

Implementing Cervical Screening in South Africa

Cervical Health Implementation Project

National Department of Health

Women's Health Research Unit, University of Cape Town

Women's Health Project, University of the Witwatersrand

EngenderHealth, USA

Volume II: A Guide for Trainers





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Principal Authors

Jennifer Moodley

*Women's Health Research Unit, School of Public Health and Family Medicine,
University of Cape Town*

Mary Kawonga

Women's Health Project, School of Public Health, University of the Witwatersrand

Janet Bradley

EngenderHealth, USA

Margaret Hoffmann

*Women's Health Research Unit, School of Public Health and Family Medicine,
University of Cape Town*

Contributing Authors

Vanessa Daries

*Women's Health Research Unit, School of Public Health and Family Medicine,
University of Cape Town*

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National Department of Health



ENGENDERHEALTH
Improving Women's Health Worldwide

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Foreword

Every year, in South Africa, many women die from cervical cancer. Though it is a preventable disease, sadly cervical cancer continues to cause needless suffering and death amongst women in the prime of their lives. We know from research and experience that well implemented organised national cervical screening programmes can significantly reduce the morbidity and mortality attributed to cervical cancer. However, previous cervical screening programmes have had little impact, largely due to inequitable access to health services.

Cervical cancer prevention is therefore a priority reproductive health intervention. To address this important public health problem, the National Department of Health approved the National Cancer Control Programme (NCCP) as South African health policy in 1999. We launched the National Guidelines for a Cervical Cancer Screening Programme in 2000. Every asymptomatic woman over the age of 30 should have 3 free Pap smears during her lifetime, with a 10 year interval between the Pap smears.

The challenge facing the Department is translating this policy into action. A cervical cancer national advisory committee was therefore established to develop a national strategy for the implementation of a national cervical cancer screening programme. All 9 provinces are represented on this inter-disciplinary committee, which includes reproductive health programme managers, academics, researchers, clinicians, laboratory personnel and relevant national NGOs. The advisory committee has been working very hard to develop an implementation strategy, which will provide a national framework for cervical screening implementation. The Cervical Health Implementation Project (CHIP), a national research initiative aimed at strengthening cervical screening services in this country, has also been

working to develop relevant and context-specific recommendations to guide programme implementation.

The National Department of Health also welcomes publications that will help to bridge the gap between policy and programme development and implementation. These guides, if implemented accordingly, will result in improvement of women's health and reduction of suffering and isolation of many women in South Africa. Let us all work together in a co-ordinated manner to ultimately eradicate preventable reproductive health cancers, especially cancer of the uterine cervix.

A handwritten signature in blue ink, appearing to read 'E Mhlanga', with a long horizontal stroke extending to the right.

Dr E Mhlanga

*Chief Director: Maternal, Child and Women's Health and Nutrition
National Department of Health, Pretoria*

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Key personnel in the project are:

WHRU: Jennifer Moodley, Margaret Hoffman, Vanessa Daries

WHP: Mary Kawonga, Jamela Ellen Robertson

EngenderHealth: Janet Bradley, Mark Barone

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Women's Health Project

School of Public Health
University of the Witwatersrand
PO Box 1038, Johannesburg 2000, South Africa
Contact: Mary Kawonga
kawongam@sph.wits.ac.za

Women's Health Research Unit

School of Public Health and Family Medicine
University of Cape Town, Anzio Road, Observatory
Cape Town 7925, South Africa
Contact: Jennifer Moodley
jmoodley@cormack.uct.ac.za

EngenderHealth

440 Ninth Avenue
New York, NY 10001, USA
Contact: Janet Bradley
jbradley@engenderhealth.org

Introduction

Cervical cancer is a preventable disease, yet in South Africa approximately 1 in 29 women will develop cervical cancer in her lifetime – it is the most common cancer in women. In South Africa, Papanicolaou (Pap) smears have been available for many years, although they have been provided on an ad hoc basis in public sector health facilities. Efforts to establish an organised national cervical screening programme were made in the latter part of the 1990s. In 2000 the National Department of Health introduced the National Guidelines for a Cervical Cancer Screening Programme. These Guidelines reflect the Department of Health's commitment to reducing the incidence and mortality of cervical cancer in South Africa. The Guidelines state that: 'All women attending public sector health services should have 3 free Pap smears in their lifetime, with a 10-year interval between each smear, commencing at age 30 years or older.' The ultimate goal is to screen at least 70% of women, nationally, within the target age group within 10 years of initiating the programme. The new Guidelines present a challenge to reproductive health managers tasked with translating national policy into action at provincial, district and facility levels.

To successfully implement the new Guidelines health service personnel need to understand the rationale behind the Guidelines, be skilled in taking good Pap smears and understand the various components of a cervical screening programme. There also needs to be intense efforts to recruit more women to be screened.

This guide has been developed for trainers working in the South African health services. It is the second of a two-volume publication and is the result of the Cervical Health Implementation Project (CHIP). The principal objectives of CHIP were to identify and measure community and service delivery barriers to optimal screening and treatment for cervical cancer, to develop appropriate and replicable interventions and to measure the effect of these interventions. Based on the experience of CHIP, a two-volume manual has been developed. Volume I is a guide for

Programme Managers – it is directed at programme managers wishing to set up cervical screening services. Volume 2 is a guide for trainers. Included in Volume 2 are manuals for training health care providers and support staff.

Doctors and nurses

Manual A is directed at doctors and nurses who are involved in cervical screening services. There are 3 modules in Manual A that can be done at different times.

The first module, which takes about 3.5 hours, is an introduction to the theory behind the National Guidelines for a Cervical Cancer Screening Programme. It covers: the reasons for screening, the natural history and epidemiology of human papillomavirus (HPV) infection and cervical cancer, details of the Guidelines including the rationale for the recommendations, and suggests how staff can promote the Guidelines.

The second module, which takes about 6 hours, addresses service delivery issues. The sessions in this module cover: the components of a well functioning cervical screening programme, setting targets, record-keeping, reducing missed opportunities for screening and client-provider interaction issues.

The third module is more practical and must be undertaken in a health facility where Pap smears are done. This module covers: taking good Pap smears, understanding laboratory results, managing clients with cervical abnormalities, and infection prevention. This module takes about 2 days, although the sessions can be extended depending on the availability of clients.

Support staff

Manual B provides an orientation to support staff (administration staff, registration clerks, supplies' staff, cleaning staff, nurses' aides, health promoters etc) to the Guidelines and outlines how they can be advocates for cervical cancer screening in the clinic and in the community. It is divided into 4 sessions and can be completed in about 2 hours.

How the sessions are organised

Every module is divided into separate training sessions. Each session is organised as follows:

- The **objectives** of the session
- The **time** needed to run the session
- The **teaching methods used** (e.g. lecture, role-play)
- The **facilitator resources** that will be useful during the session
- **Preparation** that needs to be done before running the session
- The **key messages** for the session
- The **training steps** to take to run the session
- The **facilitator notes** to help run the session
- **Handouts** for the session
- **Overheads** can be found at the end of each module

Modules may be combined or used separately, depending on the needs of different audiences.

CHIP 2004. Implementing Cervical Screening in South Africa. Volume I: A Guide for Programme Managers. Cervical Health Implementation Project, South Africa. University of Cape Town, University of the Witwatersrand, EngenderHealth, 2004 is a companion volume and is an essential reference document for the trainer.

Managing Workshops

There are several issues to remember when running workshops. Many of these need to be thought about and decided on before the training begins:

Participants

It is important to discuss the training content and objectives with fellow trainers and local facility managers beforehand, to ensure that the correct participants are selected. For the theoretical sessions we suggest a maximum of 20 participants and for the practical training in taking a good Pap smear, a maximum of 6 participants. For the practical training, participants will perform a Pap smear individually, under supervision.

Choosing a Venue

For the theoretical sessions, a venue away from the service sites, taking a few staff from each site to work together, is recommended. The advantage of this is that participants will not be distracted by work issues and will also be able to interact and benefit from association with colleagues from other clinics. Alternatively, it may be difficult to arrange this, and you may choose instead to conduct the training at the site, at a time when the client load is low, or outside work hours. Practical sessions will need to be conducted in clinics where Pap smear techniques and infection prevention can be demonstrated.

Being Prepared

Before the training you must be fully familiar with the contents of the sessions you are about to facilitate, know what you want to achieve and know how you will organise the sessions.

Read the facilitator notes thoroughly, check out the facilitator resources, have all your overheads ready, and ensure that you have enough copies of all session prompts (case studies, games) and participant handouts.

You should discuss with the people at the venue your needs for seating, writing and demonstration sessions. Table 1 outlines the resources needed to conduct the workshops.

Table 1: Materials Needed for Training Sessions

For all sessions

- Enough chairs, arranged in a circle or semi-circle
- Facilities for drinks and/or food
- Chalkboard/whiteboard/flip chart
- Overhead projector (if using overhead transparencies)
- Labels/name tags
- Koki pens
- Copies of the National Guidelines for a Cervical Cancer Screening Programme 2000
- Relevant posters/wall charts
- Relevant handouts and overhead transparencies
- Community and clinic IEC materials

For practical sessions

- Examination couch
- Light source
- Gloves
- Speculums
- Spatulas
- Sponge holding forceps
- Kidney dish
- Bucket to receive soiled instruments
- Brush for washing soiled instruments
- Glass slides and markers
- Fixative
- Pap smear register
- Cytology request forms
- Cytology report forms
- Sterilisation equipment
- Decontamination solution

Managing Time

Sessions and modules should be kept within the time limits noted in the manual. It should be stressed that sessions need to start on time. It is often a good idea to select one of the participants as a timekeeper.

Facilitation Tips

Helping People Learn

In these workshops, there are a variety of training techniques, including lectures, question and answer sessions, discussions, demonstrations, practical skills' coaching and role-plays. People generally learn best by doing. This is illustrated by the Chinese proverb:

**I hear and I forget,
I see and I remember,
I do and I understand**

The pyramid in Figure 1 (see page 17) clearly shows that reading is the least effective method of learning.

Training Skills

As a trainer the following are important skills you should remember.

Develop and support a sense of group spirit

It is important that, as the facilitator, you build and maintain the group's identity by establishing an atmosphere of mutual trust and respect. This means that the training environment will be friendly and allow participants to express their views, opinions, concerns, attitudes and behaviours freely.

Ensure that the intended content is covered

It is important that the material in all of the training modules is covered effectively. This will require that you help the group stay focused on the task. For this, you will need to do the following:

- Link each new topic with previous topics and with real-life examples. This will make sessions more interesting and there will be a better overall understanding of the topic rather than an accumulation of isolated facts.
- Ask questions that encourage thought of the task at hand. Avoid questions that seek 'yes/no' answers.
- Give clear, specific instructions for all activities. Confusion about expectations will distract participants from the issues of importance.
- Keep the focus on the content of the session. Politely attempt to keep off-topic conversations confined to tea and lunch breaks.
- Synthesise knowledge at the end of each session. Conclude sessions by restating the session's theme and integrating the suggestions and ideas that arose during the session into this framework.

Be an effective communicator

Encourage discussion:

- Ask open-ended questions which require a thoughtful response and/or guide the discussion in a particular direction.
- Ensure all participants feel their participation is welcome and desired.

Listen carefully

Several tools can assist you in this:

- Restate a participant's contribution to clarify and verify your understanding of the participant's statement.
- Listen for the content **and** attitude of a message.
- Support the participant's contribution. This does not mean you must agree with the participant, only that you respect his/her position.

Handle training problems

Successful group facilitation requires practice. Many situations will arise during a training programme that an experienced facilitator will be able to solve tactfully and effectively. Nobody can expect to be a successful facilitator overnight, but dealing with the following situations effectively will help your training session run as smoothly as possible.

Example 1: A participant wants to argue with you

This can be a positive sign as it shows that participants feel comfortable expressing their own points of view. By allowing discussion of alternate opinions you are allowing people to think critically about what they are expected to learn. This is a very profitable teaching/learning tool so long as each side respects the other's opinion, even if their beliefs remain unchanged. Some participants, however, will argue merely for the sake of arguing. Although this can be useful to a group discussion, it can become tiresome and time-consuming and you should tactfully control this behaviour to maintain focus and proper decorum.

Example 2: The group looks bored

You may need a change of pace, a change of venue, a change of topic or simply a break. Some questions you can ask yourself include:

- Have I been using the same teaching techniques for too long, i.e. too many lectures or too many large group activities?
- Have I made some connection between my topic and the participants' lives?
- Have I been repeating material?
- Have I been enthusiastic enough, or too enthusiastic?
- Is the venue suitable, i.e. too big or small, too hot or cold?
- Are there circumstances outside of the session influencing the behaviour of your group, i.e. overnight travel, peer relations, workplace stress?

Example 3: Nobody is answering your questions

Here are some questions to ask yourself to solve this problem:

- Am I speaking loudly or clearly enough for the group to understand me?
- Do my questions require thought to answer, i.e. 'How' or 'Why' questions asking for 'thoughts', 'opinions' or 'beliefs'?
- Am I waiting long enough for a response? Many participants will take time to think about the questions and carefully formulate an answer before volunteering their answer.
- Is the group focused on the discussion at hand?

Example 4: Some participants do not seem to be involved in the discussion

Some people are naturally quiet. They may be embarrassed to speak in front of a group or they may simply be learning from what others are saying. Do not confront them with specific questions if they do not appear ready to respond. However, offer them the opportunity to add their opinions or feelings when the chance arises.

Example 5: Some participants are monopolising the discussion

Some participants will naturally answer questions more quickly and more often than others will. While their responses can be valuable for their content and for sparking responses by the rest of the group, their frequent outputs can also cause others to feel left out or unable to contribute. It is your responsibility to ensure that the less assertive participant has the opportunity to make a contribution by expressing his/her views. You may have to ask the overzealous participants discreetly to delay their response until others have had a chance to make their own contributions. One other option is to allow partners to discuss a certain question before sharing with the whole group, or to have participants write down their thoughts before sharing with the whole group. In these ways, all participants are engaged in some way, and may then feel more comfortable sharing their responses with the whole group.

