = ② |

4. How well did you understand what the nurse explained to you?
   - Very well | ① |
   - More or less | ② |
   - Not at all | ③ |
   - Nurse did not explain anything | ④ |
### MEN ONLY

5 Why did you come to the clinic today?

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>5.1 You have pain during urination</td>
<td>Yes = ①  No = ②</td>
<td></td>
</tr>
<tr>
<td>5.2 You have a discharge from the penis</td>
<td>Yes = ①  No = ②</td>
<td></td>
</tr>
<tr>
<td>5.3 You have sores in the genital area</td>
<td>Yes = ①  No = ②</td>
<td></td>
</tr>
<tr>
<td>5.4 Your partner has recently been treated for STDs</td>
<td>Yes = ①  No = ②</td>
<td></td>
</tr>
<tr>
<td>5.5 Other (specify)</td>
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</table>

6 For how many days have you had this problem in your genital area?

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<tbody>
<tr>
<td>Number of days</td>
<td></td>
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</table>

7 Before coming to this clinic, what did you do about this problem in your genital area? (Read out)

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<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>7.1 Sought advice from a friend</td>
<td>Yes = ①  No = ②</td>
<td></td>
</tr>
<tr>
<td>7.2 Sought advice from a relative</td>
<td>Yes = ①  No = ②</td>
<td></td>
</tr>
<tr>
<td>7.3 Used medicine that you had at home</td>
<td>Yes = ①  No = ②</td>
<td></td>
</tr>
<tr>
<td>7.4 Sought advice from a traditional healer</td>
<td>Yes = ①  No = ②</td>
<td></td>
</tr>
<tr>
<td>7.5 Sought advice from another clinic</td>
<td>Yes = ①  No = ②</td>
<td></td>
</tr>
<tr>
<td>7.6 Attended a private doctor</td>
<td>Yes = ①  No = ②</td>
<td></td>
</tr>
<tr>
<td>7.7 Nothing</td>
<td>Yes = ①  No = ②</td>
<td></td>
</tr>
<tr>
<td>7.8 Other (specify)</td>
<td></td>
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</tbody>
</table>

### WOMEN ONLY

8 Why did you come to the clinic today?
<table>
<thead>
<tr>
<th>Question</th>
<th>Yes</th>
<th>No</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>8.1 You have a discharge from the vagina</td>
<td>1</td>
<td>2</td>
<td>31</td>
</tr>
<tr>
<td>8.2 You have itching in the vagina</td>
<td>1</td>
<td>2</td>
<td>32</td>
</tr>
<tr>
<td>8.3 You have sores in the genital area</td>
<td>1</td>
<td>2</td>
<td>33</td>
</tr>
<tr>
<td>8.4 Your partner has recently been treated for STDs</td>
<td>1</td>
<td>2</td>
<td>34</td>
</tr>
<tr>
<td>8.5 Other (specify)</td>
<td></td>
<td></td>
<td>35</td>
</tr>
<tr>
<td>9 For how many days have you had this problem in your genital area?</td>
<td></td>
<td></td>
<td>36-37</td>
</tr>
<tr>
<td>10 Before coming to this clinic, which of the following did you do with regard to this problem in your genital area? (Read out)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10.1 Sought advice from a friend</td>
<td>1</td>
<td>2</td>
<td>38</td>
</tr>
<tr>
<td>10.2 Sought advice from a relative</td>
<td>1</td>
<td>2</td>
<td>39</td>
</tr>
<tr>
<td>10.3 Used medicine that you had at home</td>
<td>1</td>
<td>2</td>
<td>40</td>
</tr>
<tr>
<td>10.4 Sought advice from a traditional healer</td>
<td>1</td>
<td>2</td>
<td>41</td>
</tr>
<tr>
<td>10.5 Sought advice from another clinic</td>
<td>1</td>
<td>2</td>
<td>42</td>
</tr>
<tr>
<td>10.6 Attended a private doctor</td>
<td>1</td>
<td>2</td>
<td>43</td>
</tr>
<tr>
<td>10.7 Nothing</td>
<td>1</td>
<td>2</td>
<td>44</td>
</tr>
<tr>
<td>10.8 Other (specify)</td>
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</table>
11 Any suggestions as to how you would like to see STD patients treated at this clinic

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Thank you for participating in this study.
Annexure 2

Letter of authorisation
The Regional Director
Region A, Department of health
PORT SHEPSTONE
4240

15 April 1998

Dear Sir

Permission to conduct research in the Region A Primary health care services

The Region A Primary health care Managers and Trainers have met and discussed a need to conduct a research study. The title of the project is:

An evaluation of the effectiveness of training in syndromic management of sexually transmitted diseases

In 1996, intensive training of nurses in syndromic management of STDs occurred in KwaZulu-Natal. Currently most of the primary health care clinics provide STD services, using one of several management protocols.

The aim of this research is

— to ascertain whether the training that nurses received in syndromic management of STDs has been implemented
— to identify gaps and deficiencies in the current STD management protocols in terms of factual evidence
— to provide improvements in nursing care and benefit mankind in general
— to feedback the findings to enable policy makers to replan and refocus

Research method

The research technique to be utilised will be direct observation. This will entail analysis of activities carried out by the clinic professional nurse in her management of an STD client. The instruments used will be observation sheets on which the observers will note every activity and the time involved in each.

To assist the observation technique, a written questionnaire will be completed by respondents other than those being observed. The questionnaires will obtain information on the resources available for STD management at the clinic, and whether these are appropriate and sufficient.

The results of the study will be made available to you.

Thank you.

L. B. Ngcezi (LBNGCEZI)
RESEARCH TEAM LEADER DATE: 15.4.98