Reminders for Effective Facilitation

- Make sessions as interactive as possible
- Have more exercises and games after the lunch sessions
- Have breather exercises in between sessions
- Give time for the trainees to respond
- Motivate each of the trainees to respond
- Give a briefing at the beginning of each session

Do's and don'ts of training

The following 'do's' and 'don'ts' should always be kept in mind by the facilitator/trainer during any learning session:

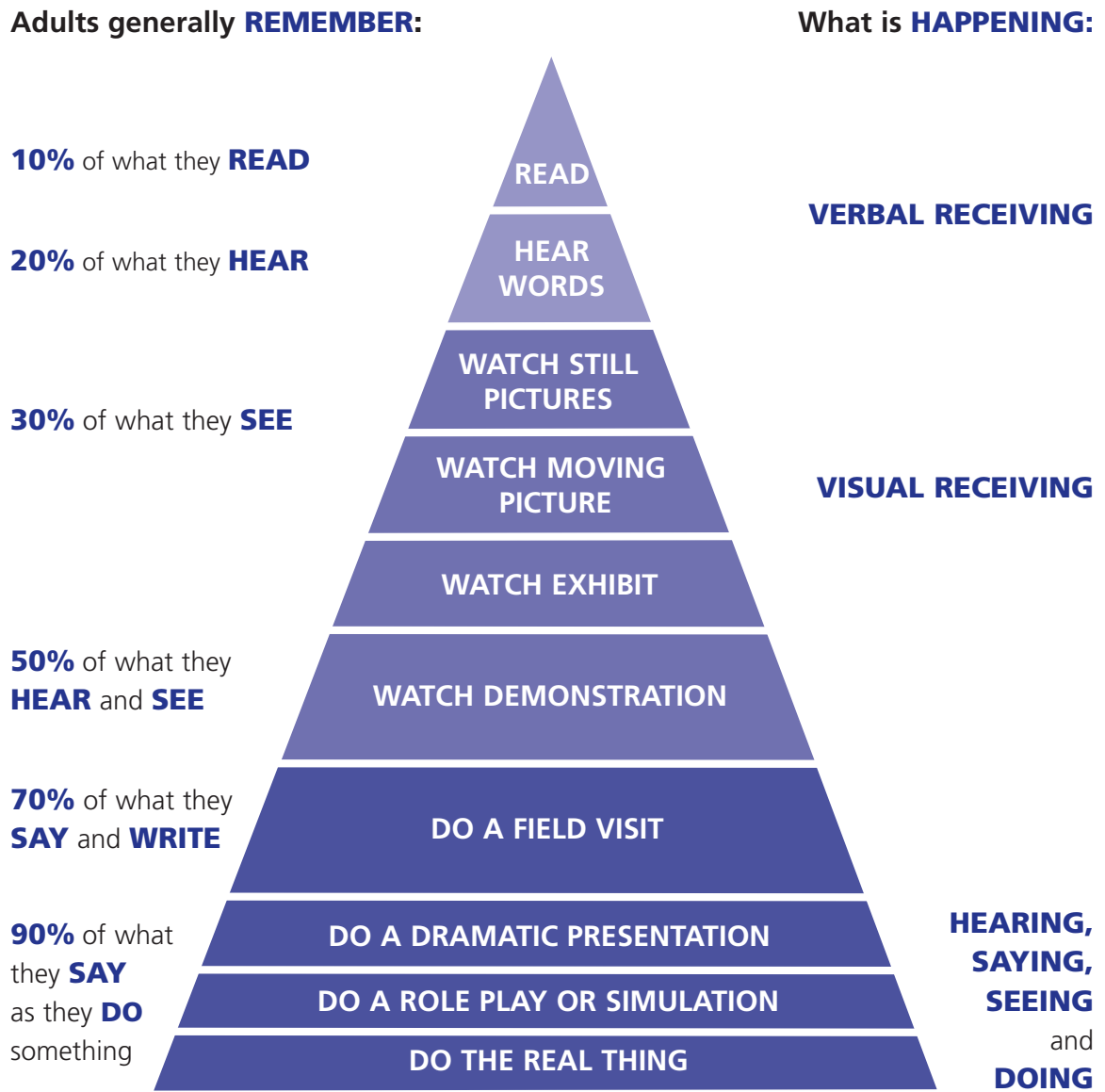
DO ...

- Maintain good eye contact
- Prepare in advance
- Involve participants
- Use visual aids
- Speak clearly
- Speak loudly enough
- Encourage questions
- Recap at the end of each session
- Bridge one topic to the next
- Encourage participation
- Write clearly and boldly
- Summarise
- Use logical sequencing of topics
- Use good time management
- K.I.S. (Keep It Simple)
- Give feedback
- Position visuals so everyone can see them
- Avoid distracting mannerisms and distractions in the room
- Be aware of the participants' body language
- Keep the group focused on the task
- Provide clear instructions
- Check to see if your instructions are understood
- Evaluate as you go
- Be patient

DON'T ...

- Talk to the flip chart
- Block the visual aids
- Stand in one spot – move around the room
- Ignore the participants' comments and feedback (verbal and non-verbal)
- Read from the curriculum

Figure 1: How Adults Learn



This pyramid clearly shows that **reading** is the least effective method of learning. **Seeing** something increases the percentage of retention, increased further when **hearing and seeing** are combined. **Saying and writing** are even better methods, but the most effective learning method is to **say and do** something at the same time.

Source: Wiman RV and Mierhenry WC. Dales learning cone of experience. Educational Media, Charles Merrill, 1969

Other Aspects of Being a Trainer

As a trainer you are an important resource to the district and region as a whole. Apart from managing the training of staff, you also have a role to play in:

- Informing and educating colleagues, clients and the community at large about Pap smears, and explaining the national screening Guidelines to them
- Playing the role of a supervisor, and monitoring to make sure those you train are taking good quality Pap smears and following correct procedures
- Training others to be trainers
- Identifying training needs in the clinics/district
- Conducting in-service training for new recruits
- Giving feedback to trainees on their performance
- Working with clinic sisters to assure all trainees are monitored and that they give you feedback on problems

These are some of the issues you, together with the clinic supervisor, will need to observe and monitor over time by conducting routine visits to sites. Ensure that:

- Staff are screening correct target group
- Staff have good smear adequacy rates
- The abnormality rates are within normal and expected limits
- Clients with abnormalities are appropriately managed
- Referral systems function and that staff take responsibility for tracking defaulters
- Staff work hand in hand with laboratory staff and diagnostic and treatment services
- The records are well-kept and used to self-monitor progress
- Staff explain procedures to clients, and have good interpersonal skills
- Smears are taken using a good light source and without use of lubricants, etc

Conducting Workshop Introductory Sessions

All workshops need to have an introductory session that lasts 15-30 minutes. It must:

- Introduce participants and facilitators, and create a relaxed atmosphere
- Inform participants about the objectives and content of the workshop, detailing sessions and times
- Deal with any housekeeping issues

Introduce Participants

As a trainer, you probably have many ideas for ice-breaker exercises and know that the best one to use might depend on who the participants are and whether they already know each other. The aim of the ice-breaker exercise is partly for participants to get to know each other but also, as the name suggests, to break the ice and get participants to relax and enjoy the sessions so they will be more open to learning. After filling out their name tags/labels, you might want to play the 'Name Game'.

Getting to Know Each Other: The Name Game

Facilitator says: Let's start our workshop by getting to know each other and relaxing. Here is a game that will help us to remember each other's names and is fun. Each of you needs to think of an adjective (describing word) that starts with the same sound as your name and which you think describes you, e.g. Marvellous Mary, Jolly Jennifer, Vibrant Vanessa!

continued...

Now stand in a circle. The facilitator should introduce himself/herself, for example by saying, *'Hello, I am Marvellous Mary'*. Then the person on the left of Mary should say, *'Hello, I am Vibrant Vanessa, and this (pointing to the person on her right, Mary) is Marvellous Mary'*.

Continue around the circle in a clockwise direction. Each person must introduce himself/herself, as well as **all** those to his/her left who have gone before.

Tough for the last person!

Inform Participants of Workshop Objectives

If you have planned everything well, participants will know why they have come to the workshop and what they expect to learn. However, sometimes participants come with the wrong expectations. It's important at the outset then to explain what you are going to do during the workshop, what you expect to achieve and how long it will take. Write the workshop agenda and objectives on an overhead or flip chart and ask participants if they have any questions.

Discuss Housekeeping Issues

Participants often worry about tea breaks and lunch breaks, so these also need to be explained. Any large housekeeping issues, such as reimbursements for travel, should be done at another time so that you can proceed with the workshop.

Training for Health Care Workers

M A N U A L A



Module 1

Cervical Cancer and Screening Theory

Module 1 consists of 6 sessions

- Session 1: Introduction to the module
- Session 2: Screening for cervical cancer
- Session 3: Epidemiology of cervical cancer
- Session 4: The natural history of cervical cancer
- Session 5: The National Guidelines for a Cervical Cancer Screening Programme: an explanation of the Guidelines
- Session 6: Promoting the National Guidelines for a Cervical Cancer Screening Programme

Time Required: 3 hours

Number of Participants: maximum 20

Overheads can be found at the end of the module

Module 1: **Session 1**

Introduction to the Module

Objectives

The objectives of this module are to:

- create a supportive learning environment
- introduce the agenda, objectives and discuss any housekeeping issues.

Time: 20 minutes

Facilitator Resources

Overhead: *Module 1: Introduction*

Preparation

Have overhead and overhead projector available.

Training Steps

- Ask participants to fill in and put on their name tags/labels
- Facilitator/s introduce her/himself/themselves
- Get participants to introduce themselves to one another – see *Conducting Workshop Introductory Sessions* on page 19
- Go through the workshop objectives, using the overhead transparency (Overhead: *Module 1: Introduction*)
- Present the agenda to the participants
- Discuss any housekeeping issues

Module 1: Session 2

Screening for Cervical Cancer

Objectives

Before explaining the rationale for a cervical screening programme, it is important that participants understand the concept of screening and its application in public health. At the end of this session the participants should:

- be able to define screening
- understand the criteria for instituting a screening programme.

Time: 30 minutes

Teaching Method

Discussion: why is screening done?

Facilitator Resources

- Suggested reading:
 - R Beaglehole, R Bonita and T Kjellstrom, *Basic Epidemiology*. WHO, Geneva 1993: 93-95
 - Peters TJ, Wildschut HIJ and Weiner CP. Epidemiologic in screening. In Wildschut HIJ, Weiner and CP Peters TJ (editors). *When to screen in obstetrics and gynaecology*. London: WB Saunders Company; 1996.
- Facilitator notes
- Overheads: *Screening 1-8*

Preparation

- Read the facilitator notes
- Check out the facilitator resources
- Have overheads and overhead projector available

Key Messages

- Screening is the process by which asymptomatic but potential diseases or defects are identified by tests that can be applied on a large scale
- Before deciding on whether to institute a screening programme one needs to assess the:
 - disease characteristics
 - clinical and health care requirements
 - technological requirements.

Training Steps

- Ask participants if they know of examples of screening programmes. Ask participants to define screening.
- Using Overhead: *Screening 1* summarise what screening is.
- Discuss why screening is done.
- Use the following questions to lead into a discussion on criteria used to decide whether or not to screen:
 - *Should we screen for influenza or the common cold? Why not?*
 - *Should we screen the general population for lung cancer? Why not?*

Note: answers to the above questions can be found in the facilitator notes.

- Using Overheads: *Screening 2-5*, discuss the criteria used to decide whether or not to screen.
- Ask participants to think about cervical cancer in South Africa and discuss whether screening for cervical cancer fits most of these criteria. Summarise responses showing Overheads: *Screening 6 and 7*.
- End the session with the key messages on Overhead: *Screening 8*.

Facilitator Notes

Introduction

Before discussing why we need a cervical screening programme, it is important that we understand the concept of screening and how we can apply this concept to public health.

Screening is the process by which asymptomatic, but potential diseases or defects are identified by tests that can be applied on a large scale (Overhead: *Screening 1*). Examples include: childhood development assessment done at child health clinics, cholesterol levels and mammography for breast cancer.

The purpose of any type of health screening is to provide a low-cost, accessible means of determining who in a population is likely to have a certain disease, and who is not. Screening constitutes the first step in the diagnostic and treatment process and cannot be regarded as an end in itself. Screening tests differ from diagnostic tests. With screening tests clients have no complaints/symptoms. With diagnostic tests, clients actively seek health services to try to identify the main cause of their symptoms. However, a diagnostic test can also be done for clients that have suspicious findings on a screening test,

Screening, including that for cervical cancer, is done on presumably healthy people – clients have no complaints, but are asked to have a Pap smear to screen for potential disease. Screening is a public health concept – screening is done in the interests of reducing the burden of disease in the population.

Criteria for deciding whether or not to screen

Not all diseases are suitable to have screening as a method for their prevention. We do not screen for influenza or the common cold as both conditions are not very serious and are self-limiting. To screen for lung cancer one would need to collect bronchial washings. This is not an easy or cheap procedure.

Criteria have been developed (JMG Wilson and G Jungner, *Principles and practice of screening for disease*. WHO, Geneva 1968) to assist when trying to determine whether or not screening is a suitable prevention strategy for a given disease.

Criteria

Disease characteristics (Overheads: *Screening 2 and 3*)

- The disease should be common
- There should be serious consequences if the disease is not diagnosed and treated early
- The population should be aware of and concerned about the disease
- The natural history of the disease should be well understood
- The disease should have a recognizable long latent period. The latent period is after biological onset of a disease but before symptoms develop (Overhead: *Screening 3*) – this allows time to detect and treat the disease early.

Clinical and health care requirements (Overhead: *Screening 4*)

- The treatment must be safe and acceptable to people
- Adequate facilities must be available and accessible for diagnosis, treatment and follow-up
- The long-term benefits of early diagnosis must outweigh the long-term detrimental effects of treatment
- The costs and benefits must be known so that a rational decision can be made
- The programme must be sustainable

Technological requirements (Overhead: *Screening 5*)

- The test must be acceptable to the public
- The test should be easy to perform and interpret
- The cost of the test must be considered in relation to the benefits of early diagnosis and treatment
- The test must be reliable and valid. A test is reliable if it provides consistent results, and valid if it correctly categorises people into groups with and without disease, as measured by its sensitivity and specificity. Sensitivity is the probability of a positive test in people with the disease. Specificity is the probability of a negative test in people without the disease.

Overheads: *Screening 6 and 7 show that screening for cervical cancer fits most of these criteria.*

Module 1: **Session 3**

Epidemiology of Cervical Cancer

Objectives

At the end of this session the participants should understand:

- why developing countries have a greater burden of disease
- the public health importance of cervical cancer in South Africa
- the role of human papillomavirus (HPV) in cervical cancer
- how cervical cancer can be prevented.

Time: 45 minutes

Teaching Method

Lecture

Facilitator Resources

- Suggested readings:
 - PATH. *Planning Appropriate Cervical Cancer Prevention Programs*. USA, 2000
 - L Denny, 'Cervical cancer screening'. *Continuing Medical Education (CME)* 17. February 1999: 153-159
 - Department of Health. *National Guidelines for a Cervical Cancer Screening Programme*. 2000
 - N Mqoqi, P Kellet, J Madhoo and F Sitas, *Cancer in South Africa, 1996-1997*. National Cancer Registry of South Africa, National Health Laboratory Service, Johannesburg 2003
- Facilitator notes
- Overheads: *Epidemiology 1-8*

Preparation

- Read the facilitator notes
- Check out the facilitator resources
- Have overheads and overhead projector available

Key Messages

- Cervical cancer is the leading cause of cancer death among women in the developing world
- It is more common in older women
- The primary underlying cause of cervical cancer is HPV
- HPV is easily transmitted (sexually) and is generally asymptomatic
- Currently there is no treatment or vaccine for HPV
- The only way to prevent cervical cancer is to detect abnormalities through screening and to treat them

Training Steps

- Show Overhead: *Epidemiology 1* and ask participants why developing countries have a higher incidence of cervical cancer.
- Show Overhead: *Epidemiology 2* and discuss the difference in risk for the different groups in South Africa.

Emphasise the following points with regards to burden of disease:

- Cervical cancer is an important women's health problem throughout the world, especially in developing countries – 80% of the cases of cervical cancer are reported from developing countries.
- Disparities in morbidity and mortality between developed and developing countries exist because of the differential access to effective cervical screening programmes.
- In South Africa 1 in 29 women will develop cervical cancer in her lifetime.
- Discuss the age distribution of cervical cancer. Use Overhead: *Epidemiology 3* to make the point that cervical cancer is more common in older women.
- Discuss HPV and cervical cancer using Overheads: *Epidemiology 4* and *5*.
- Discuss the Human Immunodeficiency Virus (HIV) and cervical cancer using Overhead: *Epidemiology 6*.
- Use the following questions to lead a discussion on prevention of cervical cancer.
 - *Do you think condoms can prevent cervical cancer?*
 - *Is abstinence a good strategy?*

Use Overhead: *Epidemiology 7* and emphasise that secondary prevention is currently the only effective way in which cervical cancer can be prevented.
- End the session with the key messages on Overhead: *Epidemiology 8*.

Facilitator Notes

Epidemiology is the study of the distribution and determinants of disease. In this session the distribution and determinants of cervical cancer will be discussed.

Burden of disease (Overhead: *Epidemiology 1*)

Cervical cancer continues to be an important women's health problem throughout the world. It accounts for 12% of all cancers in women. Each year approximately half a million new cases and 233,372 deaths from cervical cancer are reported, with 80% of the cases from the developing countries. Among women in developing countries cervical cancer is the leading cause of death from cancer. The age standardised mortality rate (ASMR) for women in developing countries for cervical cancer is 9.8 per 100,000. This is approximately twice the rate of developed countries.

The age standardised incidence rates (ASIR) of cervical cancer for a number of countries are shown in Overhead: *Epidemiology 1*. The huge disparities in morbidity and mortality between developed and developing countries exist largely because over the last few decades developed countries have implemented effective cervical screening programmes. In some countries this has reduced incidence and mortality by up to 80%. In Finland, for example, an organised national cervical screening programme introduced in 1963 has decreased the incidence of cervical cancer to 4 per 100,000 women, one of the lowest in the world. On the other hand, the incidence and mortality rates seen in developing countries are attributed to the lack of effective cervical screening programmes. Studies have shown that only about 5% of women in developing countries have had a Pap smear.

Cervical cancer in South Africa (Overhead: *Epidemiology 2*)

In South Africa cancer of the cervix causes significant cancer related morbidity and mortality. It has been estimated that 5,000 new cases of the disease are reported annually. Cervical cancer accounts for 18.5% of all female cancer reported every year in the country. It is the commonest cancer in South African women. In South Africa 1 in every 29 women will develop cervical cancer in her lifetime. Approximately 1,500 deaths are reported from cervical cancer annually. However, death rates are differentially distributed with the highest mortality occurring in black women and the lowest in white women.

Black South African women are most at risk (1 out of every 23 women) and white and coloured South African women are least at risk (1 out of every 59 women). The difference in risk is related to the difference in socio-economic status, and related to this, the difference in access to regular Pap smears and early treatment. White South Africans have had far greater access to the private sector health services. In the private sector women in general have regular Pap smears, so pre-cancerous lesions are picked up early and treated, with the result that there are few cases of cervical cancer in this group.

Age distribution (Overhead: *Epidemiology 3*)

Overhead: *Epidemiology 3* shows the crude incidence rate of cervical cancer according to age group in South Africa and illustrates that cervical cancer in South Africa, as elsewhere in the world,

occurs more frequently with increasing age. Incidence rates increase markedly after the age of 40. This is an age when women play an important role socially, culturally and economically. Cervical cancer is more common in older women. Although cervical cancer does occur in younger women, the incidence of cervical cancer is much less frequent in women below the age of 30 years.

HPV and cervical cancer (Overheads: *Epidemiology 4 and 5*)

The primary underlying cause of cervical cancer is HPV, a very common sexually transmitted infection that is easily transmitted and generally asymptomatic. The virus can exist throughout the anogenital area of men and women, including areas not covered by condoms. A recent study estimated that in 99% of cervical cancers worldwide, HPV is present. There are approximately 120 types of HPV. Some are low-risk types and cause benign conditions such as genital warts: others are high-risk oncogenic types. Approximately 80% of cervical cancer is associated with 4 types of HPV – 16, 18, 45, 31.

Women generally are infected with HPV in their teens, twenties or thirties. In most women HPV infection is transient and disappears spontaneously, so treatment on the basis of infection is unwarranted. In fact, less than 5% of women infected with HPV eventually develop cervical cancer.

Some HPV infections, however, persist and these may go on to form pre-cancerous lesions which if not treated become cancerous. Co-factors may be important in determining which infections persist and which do not.

Hormonal factors are thought to have an influence in the development of cervical cancer. These include early age at first birth and high parity. There is conflicting evidence on the association between use of hormonal contraceptives and cancer of the cervix. Tobacco use may influence whether a women with dysplasia will go on to develop cervical cancer. Immune suppression, as seen in HIV positive women, is thought to be a co-factor.

Sexual activity (the number of sexual partners, sexual activity of partner etc) is most likely an indicator of HPV exposure, rather than a co-factor.

HIV and cervical cancer (Overhead: *Epidemiology 6*)

HIV positive women have a higher rate of HPV prevalence, and a greater incidence of pre-cancerous lesions. In HIV positive women pre-cancer lesions are more aggressive, progressive, persistent, more likely to occur in younger women and more likely to recur when treated. This is an area where much more research is needed.

Prevention of cervical cancer (Overhead: *Epidemiology 7*)

Primary prevention of HPV is a challenge. The use of condoms offers some protection against HPV infection. HPV can exist throughout most of the anogenital areas including areas not covered by condoms. A more promising approach to primary prevention is the development of vaccines against HPV – however, it will be several years before a vaccine is available for widespread use. Abstinence from sexual intercourse would protect against cervical cancer – but this is not a practical means of prevention.

Early detection and treatment of pre-cancerous lesions is currently *the only effective way* in which cervical cancer can be prevented.

Module 1: Session 4

The Natural History of Cervical Cancer

Objectives

At the end of this session the participants should understand:

- the natural history of cervical cancer
- the Bethesda classification system.

Time: 40 minutes

Teaching Method

Lecture

Facilitator Resources

- Suggested readings:
 - PATH. *Planning Appropriate Cervical Cancer Prevention Programs*. USA, 2000: 7-9
 - L Denny, 'Cervical cancer screening'. *Continuing Medical Education (CME)* 17. February 1999: 153-159
 - Department of Health. *National Guidelines for a Cervical Cancer Screening Programme*. 2000
- Facilitator notes
- Overheads: *Natural History 1-3*

Preparation

- Read the facilitator notes
- Check out the facilitator resources
- Have overheads and overhead projector available

Key Messages

- Cervical cancer has a long latent period
- The majority of low-grade squamous intra-epithelial lesions (LSIL) regress spontaneously
- Screening can take place relatively infrequently and still have a significant impact on morbidity and mortality
- Clients with LSIL should be monitored
- Clients with high-grade squamous intra-epithelial lesions (HSIL) *must be investigated*

Training Steps

- Make sure that participants understand what cancer is.
Explain that cancer is the popular name given to malignant tumours.
- Using Overhead: *Natural History 1*, discuss the Bethesda System.
- Discuss the natural history of cervical cancer using Overhead: *Natural History 2*.
- Emphasise that cervical cancer takes many years to develop. This means that screening can take place relatively infrequently in a woman's lifetime and still have a significant impact on morbidity and mortality.
- End the session with the key messages on Overhead: *Natural History 3*.

Facilitator Notes

Introduction

Normal cells have a characteristic growth pattern and a limited life span. Normally new cells are only produced when required. Sometime, however, cells keep growing when they are not needed. These extra cells form a growth or tumour. Tumours can be benign or malignant. Benign tumours are not cancerous. They remain in localised areas of the body. Cancer is the popular name given to malignant tumours. Cells in malignant tumours grow without control or order. They can spread and invade other organs.

Cervical cancer develops in the lining of the cervix. It usually develops over time. Normal cervical cells may gradually undergo changes to become pre-cancerous and then cancerous. When the cell growth crosses the basement membrane then the cancer is referred to as invasive.

Cervical dysplasia classification systems (Overhead: *Natural History 1*)

A wide range of terminology has been used to describe the cytological and histological changes of dysplasia. In 1988 cytopathologists met in Bethesda to develop a universal and standard system that is now referred to as the Bethesda System. This system has replaced the cervical intra-epithelial neoplasia (CIN) classification system that was used previously.

According to the Bethesda System dysplasia can be:

- Low-grade squamous intra-epithelial lesions (LSIL) = atypia and CIN I
- High-grade squamous intra-epithelial lesions (HSIL) = CIN II and CIN III.

The natural history of cervical cancer (Overhead: *Natural History 2*)

A clear understanding of the natural history of cervical cancer is necessary to plan and implement an effective and rational cervical screening programme.

The normal progression of the disease begins with a normal cervix that becomes infected with a high-risk type HPV. This results in what are called HPV-related changes in the cells. The HPV infection can either be cleared spontaneously, remain stable or lead to low-grade dysplasia.

LSIL, is usually transient and about 60% will return to normal in 2 to 3 years. About 15% of women with *LSIL* will go on to develop *HSIL*. This process takes 2 to 4 years and it is thought that certain co-factors need to be present for progression to occur. *HSIL* (the precursor to cervical cancer) is less common than *LSIL*. The majority of women with *HSIL* develop *invasive cervical cancer* within 10 years.

Cervical cancer is a disease with a long latent period (it develops over a long period of time). It may take as long as 10 to 15 years to progress from a pre-cancerous cervical lesion to invasive carcinoma. This means that screening can take place relatively infrequently in a woman's lifetime and still have a significant impact on morbidity and mortality.

As most (60%) *LSIL* regresses spontaneously these lesions should be monitored rather than treated. *HSIL* on the other hand should be investigated, as a significant proportion progress to invasive cancer.

Module 1: **Session 5**

The National Guidelines for a Cervical Cancer Screening Programme: An explanation of the Guidelines

Objectives

At the end of this session the participants should:

- know the National Guidelines for a Cervical Cancer Screening Programme
- understand the rationale behind the Guidelines.

Time: 30 minutes

Teaching Method

Lecture

Facilitator Resources

- Suggested reading:
 - Department of Health. *National Guidelines for a Cervical Cancer Screening Programme*. 2000
- Facilitator notes
- Overheads: *South African Guidelines 1-4*

Preparation

- Read the facilitator notes
- Check out the facilitator resources
- Obtain copies of the Department of Health. *National Guidelines for a Cervical Cancer Screening Programme, 2000* for participants.
- Have overheads and overhead projector available

Key Messages

- 'Three Pap smears in a lifetime, with a 10-year interval between each smear, starting at age 30 years or older'
- The Guidelines reflect the best attempt to reduce the incidence and mortality of cervical cancer given the current logistical and resource constraints
- It is more effective to screen *more people less frequently* than to screen a small proportion of the population more frequently

Training Steps

- Ask participants if they are aware of the National Guidelines for a Cervical Cancer Screening Programme and what the Guidelines say. Using Overhead: *South African Guidelines 1*, summarise the main features of the Guidelines.
- Show Overhead: *South African Guidelines 2*, and discuss the effect of different screening intervals on the incidence of cervical cancer. Make the point that even screening every 10 years can significantly reduce the amount of cervical cancer by more than half (64%).
- Show Overhead: *South African Guidelines 3*, and highlight the fact that women over the age of 50 are at a greater risk of developing cervical cancer (column 2). Remind participants that HSIL generally develops 10 years before invasive cancer. Therefore, where programme sources are limited, screening should initially focus on women in their late 30's and 40's, as this is the group most at risk of precursor lesions. Also point out how many women need to be screened in each age group to find one case (column 3).
- Discuss the importance of achieving high coverage emphasising that it is more important to achieve a high coverage than to achieve a shorter screening interval.
- Hand out copies of the Department of Health *National Guidelines for a Cervical Cancer Screening Programme, 2000* to participants.
- Go through the key messages using Overhead: Promoting National Guidelines 1.
- End the session with the key messages on Overhead: *South African Guidelines 4*.

Facilitator Notes

Introduction

The National Guidelines for a Cervical Cancer Screening Programme state that: 'All women attending public sector health services should have 3 free Pap smears in her lifetime, with a 10-year interval between each smear, commencing at age 30 years or older.' The ultimate goal is to screen at least 70% of women, nationally, within the target age group within 10 years of initiating the programme. (Overhead: *South African Guidelines 1*)

Rationale for cervical screening programme

How often should women be screened?

Cervical cancer is a disease with a long latent period, which means it develops over a long period of time. It may take as long as 10 to 15 years for the disease to develop. Screening can therefore take place relatively infrequently and still have a significant impact on morbidity and mortality.

Overhead: *South African Guidelines 2* shows the effect of different screening intervals on the incidence/new cases of invasive cervical cancer in women 35-64 years. The data indicate that if screening were to be done every year on women in that age group (assuming 80% coverage), the incidence of cervical cancer would be reduced by 93%. To do this each woman would have to have 30 smears in her lifetime. The same reduction in incidence can be achieved by screening every 2 years. Screening once every 2 years is just as effective as screening annually! Each woman however would need to have 15 Pap smears in her lifetime as compared to 30 Pap smears required with annual screening.

The data also show that if screening were to be done every 3 years, the reduction in incidence of cervical cancer (91%) would be almost as great as that achieved by screening every year. The implication is that it is unnecessary to screen women annually, and that it is almost just as effective to screen women every 3 years.

Even a screening interval of 10 years (i.e. 3 tests per woman in her lifetime) can reduce the amount of cervical cancer in the population by more than half (64%). A 64% reduction in incidence would have a major public health impact of reducing mortality due to cervical cancer. It would save thousands of lives.

When should we start screening for cervical cancer?

Overhead: *South African Guidelines 3* illustrates that cervical cancer becomes more common with increasing age. Women over the age of 50 are at a greater risk of cervical cancer than those under the age of 50 years. High-grade lesions are generally detectable up to 10 years before cancer develops. *Therefore, where programme sources are limited, screening should initially focus on women in their late 30's and 40's, as this is the group most at risk of precursor lesions.*

Overhead: *South African Guidelines 3* also illustrates the number of women that need to be screened to detect one case of cervical cancer. It can be seen that in younger women (women under the age of 30 years) many more tests need to be done to pick up cervical cancer as compared to older women. In fact, we would need to screen 18,875 women between the ages of 25 to 29 to identify one case, compared with only 5,679 women aged 30-34.

Remember: Not all pre-cancerous cervical abnormalities will progress to invasive carcinoma; some of the abnormalities regress to normal without treatment. The probability of pre-cancerous lesions regressing to normal is much higher in younger women than in their older counterparts. Thus, it is thought to be unreasonable to perform Pap smears on younger women. Given that cervical cancer has such a long latent period, the majority of the lesions that do not regress to normal can still be detected through relatively infrequent cervical screening.

Coverage

Current evidence shows that the most successful programmes, i.e. those that have the greatest success in reducing disease, are those with the greatest population coverage. In South Africa, there has always been a small proportion of women (usually younger women who are less at risk) who have had annual Pap smears, while the majority of the population has had none at all, resulting in persistently high rates of cervical cancer in the country. The policy attempts to redress this imbalance by urging health authorities to reduce the number and frequency of Pap smears per women and use available resources to rather increase population *coverage*.

Achieving high coverage should be a primary goal in a screening programme, and should be given even more importance than trying to achieve a short screening interval. It is more effective to screen more people less frequently than to screen a small proportion of the population more frequently. Screening women every 10 years is not ideal, but if that means we are able to screen more women, then it is the best way to ensure we reduce cervical cancer in the country.

Module 1: **Session 6**

Promoting the National Guidelines for a Cervical Cancer Screening Programme

Objective

At the end of this session the participants should be skilled at promoting the new National Guidelines for a Cervical Cancer Screening Programme.

Time: 30 minutes

Teaching Method

Small group activity

Facilitator Resources

- Suggested reading:
 - Department of Health. *National Guidelines for a Cervical Cancer Screening Programme*. 2000
- Handouts 1-3 :
 - Handout 1 : Exercise: 'What do I say?'
 - Handout 2 : What do I say': Sample answers
 - Handout 3: Summary of the *National Guidelines for a Cervical Cancer Screening Programme*
- Overhead:
 - *Promoting the National Guidelines 1*

Preparation

- Read the suggested reading
- Check out the facilitator resources
- Check there are an adequate number of handouts

Key Messages

- The National Guidelines are based on the natural history of cervical cancer and on epidemiological evidence.
- By screening women over the age of 30 every 10 years, the screening programme aims to achieve as much reduction in cervical cancer disease and death as possible within the resources available in the country.

Training Steps

- Handout the exercise sheet labelled 'What do I say?'
- Ask the group to work in pairs. Participants should read the case study together and then discuss how they think a health care provider should respond.
- Allow about 10 minutes for participants to work through the exercise. You should then lead a discussion on the appropriate response for each scenario.
- Go through the key messages using overhead: Promoting the National Guidelines 1.
- At the end of the session, hand out the 'Summary of the National Guidelines for a Cervical Cancer Screening Programme'. Encourage participants to have the handout easily accessible at their workstations.



Handout 1:

Exercise:

What Do I Say?

Scenario 1

A colleague at work says: *'I saw a 20-year old lady with cervical cancer just last month. If we only start doing Pap smears when a woman is 30, just imagine how many women we are going to miss with cervical cancer! This new policy just does not make sense.'*

Health care provider response:

Scenario 2

A friend says: *'My gynaecologist does a Pap smear on me every 2 years. Why should our patients have to wait for 10 years? That is far too long to wait. I am sure these women are going to get cervical cancer while they are waiting.'*

Health care provider response:

Scenario 3

A 22-year-old client says: *'Sister, I am on family planning. I am well but I know I must have regular Paps and so I've come for one today.'*

Health care provider response:



Handout 2:

Sample Answers

What Do I Say?

Scenario 1

Colleague at work: *'I saw a 20-year old lady with cervical cancer just last month. If we only start doing Pap smears when a woman is 30, just imagine how many women we are going to miss with cervical cancer! This new policy just does not make sense.'*

Health care provider response: Public policy is meant to ensure that we get the most benefit using the resources we have. Cancer of the cervix is most common in women over the age of 50 years. High-grade lesions (the lesions that must be treated to prevent cancer) usually start to develop about 10 years before a woman develops cervical cancer. Therefore the policy is targeting older women. Yes, we will miss a few younger women – but we need to focus our resources to detect the many more cases of cervical cancer or pre-cancerous lesions among the older women. So if we start to screen at age 30 we will pick up the *majority* of women with pre-cancerous lesions. If we start screening earlier, we will have to screen millions of women to find just a few cases.'

Scenario 2

A friend: *'My gynaecologist does a Pap smear on me every 2 years. Why should our patients have to wait for 10 years? That is far too long to wait. I am sure that these women are going to get cervical cancer while they are waiting.'*

Health care provider response: 'Cervical cancer takes a long time to develop. In fact it takes 10 to 15 years to go from having a normal cervix to having cervical cancer, so we are able to wait longer between Paps than we used to think. This means we can screen for cervical cancer relatively infrequently and still reduce the amount of cervical cancer in the population by more than half! If we could screen women more often, say every 2 to 3 years we would reduce cervical cancer by more than 80% – but this also means that we need to do many, many more Pap smears on each woman. Right now we do not have the resources to do this in the public sector. As our resources improve we will be able to shorten the interval between Pap smears.'

The 3 Pap smears offered in the public services to women are free. If a woman wants a Pap smear in between this time she will have to pay for the in between Pap smears.'

Remember: Even if we do a Pap smear every 10 years on women older than 30 years we can still reduce the amount of cervical cancer in the population by more than half!

Scenario 3

22-year-old client: *'Sister, I am on family planning. I am well, but I know I must have regular Paps and so I've come for one today.'*

Health care provider response: 'Cancer of the cervix is much more common in older women. It is not common in young women such as you. So we are now doing Pap smears on women over the age of 30. Remember you can come and see us if you have any problems, otherwise come for your free Pap test soon after your 30th birthday.'



Handout 3:

A Summary of the National Guidelines for a Cervical Cancer Screening Programme

'Three free Pap smears in a lifetime, with a 10-year interval between each smear, starting at the age of 30 years or older'

Why Start Screening at Age 30?

- The policy has been developed so we can use our limited resources to get the maximum benefit for the whole population.
- Cervical cancer is most common among women over the age of 50 years. High-grade pre-cancerous lesions (not yet cancer) usually start to develop 10 years before a woman develops cervical cancer. So if we start to screen at age 30 we will pick up the majority of women with pre-cancerous lesions. These lesions can be treated and the women will not go on to develop cervical cancer.
- As cancer of the cervix is not common in young women we would have to screen many, many young women before we find one with cervical cancer. It is better to spend our scarce resources screening those women with a much higher chance of getting cervical cancer, i.e. the older women.
- In young women (less than 30 years old) pre-cancerous lesions are often low-grade and get better without any treatment. If the lesions do not regress spontaneously, it will still take many years before cervical cancer develops. So we will still, in most cases, be able to detect pre-cancer in these women (by a screening Pap smear) before they go on to get cervical cancer.

Why Screen Every 10 Years?

- The policy has been developed so that we can use our limited resources to get the maximum benefit for the whole population.
- Cervical cancer takes a long time to develop. In fact it takes 10 to 15 years to go from having a normal cervix to having cervical cancer. This means that we can screen for cervical cancer relatively infrequently and still reduce the amount of cervical cancer in the population by more than half!
- As our resources improve we will be able to screen women attending the public health services in South Africa more frequently. The best would be to screen women every 3 years after they become sexually active.
- Current evidence shows that the most successful programmes, i.e. those that have the greatest success in reducing disease, are those with the greatest population coverage. In South Africa, there has always been a small proportion of women (usually younger women who are less at risk) who have had annual Pap smears, while the majority of the population has had none at all, resulting in persistently high rates of cervical cancer in the country. The policy attempts to redress this imbalance by urging health authorities to reduce the number and frequency of Pap smears per women and use available resources to rather increase population coverage.

Module 1: Objectives

- Discuss the criteria for a screening programme
- Describe the epidemiology and natural history of cervical cancer
- Present and explain the National Guidelines for a Cervical Cancer Screening Programme
- Suggest ways for health care workers to promote the Guidelines

Screening

Screening is the process by which asymptomatic, but potential diseases or defects are identified by tests that can be applied on a large scale.

Source: R Beaglehole, R Bonita and T Kjellstrom, Basic Epidemiology. WHO, Geneva 1993: 93-95

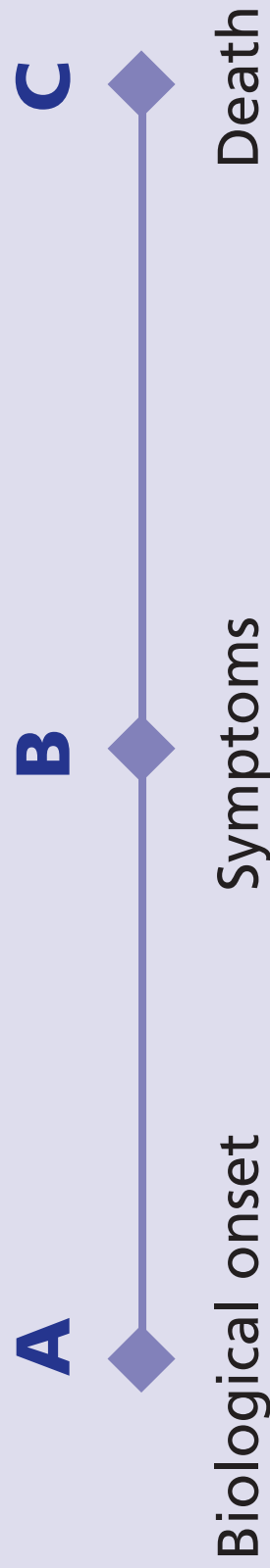
SCREENING 1

Criteria for a Screening Programme

Disease Characteristics

- Common
- Serious
- Concern about the disease
- Natural history understood
- Long latent period

Screening: latent period



Criteria for a Screening Programme

Clinical and Health Care Requirements

- Safe and acceptable treatment
- Facilities for diagnoses and treatment
- Benefits of treatment outweigh risks
- Costs and benefits are known
- Sustainable

Criteria for a Screening Programme

Technological Requirements

- Acceptable test
- Simple test
- Cheap enough
- Reliable and valid test

Screening

Is screening for cervical cancer in SA a good idea?

Criteria?	Cervical cancer?
Common?	Yes, women have a 1 in 29 chance of developing cancer in their lifetime.
Serious?	Yes, can lead to death.
Is there concern about this?	Yes, health workers see this disease too frequently and it is a burden on the system.
Long latent period?	Yes, 10-15 years.
Acceptable treatment?	Yes, pre-cancer is easily treated and prevented. Treatment for cervical cancer is more difficult.
Acceptable cost?	Screening is not expensive. It is much cheaper than dealing with women who get cancer.

Screening

Is screening for cervical cancer in SA a good idea?

Criteria?	Cervical cancer?
Benefit?	Yes, screening saves lives.
Facilities?	Yes, most districts have facilities that could screen women.
Acceptable test?	Yes, women find it acceptable.
Simple test?	Yes.
Cheap test?	Yes.
Good enough test?	Pap smears pick up most disease, and have few false positives.
Sustainable?	Yes, it is simple, and able to be done by nurses in many locations.

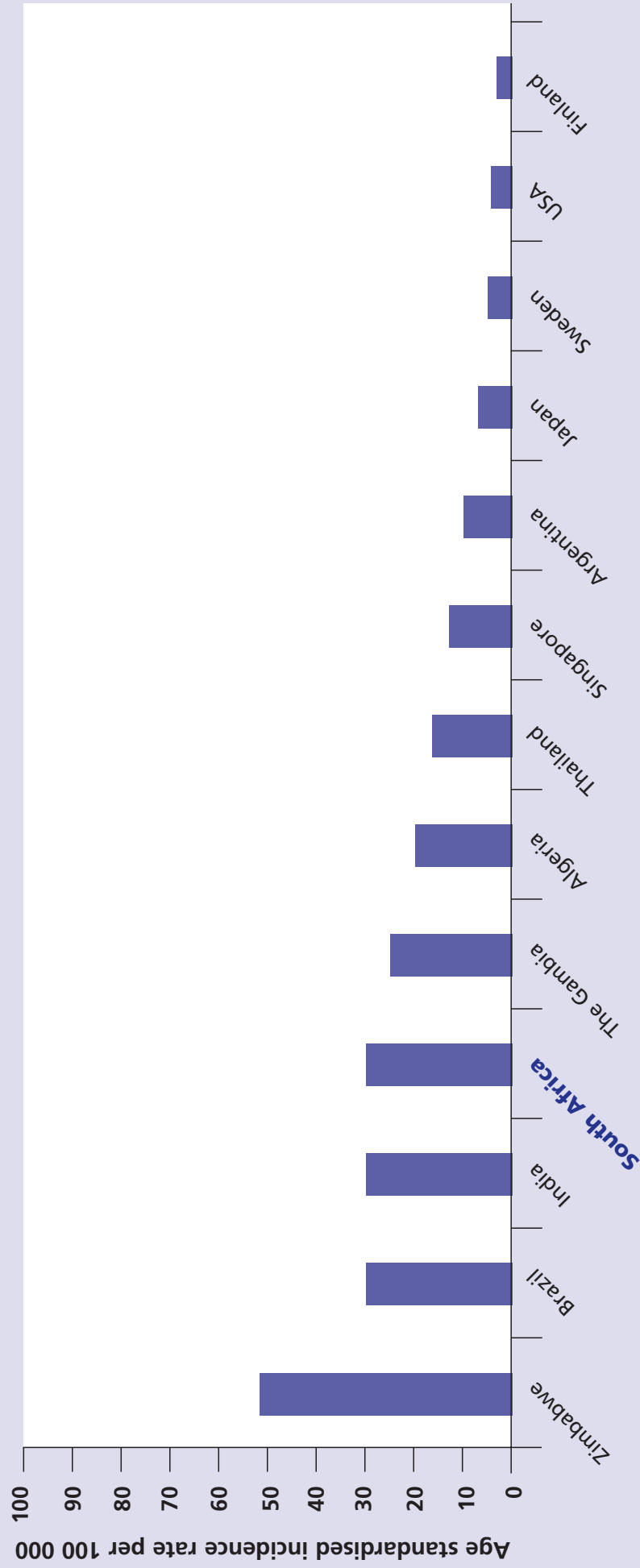
Screening

Key Messages

- Screening is the process by which asymptomatic, but potential diseases or defects are identified by tests that can be applied on a large scale
- Factors to assess before deciding whether to institute a screening programme:
 - disease characteristics
 - clinical and health care requirements
 - technological requirements

Incidence of Cervical Cancer

World-wide



Source: South Africa - National Cancer Registry 1993-1995. Other countries Globocan 2000

Cervical Cancer in South Africa, 1997

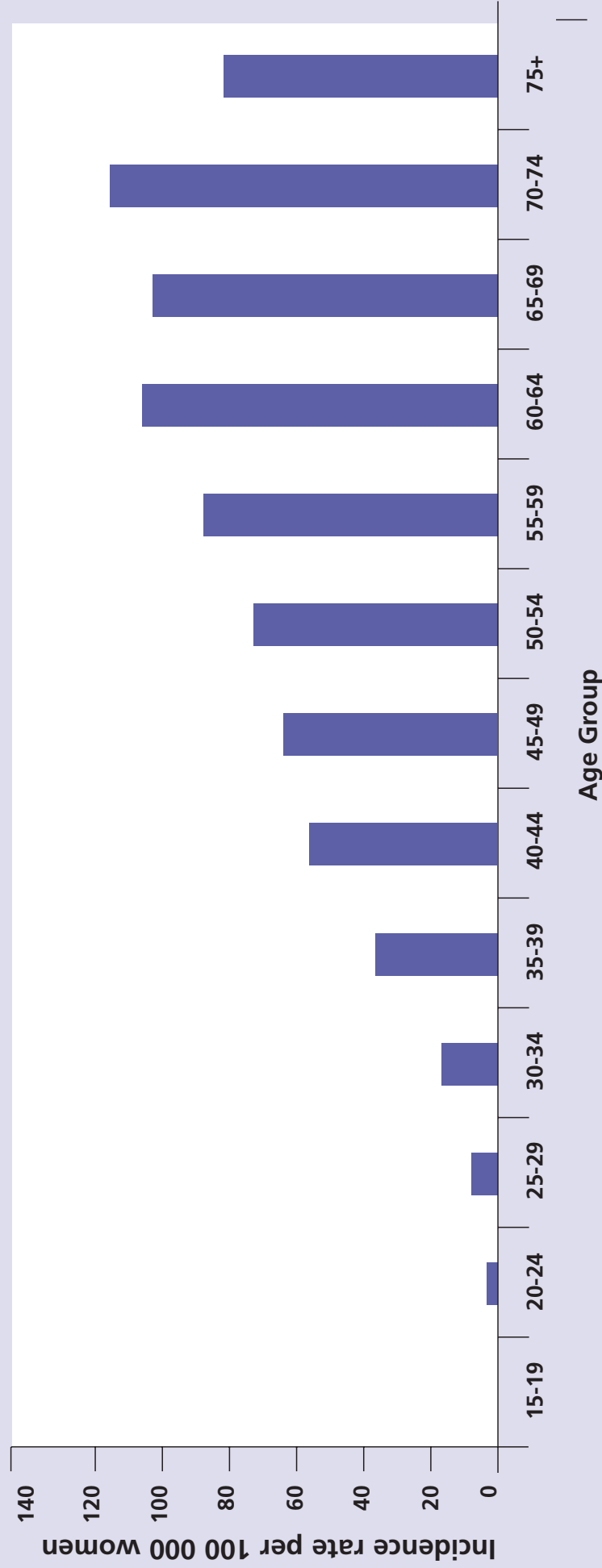
Population group	ASIR	Lifetime risk
Asian	19	1 in 47
Black	38	1 in 23
Coloured/White	16	1 in 59
All SA women	31	1 in 29

Source: Mqoqi et al. Cancer in SA, 1996 - 1997. National Cancer Registry of SA, National Health Laboratory Service, Johannesburg 2003

ASIR = Age standardised incidence rate = number of cases per 100,000 women

Age-specific Incidence Rate of Cervical Cancer

South Africa: 1997



Source: Mqooqi et al. Cancer in SA, 1996 - 1997. National Cancer Registry of SA, National Health Laboratory Service, Johannesburg 2003

Cervical Cancer and HPV Infection

- Common STI, easily transmitted
- 99% of cervical cancers associated with HPV
- Many subtypes of HPV
- Some HPV subtypes are benign and some are oncogenic

Cervical Cancer and HPV Infection

- Currently no treatment for HPV
- In most women HPV is a transient infection
- Some HPV infections persist and go on to become pre-cancerous lesions
- Less than 5% of women infected with HPV get cervical cancer

HIV and Cervical Cancer

HIV positive women

- Greater prevalence of HPV infections
- Greater incidence of pre-cancerous lesions
- Pre-cancerous lesions are more:
 - progressive
 - aggressive
 - persistent
 - likely to return
 - likely to affect younger women

Is Prevention of Cervical Cancer Possible?

Primary prevention:

- vaccines against HPV: work in progress
- condoms: not totally effective
- abstinence: not possible for many women

Secondary prevention:

- early detection and treatment of pre-cancerous lesions

Source: EngenderHealth

EPIDEMIOLOGY 7

Epidemiology of Cervical Cancer

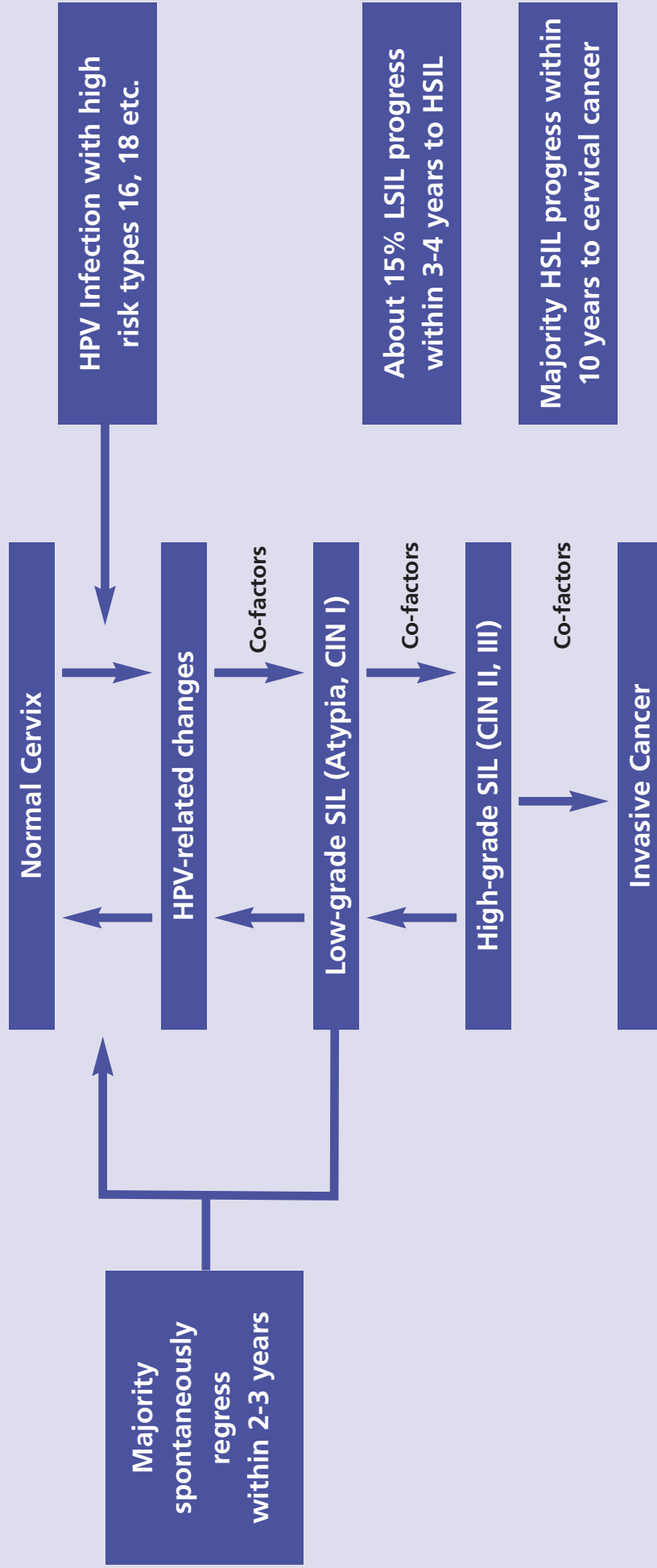
Key Messages

- Leading cause of cancer death among women in the developing world
- More common in older women
- Primary underlying cause is HPV
- Currently no treatment or vaccine for HPV
- Prevention – only by early detection and treatment of abnormalities

Cervical Dysplasia Classification Systems

- **Low-grade squamous intra-epithelial lesions (LSIL)**
Includes lesions previously called:
 - atypia
 - cervical intra-epithelial lesions grade I (CIN I)
- **High-grade squamous intra-epithelial lesions (HSIL)**
Includes lesions previously called:
 - cervical intra-epithelial lesions grade II (CIN II)
 - cervical intra-epithelial lesions grade III (CIN III)

Natural History of Cervical Cancer



Source: *Planning Appropriate Technology in Health*. USA, 1997

NATURAL HISTORY 2

Natural History of Cervical Cancer

Key Messages

- Long latent period
- The majority of LSIL regress spontaneously
- Relatively infrequent screening can have a significant impact on morbidity and mortality
- Clients with LSIL should be monitored
- Clients with HSIL must be treated

The National Guidelines for a Cervical Cancer Screening Programme

- 3 free smears in a woman's lifetime, with a 10-year interval between each smear, starting at age 30 years or older
- Goal: to screen at least 70% of women in the target age group within 10 years

Why 10 Years Apart?

Screening frequency and reduction in cervical cancer

Frequency of screening*	% Reduction in incidence/new cases	No. of Pap smears per woman per lifetime
1 year	93.3%	30
2 years	93.3%	15
3 years	91.4%	10
5 years	83.9%	6
10 years	64.2%	3

• Screening all women aged 35 to 64 who have had at least one previous negative screen.
Source: WHO. Control of cancer of the cervix uteri. *Bulletin of the World Health Organization*, 64:607-618, 1986.

Why Start at Age 30?

Cervical cancer age-specific incidence rate, SA 1997

Age Group	Incidence per 100 000 women	Number of women to be screened to detect 1 case of cervical cancer
15-19	0.1	709,189
20-24	1.6	63,199
25-29	5.3	18,875
30-34	17.6	5,679
35-39	34.8	2,874
40-44	55.1	1,815
45-49	66.6	1,502
50-54	73.4	1,363
55-59	86.1	1,161
60-64	107.9	927
65-69	104.0	961
70-74	114.6	873
75+	85.1	1,175

Source: Mqoqi et al. Cancer in SA, 1996 - 1997. National Cancer Registry of SA, National Health Laboratory Service, Johannesburg 2003

The National Guidelines for a Cervical Cancer Screening Programme

Key Messages

- Components:
 - 3 free Pap smears in a lifetime
 - 10 year interval between each smear
 - starting at the age of 30 years or older
- Goal: reduce incidence and mortality (within logistical and resource constraints)
- Screening more women less frequently will reduce the death rates more than screening a few women very frequently

Promoting the National Guidelines

Key Messages

The National Guidelines:

- are based on the natural history of cervical cancer and on epidemiological evidence
- aim to achieve as much reduction in cervical cancer disease and death as possible given the resources available

Module 2

Health Systems

Module 2 consists of 6 sessions

- Session 1: Introduction to the module
- Session 2: Components of a cervical screening programme
- Session 3: Setting targets
- Session 4: Record-keeping and tracking systems
- Session 5: Reducing missed opportunities – recruiting women attending health care facilities
- Session 6: Client-provider interactions

Time Required: 6 hours

Number of Participants: maximum 20

Overheads can be found at the end of the module

Module 2: **Session 1**

Introduction to the Module

Objectives

The objectives of this module are to:

- create a supportive learning environment
- introduce the agenda, objectives and discuss any housekeeping issues.

Time: 20 minutes

Facilitator Resources

Overhead: *Module 2: Introduction*

Preparation

Have overhead and overhead projector available

Training Steps

- Ask participants to fill in and put on their name tags/labels.
- Facilitator/s introduce her/himself/themselves.
- Get participants to introduce themselves to one another – see *Conducting Workshop Introductory Sessions* on page 19.
- Go through the workshop objectives, using the Overhead: *Module 2: Introduction*.
- Present the agenda to the participants.
- Discuss any housekeeping issues.

Module 2: **Session 2**

Components of a Cervical Screening Programme

Objectives

At the end of this session the participants will:

- understand that a cervical screening programme is more than just taking Pap smears
- be able to discuss the components of a comprehensive cervical screening programme.

Time: 45 minutes

Teaching Method

Group activity: Components of a cervical screening programme

Facilitator Resources

- Suggested readings:
 - AB Miller, *Cervical cancer screening programmes – managerial guidelines*. WHO, Geneva 1992
 - Department of Health, *National Guidelines for a Cervical Cancer Screening Programme*. 2000
 - CHIP, *Implementing Cervical Screening in South Africa. Volume I: A Guide for Programme Managers*. Cervical Health Implementation Project, South Africa. University of Cape Town, University of the Witwatersrand, EngenderHealth, 2004
 - N Smith, J Moodley and M Hoffman, 'Challenges to cervical screening in the Western Cape province'. *South African Medical Journal* 2003; 93: 32-35
- Facilitator notes
- Overhead: *Components 1-2*

Preparation

- Read the facilitator notes
- Take a look at the facilitator resources
- Have overheads and overhead projector available
- Prepare flip chart for the exercise
- Make sure you have sufficient Post-it notes for participants

Key Messages

Many aspects of the health system need to function together to create a good quality service that ensures women with abnormal smears get treated. The key components are:

- screening services
- cytology services
- client management at primary care level
- colposcopy and treatment services
- client recruitment
- monitoring and evaluation
- referral and feedback systems
- planning and budgeting.

Training Steps

- Put up the flip chart on which the following exercise has been written.
'If we want to reduce the number of cases of cervical cancer, then we must set up well functioning cervical screening services. What are the various things that need to be in place for an effective cervical screening programme?'
- Ask participants to work through the exercise in pairs. Hand out 12 Post-it notes to each pair. Ask participants to write down one component of a cervical screening programme per Post-it note and hand them in to the facilitator.
- Allow participants 10 minutes to work through the exercise. Collect Post-it notes from participants. Go through each response and group under the following headings:
 - Screening services (equipment, staff, tracking system etc)
 - Cytology services
 - Client management at primary care level
 - Colposcopy and treatment services
 - Client recruitment
 - Monitoring and evaluation
 - Referral and feedback systems
 - Planning and budgeting
- Using Overhead: *Components 1* go through each of the components.
- Using Overhead: *Components 2* sum up the session

Emphasise the fact that a cervical screening service is not just about taking Pap smears. The ultimate goal of a screening service is to prevent morbidity and mortality from cervical cancer. For this to happen, various mechanisms need to be put in place, each playing an important and complimentary role in the screening service.

Facilitator Notes

A cervical screening programme entails more than just taking Pap smears. Experience has shown that for cytology-based screening and treatment services to function effectively, the following components of the screening programme should be in place, functioning and properly co-ordinated:

- Screening services – facilities must have:
 - sufficient quantities of the appropriate equipment
 - adequate numbers of trained staff available to perform Pap smears
 - systems in place to transport Pap smears to the cytology laboratory.
- Cytology services with:
 - reasonable turn-around times
 - adequate number of trained staff
 - uniform cytology reporting terminology and recommendations for client management
 - appropriate quality assurance mechanisms
 - adequate number of trained staff.
- Client management at primary care level includes:
 - implementing standardised guidelines for the management of clients with abnormal Pap smears
 - establishing mechanisms for informing clients of results and for tracking clients who need re-screening or referral for further management.
- Colposcopy and treatment services that:
 - are accessible to clients
 - provide feedback to referring clinics.
- Client recruitment strategies that:
 - inform and educate men and women in communities about cervical cancer and screening
 - actively recruit women in health facilities.
- Monitoring and evaluation includes mechanisms to:
 - collect data e.g. Pap register
 - analyse key cervical screening data and then use these data to assess how the screening programme is performing.
- Referral and feedback systems to ensure that:
 - clients with abnormalities are referred for appropriate treatment
 - clinics are informed of the outcome of their client referrals.
- Planning and budgeting - the timing of programme interventions is important. Many of the programme components above can be implemented concurrently, but as a rule of thumb it is better to start with planning and budgeting, and then ensure that the health systems components are in place before recruiting clients.

Module 2: **Session 3**

Setting Targets

Objectives

At the end of this session the participants should be able to:

- understand the rationale for and use of a tool to set targets and assist with calculating resource needs
- understand the importance of setting goals/targets for a cervical cancer screening programme
- know how to use population data to plan and determine resource requirements
- know how to use goals/targets to plan for and monitor services.

Time: 2 hours

Teaching Methods

- Lecture
- Group exercise: Using the facility planning tool
- Discussion: Setting goals and targets

Facilitator Resources

- Facilitator notes
- Handouts 1-3:
 - Handout 1: facility planning tool
 - Handout 2: sample answer to exercise on using the facility planning tool
 - Handout 3: cervical screening equipment and supplies audit form.
- Overheads: *Setting Targets 1-3*

Preparation

- Read the facilitator notes
- Check out the facilitator resources
- Have overheads and overhead projector available
- Ask participants to bring population data for their clinic catchment area and a calculator
- Check that there are an adequate number of handouts for the participants

Key Messages

- Population data are essential for planning, e.g. clinic catchment population data are useful for planning services at facility level
- Indicators are needed to monitor progress towards achieving goals
- Monthly targets are useful for frequent monitoring

Training Steps

- Use the Overhead: *Setting Targets 1* to discuss the aim and objectives of the session.
- Explain to participants that you will first discuss setting a monthly target for their clinic. Handout the facility planning tool (Handout 1) and briefly explain its rationale, from step A to step E.
- Ask participants to complete Handout 1 up to step E using their clinic population data or if participants have not been able to access this data, ask them to assume that their clinic has a catchment population of 103,000.
- Go through the facility planning tool (with calculations already done) to demonstrate how cervical cancer screening targets are set for a clinic catchment population (Handout 2).
- Lead a brief discussion with participants, exploring the concepts of goals and targets. You may lead by seeking their responses to the following prompter questions:
 - *Why are goals/targets important?*
 - *What is the relevance of a coverage goal/target for a screening programme?*
 - *How will you know you are achieving the goal/target?* Highlight that:
 - goals/targets help to determine how much (how many new Pap smears) should be done and to monitor progress (how well the programme is doing)
 - every year clinic managers and staff need to know how many new Pap smears in women 30 years or more are being done and compare this to how many they should be doing (the target) in order to achieve the coverage goal.
- Present Overhead: *Setting Targets 2*. Explain that this overhead shows examples from 3 clinics somewhere in SA. It compares the **expected** (screening target) number of smears each clinic should perform per month (in column 2) against the **actual** number of Pap smears these clinics performed per month during a 1-year period (in column 3).

Give participants 1 or 2 minutes to examine the results and assess how many of the clinics are already performing the expected number of Pap smears.

The examples show that, like many clinics in South Africa, all 3 clinics are doing only a small proportion of the number of Pap smears they should be doing. It is important because it shows staff and managers what they are currently doing, what they should be doing and how much more needs to be done to achieve the coverage goal. This comparison of observed and expected number of Pap smears done is a good way for clinic staff and management to monitor progress towards achieving their coverage goal.
- Ask participants to complete steps F to H of the facility planning tool. Give participants the equipment and supplies audit form (Handout 3). Go through steps F to H of the facility planning tool and through the equipment and supplies audit form, explaining to participants that this will assist to determine resource needs. Participants should be encouraged to complete the equipment and supplies audit form when they return to their clinics. This should be done together with the facility/clinic managers.
- End the session with the key messages on Overhead: *Setting Targets 3*.

Facilitator Notes

Understanding the facility planning tool

Step A

As you explain step A, highlight that the target for cervical cancer screening for the district are those people that use public sector health services because the district health budget caters for this segment of the population only. Nationally, 80% of the population utilise public sector facilities, and this is the figure used in the facility planning tool, but applied to clinic catchment population level.

Step B

Where the number of females in the catchment population is known, this number should be used. In many cases, the actual number of females is unknown, so the national ratio can be applied (51% of the population).

Step C

Step C is the number of female public sector users in the clinic catchment population who are 30 years of age or more (this is the target group for cervical cancer screening). If the number of women over 30 in an area is not known, the national average can be applied (38% of all females).

N.B.: Remind participants that: the National Department of Health's Guidelines for a National Cervical Cancer Screening Programme states that the cervical cancer screening services in the public sector should target women aged 30 years old or older, providing each with 3 free Pap smears, 10 years apart, in her lifetime.

Step D

Step D will enable a clinic to develop a coverage goal for its catchment area. Explain that the national goal is merely a guideline, and that the goal of 70% coverage in 10 years is the minimum they should do.

N.B.: These calculations are based on the understanding that implementation of the cervical cancer screening programme will take 10 years. By the end of the 10-year period, the clinic should have provided 70% of women in the target age group with one screening Pap smear each. Thus if the programme starts in 2003, by 2013 each clinic in the district should have successfully implemented the programme and provided at least 70% of women in the target group with one Pap smear each.

Step E

Step E enables a clinic to calculate its monthly target. A monthly target is useful to clinic managers and staff because monitoring can happen more frequently without having to wait until the end of the year. Also clinics are able to compare on a monthly basis the actual number of smears done against the number they should be doing.

Step F

Some cytology results will recommend a repeat smear. In calculating resource needs, the number of new and repeat smears that will be done needs to be taken into account. If the clinic does not know how many of its Pap smears are inadequate and need repeating, assume 15% repeats.

Step G

This includes new and repeat smears.

Step H

This is the workload per trained nurse.

The equipment and supplies audit form

Facility managers need to ensure that facilities have sufficient quantities of the right equipment for screening and infection prevention. The equipment and supplies audit form allows managers to compare the quantities of equipment available against the quantities required to cater for the anticipated workload. Where there is a shortfall, the manager needs to take action, such as requesting more stocks from higher authorities, or where applicable, purchasing additional equipment. However, while awaiting further stocks, screening services should be provided using the existing equipment.

These staffing workloads and equipment needs are, however, based on an assumption that the health facilities make an effort to recruit more women for screening to meet the target number of Pap smears. Though facility managers are encouraged to aim to achieve the monthly target as soon as possible, they also need to be realistic about what is achievable. If it is unlikely that the target number of smears will be achievable soon, then managers need to estimate how many Pap smears they can realistically do and work out whether the current staff complement and equipment are sufficient to meet this need before requesting for more staff or ordering more equipment. The idea is to avoid requesting more staff or ordering more equipment than are actually required.



Handout 1:

Facility Planning Tool

Clinic nameProvince

Catchment population for clinicDate

Determine the following for your clinic catchment area

A. Total population (public sector users)	<input type="text"/>	A = 80% of catchment population (Assume 80% of people in catchment area use public sector facilities)
--	----------------------	---



B. Number of females	<input type="text"/>	B = 51% of A (Assume 51% of catchment population are female)
----------------------	----------------------	--



C. Number of females 30 years or older	<input type="text"/>	C = 38% of B (This is the target group for screening)
---	----------------------	---



D. Number of new Pap smears the clinic must do per year to achieve 70% coverage of target group in 10 years	<input type="text"/>	D = 70% of C, then divided by 10 (70% coverage is the national goal)
---	----------------------	--



E. Number of new Pap smears the clinic will need to do per month	<input type="text"/>	E = D divided by 12 (It is more practical to work with monthly targets. E is the monthly target)
--	----------------------	--



F. Number of repeat Pap smears the clinic is estimated to do per month	<input type="text"/>	F = 15% of E (Assume 15% of Pap smears done per month will need to be repeated)
--	----------------------	---



G. Total number of Pap smears per month (new and repeat)	<input type="text"/>	G = E + F (This is the total number of Pap smears a clinic should do per month)
--	----------------------	---



H. Number of Pap smears each trained nurse will need to do per month	H1. Number of trained nurses:	H1 = number of nurses trained in taking Pap smears
	H2. Number of smears per nurse:	H2 = G divided by H1 (This is the workload per trained nurse)



Conduct an audit to determine the quantity of equipment and supplies available to perform the number of smears in G above (use the equipment and supplies audit form provided).

Explanations for Using the Facility Planning Tool

Clinic Catchment Population

Get clinic catchment population data from your district office or local Statistics South Africa office.

Step A. Total population that use the public sector

Not everyone in your catchment area uses public sector facilities. Your clinic will cater only for those that use the public sector. Assume 80% of your catchment population use public sector facilities (on average, 80% of the national population use the public sector).

Step B. Number of females

If you do not have the statistics for the number of women in your catchment area, assume 51% of your catchment population are female (51% of national population are female).

Step C. Number of females 30 years or older

The target group for Pap smears is women 30 years old or older. If the number of women over the age of 30 years old is unknown, assume that approximately 38% of the females in your catchment area are in this age group (38% of the national female population is 30 years or older).

Step D. Number of new Pap smears the clinic must do per year to achieve 70% coverage of target group in 10 years

The national goal for cervical screening programme is: 70% coverage of the target group in 10 years. This means 70% of the females 30 years or older (70% of C) must be screened in the first 10 years of setting up the cervical screening programme. However, this number must be divided by 10 to work out the annual target (assume the number of women who need to be screened is spread equally per year over the 10 year period).

Step E. Number of new Pap smears the clinic will need to do per month

At a clinic level, it is more practical to work with a monthly than an annual target. So, to find the number of Pap smears the clinic should do per month to achieve 70% coverage, divide the annual target (number in D) by 12.

Step F. Number of repeat Pap smears the clinic is estimated to do per month

Every month, a proportion of new Pap smears done will be repeated due to inadequate specimens, lost specimens, etc. If this proportion is unknown, assume 15% of Pap smears done per month will need to be repeated.

Step G. Total number of Pap smears per month (new and repeat)

The number of repeat smears must be added to the number of new smears (F + E) to determine the total number of smears the clinic must do per month to achieve coverage goal and cater for repeats. This number is also used to determine the staffing workloads and equipment needs for the clinic.

Step H. Number of Pap smears each trained nurse will need to do per month

This is the Pap smear workload per nurse. To work this out, two steps are involved:

H1: Count *all* nurses in your clinic who are trained in taking Pap smears (this includes formal courses, in service training, refresher courses, etc – any training that equips a nurse with skills for taking Pap smears).

H2: Work out how many Pap smears each trained nurse should perform per month by dividing the total number of Pap smears the clinic should do per month by the number of trained nurses.



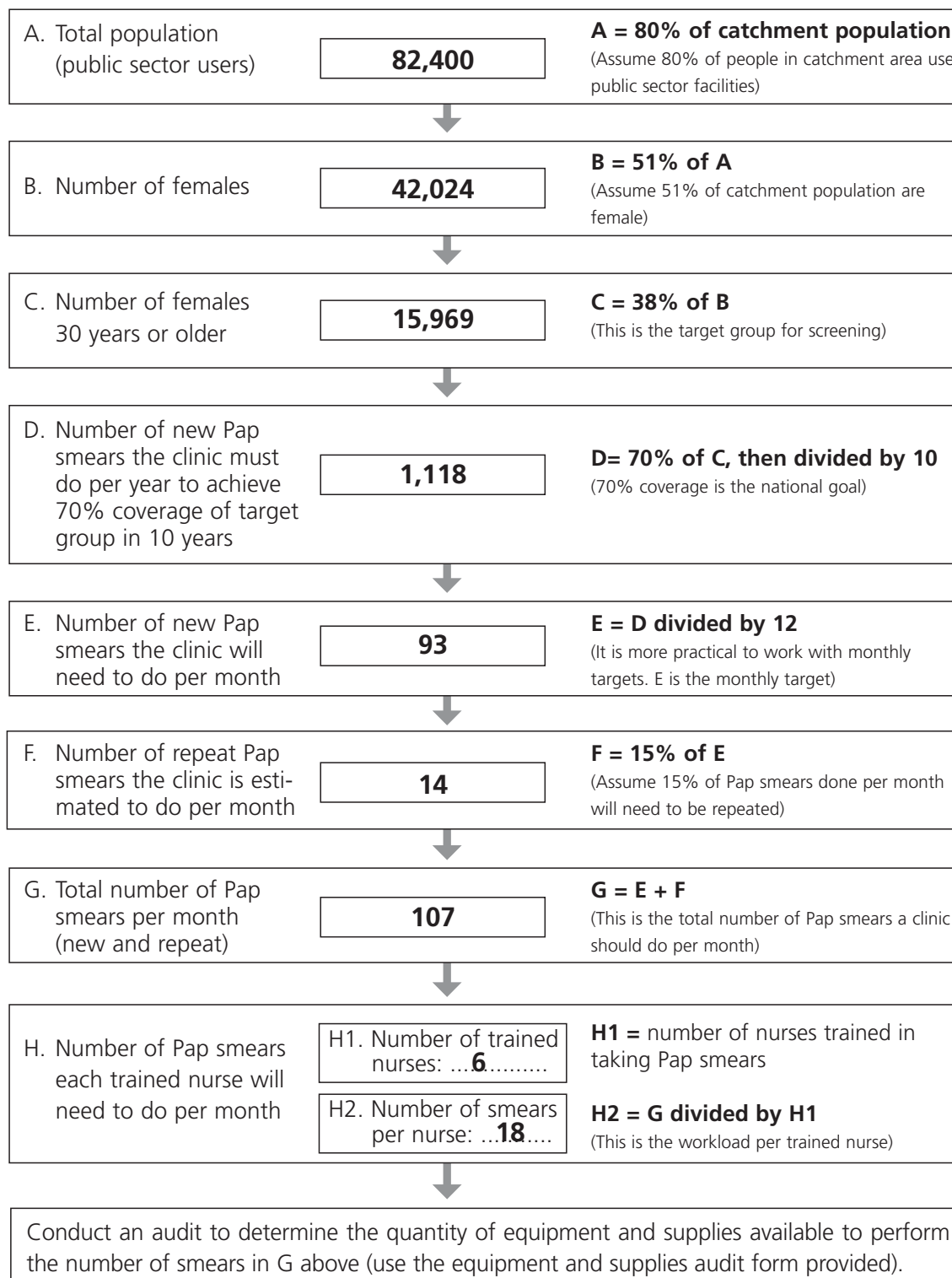
Handout 2:

Example of a Completed Facility Planning Tool

Clinic nameProvince

Catchment population for clinicDate.....

Determine the following for your clinic catchment area





Handout 3:

Cervical Screening Equipment and Supplies Audit Form

Clinic name Date

District Province

Name of staff Signature

Goal total number of Pap smears per month

Type of equipment and supplies	Quantity available in clinic	Quantity required to achieve goal	Shortfall	Action taken and outcome
<i>Capital equipment</i>				
Examination couch				
Examination light (working)				
Vaginal speculum				
Steriliser/autoclave				
Swab holding forceps				
Container for soiled instruments				
<i>Consumables</i>				
<i>Order periodically (specify period)</i>				
Aylesbury spatula				
Glass slide				
Fixative				
Decontamination fluid				
Gloves				
Linen Saver				
Cytology request forms				
IEC materials (pamphlets)				
Slide mailer (container for transporting slides)				
Slide marker				
Pap smear record book/sheet				

Module 2: **Session 4**

Record-keeping and Tracking Systems

Objectives

At the end of this session participants should understand the importance of:

- record-keeping
- following up clients with positive Pap smears.

Time: 1 hour

Teaching Methods

- Group activity: Case study on cervical screening records
- Discussion: Record-keeping and following up clients with positive smears

Facilitator Resources

- Handouts 1-3 :
 - Handout 1 : Exercise: 'Cervical screening record-keeping' and pap register
 - Handout 2 : Sample answers to exercise on cervical screening record-keeping
 - Handout 3 : Client referral and recall tracking cards

Preparation

- Go through the exercises and sample answers
- Check that there are an adequate number of handouts for the participants

Key Messages

Record-keeping and follow-up systems are key components of a well functioning cervical screening service.

Training Steps

- Hand out the exercise sheet 'Cervical screening record-keeping' to participants.
- Ask participants to work through the case study in pairs. Allocate 30 minutes for this exercise.
- Go through the discussion questions with participants.
- Hand out sample answers and examples of the client referral and recall tracking cards
- End the session by emphasising that record-keeping and follow-up systems are key components of a well functioning cervical screening service.



Handout 1:

Exercise:

'Cervical Screening Record-keeping'

September 2002, Friday 15h00

Sister Sibongile is in charge of a busy clinic in a peri-urban area in South Africa that provides comprehensive primary health care services.

Since the introduction of the National Guidelines for a Cervical Cancer Screening Programme there has been a focus on improving cervical screening in the district. At the clinic, two of the examination rooms are fully equipped for staff to do Pap smears. All 4 professional nurses at the clinic have been trained to do Pap smears. Staff at the clinic had set themselves a target of doing 30 new Pap smears per month.

A few months ago, Sister Sibongile met with her professional nurses to discuss ways in which they could keep records of the Pap smears that were being done. Together the nurses drew up a 'Pap register' and have been filling this in for the past few months. Today they are meeting to discuss the Pap register data for June 2002.

Have a look at the Pap register sheet for June 2002

- *Why do you think that staff at the clinic drew up a Pap register, i.e. of what value is a Pap register?*
- *Why have they divided the Paps into new and repeat smears?*
- *Why is the age category divided into age < 30 years and > than 30 years?*
- *Did the clinic meet its target for June 2002?*
- *What are your comments on the quality of the smears?*
- *What could be done to address this issue?*
- *Four of the 20 clients have not returned for their Pap smear results as yet. Which of these clients is it **most** important to make contact with as soon as possible?*
 - *Why?*
 - *What would you do?*
- *It is now **January 2003**. What would you do if you have not had any feedback about your clients from the referral hospital?*
- *Some clients will need to return at a later stage for repeat Pap smears. How will you know whether these clients have returned?*

Exercise: Cervical Screening Record-keeping**Pap register**

	Date Pap done	Pap done by	Name of client	ID number / D.O.B	Physical address	Tel. Number	Client folder number	New smear	
								< 30 yrs	≥ 30 yrs
1	2002/06/03	B	J. Smith	20.05.1960	21 Jupiter Street, Orbit Village	62345712	1234		✓
2	2002/06/03	B	K. Adams	10.01.1978	16 Saturn Street Orbit Village	62316212	1235	✓	
3	2002/06/03	B	M. Jones	01.01.1950	14 Libra Street Orbit Village	62345402	1236		✓
4	2002/06/03	A	M. Kammies	07.05.1961	27 Summer Street Seasondale	62345403	2367		✓
5	2002/06/05	C	I. King	09.08.1952	32 Chopin Street Musica	62345404	2387		✓
6	2002/06/05	D	P. White	26.04.1958	76 Bach Street Musica	62345405	2389		✓
7	2002/06/05	B	H. Grey	29.04.1964	26 Vivaldi Square Musica	62345406	2390		✓
8	2002/06/05	C	J. Brown	05.06.1970	27 Blossom Street Seasondale	62345407	2399		✓
9	2002/06/10	B	P. James	09.08.1949	98 Orchard Road Seasondale	62345408	2500		✓
10	2002/06/10	D	O. Kotze	07.07.1957	65 Petunia Street Seasondale	62345409	2588		✓
11	2002/06/10	A	P. Kay	15.10.1970	88 Neptune Street Orbit Village	12345402	2590		✓
12	2002/06/12	A	U. Mansfield	23.05.1968	22 Chopin Street Musica	22345402	2599		✓
13	2002/06/12	B	P. Scott	05.12.1955	99 Winter Street Seasondale	32345402	2603		
14	2002/06/12	B	P. Ross	13.09.1962	28 Church Street Musica	42345402	2606		✓
15	2002/06/12	C	Y. Brey	17.09.1970	96 Comet Street Orbit Village	52345402	2616		✓
16	2002/06/12	C	K. Naidoo	30.06.1970	22 Pluto Street Orbit Village	72345402	2618		
17	2002/06/17	D	R. Williams	23.05.1955	56 Jupiter Street Seasondale	82345402	2700		✓
18	2002/06/17	D	M. Smeda	18.10.1971	12 Orbit Street Orbit Village	92345402	2711		✓
19	2002/06/17	B	B. Jappie	18.09.1963	57 Blossom Street Seasondale	62345402	2719		
20	2002/06/17	B	M. Sampson	19.10.1970	22 Main Street Musica	62345402	2727		✓

Note: Remember to make copies of the Pap Register exercise onto A3 paper

Repeat smear		EC* present		Pap smear result	Action needed**	Results given***
< 30 yrs	≥ 30 yrs	Yes	No			
		✓		No cellular abnormalities detected	Routine 10 year follow-up	
		✓		G.Vaginalis. No malignant or pre-malignant cells	Treat the infection	Yes
		✓		Atypical, LSIL.	Repeat in 6 months	Yes
			✓	Smear unsatisfactory	Repeat smear	Yes
		✓		HSIL	Refer for colposcopy	
			✓	The specimen is unsatisfactory	Repeat smear	Yes
		✓		No cellular abnormalities detected	Routine follow-up	Yes
			✓	Specimen unsatisfactory	Repeat smear	Yes
			✓	Specimen unsatisfactory	Repeat smear	Yes
		✓		No cellular abnormalities detected	Routine 10 year follow-up	Yes
			✓	Unsatisfactory smear	Repeat smear	Yes
			✓	Specimen obscured-inflammatory exudate	Repeat smear	Yes
	✓	✓		Second LSIL	Refer for colposcopy	Yes
		✓		LSIL	Repeat in 12 months	Yes
			✓	Specimen unsatisfactory	Repeat smear	Yes
	✓	✓		No cellular abnormalities detected	Routine 10 year follow-up	Yes
		✓		HSIL	Refer for colposcopy	Yes
		✓		ASCUS present, possibly reactive in nature	Repeat in 12 months	Yes
	✓	✓		ASCUS present, possibly reactive in nature	Repeat in 12 months	
		✓		No cellular abnormalities detected.	Repeat in 12 months	

* EC = endocervical component

** Refer to management guidelines for appropriate action.

Where client requires recall or referral, fill in a tracking card in the tickler box

*** Tick if clients has been informed of results



Handout 2:

Sample answers to exercise on cervical screening record-keeping

- **Why do you think that staff at the clinic drew up a Pap register, i.e. of what value is a Pap register?**

The register allows one to collate data easily, e.g. number of clients seen per month, number of repeat smears done, number of smears with an endocervical component present. The collated data give an indication of how well the cervical screening service is functioning at the clinic. The register also allows staff to check whether client results have been received and whether clients have been informed of their results.

- **Why have they divided the Paps into new and repeat smears?**

In order to calculate coverage one needs to know how many new clients were seen. By having separate columns for new and repeat clients it is easy to calculate the number of new clients seen. Note this clinic has set themselves a target of seeing 30 new clients per month. Staff should also note what proportion of smears is being repeated – if this is high (greater than 15%) then staff need to investigate why so many smears are being repeated.

- **Why is the age category divided into age < 30 years and (≥ 30 years)?**

The new National Guidelines for a Cervical Cancer Screening Programme target women 30 years and older. This division allows staff to calculate easily what proportion of smears is being done on the appropriate age group.

- **Did the clinic meet its target for June 2002?**

Target = 30 new smears per month.

The clinic staff did 20 smears – of these 17 were new smears, but only 16 of the 17 new smears were on women in the correct target age group. Therefore they did 16/30 of target smears (53%). They did only just over half of their target.

- **What are your comments on the quality of the smears?**

One indication of the quality of smears is the presence of endocervical cells on the smear. For June 2002, 35% of smears lacked an endocervical component. This is high and needs investigation. You might want to look at adequacy rates by provider to see whether some staff need additional training.

- **What could be done to address this issue?**

Arrange for staff to be re-trained on the technique of taking a good smear.

- **Four of the 20 clients have not returned for their Pap smear results as yet. Which of these is it *most important to make contact with as soon as possible? Why?***

The client with the HSIL. The majority of HSIL will progress to cervical cancer if not treated.

What would you do?

Make an appointment at the colposcopy clinic for the client.

Contact the client – by telephone, home visit or by letter and inform her that her Pap results showed an abnormality that needs further investigation. Check that the colposcopy appointment date is suitable.

- **It is now *January 2003*. What would you do if you have not had any feedback about your clients from the referral hospital?**

Contact the referral centre. Discuss issue of feedback with the referral centre.

- **Some clients will need to return at a later stage for repeat Pap smears. How will you know whether these clients have returned?**

Clients who require referral, repeat Pap smears or further investigation and treatment must be followed up. The tickler box is a system that has been developed to assist in tracking clients that need referral or repeat smears. The system consists of a box with two types of client tracking cards in two different colours: the recall cards (blue) and the referral cards (red). The recall cards are kept in the tickler box in monthly order. The referral cards are kept at the front part of the box.

Each time a Pap result is received and the client requires a repeat smear, a health service provider fills out a client recall tracking card for that particular client. The card records the client's folder number, contact details, date when Pap smear was done, Pap result and date when client must return. The card is slotted into the box in the month in which the client must return for a repeat smear. For example, if the client must return for a repeat smear in August, then her card is slotted into the August section of the box. When a client returns for the follow-up visit, details of this visit are recorded and the card is then put into the client's folder/file. Each month staff must check whether clients who were meant to return that month have been seen. If not, the individual clients will need to be contacted.

For clients who require referral to a colposcopy clinic or gynaecology clinic, a client referral tracking card is filled out as soon as that result is received from the laboratory. The referral tracking card records the client's folder number, contact details, date when Pap smear was done, Pap result and the appointment date at the colposcopy/gynaecology clinic. These cards are red in colour to emphasise the fact that these clients must be contacted, given their result and informed that they need to be seen at a referral centre. The cards are kept in the front of the tickler box until the outcome of the referral is known. Once the outcome is known the card is put into the client's folder/file.



Handout 3:

Client referral and recall tracking cards

Example of a card that can be used as part of the Tickler Box System to track clients requiring a repeat Pap smear

Cervical Screening
Tracking Card: Client Recall

Name:ID number or date of birth:

Home address:.....

Telephone number:

Client folder number:

Date Pap smear done:

Pap smear result:

Date when client must return:

Follow-up record

Date of repeat smear:

Action taken if client has not returned:

Example of a card that can be used as part of the Tickler Box System to track clients requiring referral

Cervical Screening
Tracking Card: Client Referral

Name:ID number or date of birth:

Home address:.....

Telephone number:

Client folder number:

Date Pap smear done:

Pap smear result:

Appointment for referral at:..... (name of referral centre)
 on: (dd/mm/yy)

Tracking record

Date client informed of Pap result and need for referral: (dd/mm/yy)

Outcome of referral:.....

Module 2: **Session 5**

Reducing Missed Opportunities – Recruiting Women Attending Health Care Facilities

Objectives

By the end of this session participants should:

- understand the importance of recruiting women for Pap smears from within the health care facility
- encourage participants to use every health care consultation with a woman age 30 years or older as an opportunity for educating about Pap smears and performing a Pap smear.

Time: 1 hour

Teaching Methods

- Play reading: *Mrs Zulu misses out*
- Group discussion: *Recruiting women*

Facilitator Resources

- Facilitator notes
- Play script
- Overhead: *Missed Opportunities 1*

Preparation

- Read the facilitator notes
- Read through the script and discussion questions
- Check that there are an adequate number of play scripts
- Have overhead and overhead projector available

Key Messages

- Health care workers should play an active role in the recruitment of women for Pap smears.
- Health care workers must view every consultation with any women age 30 years or older as an opportunity for:
 - increasing awareness about the cervical screening programme
 - providing Pap smears for these women.
- Preventing missed opportunities is one step closer to achieving higher screening coverage

Training Steps

- Organise participants – ask for 3 volunteers from the group. Give each volunteer a copy of the script and allocate a role to each volunteer (narrator, Mrs Nkosi and Mrs Zulu). Give the volunteers 5 minutes each to go through the script. Ask the group to watch the play and note down any questions they may have.
- Ask the volunteers to enact the play.
- Lead a discussion on the play, prompting the debate with some questions:
 - *What have you learnt from this play?*
 - *What could have been done differently so that both women could have had a Pap smear?*
 - *Who should be responsible for recruiting women for Pap smears?*
 - *What can health care providers do to ensure more women in the target age group are reached?*
 - *What ideas do you have for recruiting more women?*
- Allow participants to engage in some discussion and debate and write their responses to these questions on newsprint paper and display on the wall. During the discussion highlight the following points:
 - Many women over the age of 30 years attend health care facilities for various health care needs (primary medical care, to accompany others, etc).
 - Health care providers should make use of women's contacts with the health care facilities as opportunities to recruit women for Pap smears.
 - Health care providers must therefore target women who are already within the health care system and be pro-active rather than wait for women to request a Pap smear.
- End the session with the key messages on Overhead: *Missed Opportunities 1*.

Facilitator Notes

Recruiting women from within health facilities

Many women over the age of 30 years attend health facilities for various health care needs. These include primary medical care, chronic medical care, collection of medications, and accompanying children, spouses or others. We know that more than 80% of South African women have never been screened for cervical cancer, yet very few of these eligible women are ever offered a Pap smear. Therefore, there are numerous missed opportunities for cervical screening in health services. It is important for health care workers to make use of women's contacts with the health facilities as opportunities to recruit them for Pap smears. Health care workers should therefore target those women who are already in the health care system and be pro-active rather than wait for women to request a Pap smear. Active client recruitment by health care workers in the health facilities should be promoted because it is less costly and the health workers have access to numerous eligible women on a daily basis. This means during every consultation with a woman over 30 years old, the health worker should discuss Pap smears with the client, give her information and offer her the service.

Counselling of women by health providers and peer educators should provide clear simple messages so as to overcome barriers of fear and anxiety and to change attitudes regarding cervical screening. Counsellors are advised to answer all questions directly and in a reassuring manner and where appropriate to remind the woman of any instructions. Sensitivity to cultural and religious considerations is important. The quality of the counselling can have a major impact on the use of services. If women are content with the interaction, they are more likely to follow through and participate fully in screening services.

Other activities that can happen in the health service, for example in the waiting room while waiting to be attended to, include group health talks, video shows (where available), and sketches and role-plays on cervical screening. Furthermore, pamphlets and posters can be displayed in health facilities and distributed to men and women attending these facilities.

Play Script:

Mrs Zulu Misses Out

Narrator: Mrs Nkosi and Mrs Zulu do not know that they both have HSIL. One night, a few months ago, Mrs Nkosi and her good friend 45-year-old Mrs Zulu were chatting:

Mrs Zulu: *Do you know what Mrs Nkosi, one afternoon while I was sitting at the market selling my goods, a woman came to speak to a group of women next to my stand about a disease called cancer of the cervix. I had never heard of this disease before that day. I heard that doing a test called a Pap smear at a clinic could prevent the disease.*

Mrs Nkosi: *I have heard of this cancer called 'cancer of the mouth of the womb'. Perhaps it is the same disease? I am not sure though.*

Mrs Zulu: *When I heard this information I did not think about it until much later when the woman had gone. I started getting worried because I thought to myself 'what if I have this disease?' But, then I realised that I must be fine because I attend the clinic once every 3 months to collect my medicines for diabetes from the sister and the doctor always gives me a check-up. Surely, if I had such a disease they would have told me, or at least they would have said something about it to me if I could be in danger of getting such a disease?*

Mrs Nkosi: *I am sure you are fine my friend, the sister or doctor would have said something to you by now!*

Mrs Zulu: *But I think you, my friend, should go and have this test because you don't often go to the clinic. Isn't the last time you ever attended the clinic almost 5 years ago? You have not had the opportunity to be seen by a doctor or sister to tell you about the disease and to check you.*

Mrs Nkosi: *No, actually, I was at the clinic twice in the last two months, both times to take my grandson for treatment because his mother was working.*

Narrator: A few months later, Mrs Nkosi goes to visit Mrs Zulu:

Mrs Nkosi: *My dear friend I came to thank you for encouraging me to go for a Pap smear. I went to the clinic after all because I started to worry, asking myself: 'What if the sister did not speak to me about this disease because I was taking a baby to the clinic and I was not the patient myself?' I had the Pap smear and a few weeks later learnt that I had something called HSIL and was referred to the hospital for treatment. I had the treatment last week.*

Mrs Zulu: *I am so glad to hear that you were treated and will not get cancer. Lucky for you I happened to be nearby when that woman came to our market. I have not seen her there since that day. It's a pity because it would be nice to tell her that her talk was useful.*

Narrator: Mrs Zulu thinks perhaps she should go to the clinic for a Pap smear as well.

Module 2: **Session 6**

Client-provider Interactions

Objective

At the end of this session the participants should have greater insight into how to improve client-provider interactions.

Time: 1 hour

Teaching Methods

- Role-play
- Discussion: Issues related to the client-provider interaction, led by facilitator

Facilitator Resources

- Suggested reading:
 - S Fonn and M Xaba. *Health workers for change. A manual to improve quality of care.* WHO and Women's Health Project, Johannesburg and Geneva, 1995
- Role-play briefs
- Overhead: *Client-provider interactions 1*

Preparation

- Read through the role-play briefs and discussion questions
- Go through the suggested reading

Key Messages

- Clients have a right to caring services
- A satisfied client is a good advocate for the cervical screening programme

Training Steps

- Role-play: Client provider communication
 - Ask for 3 volunteers to take part in the role-play
 - Hand out briefs to volunteers. Discuss privately with the players what they are going to do according to the briefs
- Ask the volunteers to perform the role-play.
- After the role-play, use some questions to start the discussion as follows. Ask:
 - Each actor: *'How did you feel playing your role?'*
 - The audience: *'Did the presentation represent a real life situation in a clinic? If not, 'how would it be different in reality?'*

- Why do patients behave as they do?
 - ◆ Ensure that the group discusses: client fear and apprehension, client's lack of knowledge, victim blaming by providers, and how providers can appear intimidating to clients.
- Why do providers behave as they do?
 - ◆ Ensure that the group discusses judgemental attitude of providers, failure to see the situation from the client's perspective, failure to recognise importance of screening and provider workload.
- How services can be organised to benefit both providers and clients
 - ◆ Discuss appointment systems and providing privacy for clients.
- 'Do you think the client would be a good advocate for screening among her friends?'
- What could the providers have done differently?
- Using overhead: *Client-provider interactions 1*, sum up the session by highlighting the fact that a satisfied client is a good advocate for cervical screening.

Client Brief

You are a 45-year-old woman. A friend of yours had cancer and has died. You have heard that you can have a test called a Pap smear to check yourself. You are quite anxious in case you are not well. Also you are not too keen because you know that you have to be examined down there and you feel uncomfortable about it. You feel uncomfortable also because the staff are often younger than you. Anyway you go to your clinic to ask for a Pap smear.

Just for this role-play please forget everything you have just learnt about cervical cancer and screening.

Provider 1 Brief

You are a nursing sister in a clinic. You have been qualified for 6 years and consider yourself to be a good nursing sister. Often however people do not take you seriously and tell you that you look so young. Everyday has different demands and sometimes it is hard to meet every person's individual needs. There are long queues, you have to see pregnant women and well babies as well as sick people and often people with sexually transmitted infections, tuberculosis – the list is endless and everyone needs information and counselling. It is all in a day's work but some days there are too many things.

It is a busy, frustrating day and you are feeling irritated. The next client comes and asks for a Pap smear. You do not see her problem as a priority.

Just for this role-play please forget everything you have just learnt about cervical cancer and screening.

Provider 2 Brief

You are a nurse at a clinic. Think of the many times you get interrupted whilst seeing a client. Your role is to interrupt Provider 1 while she is busy with the client.

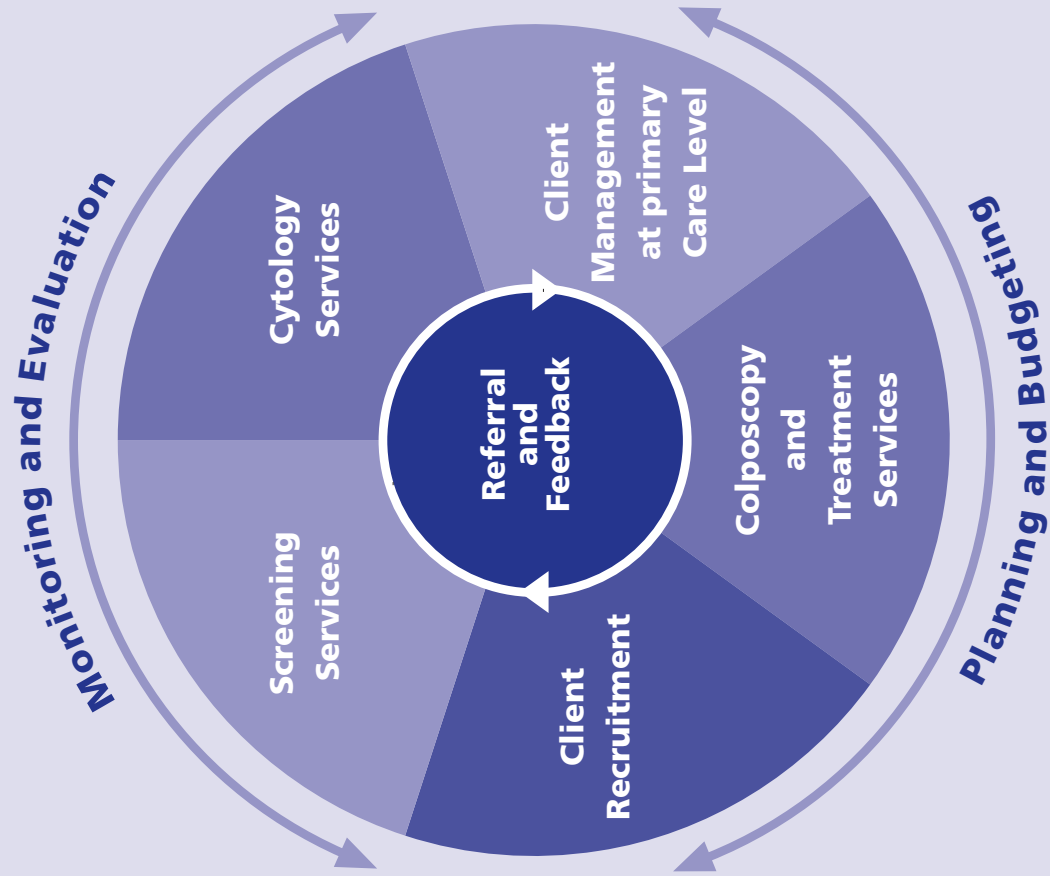
Just for this role-play please forget everything you have just learnt about cervical cancer and screening.

Module 2: Objectives

To discuss:

- Health system requirements
- Record-keeping and client tracking
- Missed opportunities for cervical screening
- Cervical screening targets
- Client-provider interactions

Components of a Cervical Screening Programme



Components of a Cervical Screening Programme

Key message:

A cervical screening programme involves more than just taking Pap smears

COMPONENTS 2

Setting Targets: Objectives

- Using the facility-planning tool
- Key concepts:
 - setting goals/targets
 - using population data to plan and determine resource requirements
 - using goals/targets to plan for and monitor services

Monitoring Targets

Clinic name	Number of Pap smears should perform per month	Actual number of Pap smears performed per month
Clinic A	107	9
Clinic B	18	3
Clinic C	10	2

SETTING TARGETS 2

Client-provider Interactions

Key Messages

- Clients have a right to caring services
- A satisfied client is a good advocate for the cervical screening programme

CLIENT-PROVIDER INTERACTIONS 1

Setting Targets

Key Messages

- Population data are essential for planning
- Indicators monitor progress towards achieving goals
- Monthly targets are useful for frequent monitoring

SETTING TARGETS 3

Missed Opportunities

Key Messages

- Actively recruit women for Pap smears
- View every consultation with any women age 30 years or older as an opportunity for:
 - increasing awareness
 - performing a Pap smear
- Remember: Reducing missed opportunities helps to achieve higher screening coverage

Client-provider Interactions

Key Messages

- Clients have a right to caring services
- A satisfied client is a good advocate for the cervical screening programme

CLIENT-PROVIDER INTERACTIONS 1

Module 3

Practical Training

This module is a guide for training health care providers to perform good Pap smears. We recommend that this module be done after Modules 1 and 2.

Module 3 consists of 6 sessions

- Session 1: Introduction to the workshop
- Session 2: Ensuring good quality Pap smears
- Session 3: Infection prevention
- Session 4: Understanding cervical cytology results
- Session 5: Managing clients with cervical abnormalities
- Session 6: Pap smear technique – practical session (you may run this session several times until all participants have had adequate supervised practice)

Time Required: 2 days in total, but you may decide to spread out the practical sessions over a few days.

Number of Participants: Sessions 1 to 5, a maximum of 20 participants. Session 6, up to 6 participants per workshop. For session 6 participants will perform a Pap smear individually, under supervision.

Overheads for the sessions above can be found at the end of the module

Module 3: **Session 1**

Introduction to the Module

Objectives

The objectives of this module are to:

- create a supportive learning environment
- introduce the agenda, objectives and discuss any housekeeping issues.

Time: 20 minutes

Facilitator Resources

Overhead: *Module 3: Introduction*

Preparation

Have overhead and overhead projector available

Training Steps

- Ask participants to fill in and put on their name tags/labels.
- Facilitator/s introduce her/himself/themselves.
- Get participants to introduce themselves to one another – see *Conducting Workshop Introductory Sessions* see page 19.
- Go through the workshop objectives, using the overhead transparency Overhead: *Module 3: Introduction*.
- Present the agenda to the participants.
- Discuss any housekeeping issues.

Module 3: **Session 2**

Ensuring Good Quality Pap Smears

Objectives

By the end of this session participants should:

- be aware of the requirements for taking a good Pap smear
- understand how to take a good quality Pap smear.

Time: 30 minutes

Teaching Method

Discussion: Quality of Pap smears

Facilitator Resources

- Laboratory forms, Pap book/Pap smear register, light source, vaginal speculum, forceps, a glass slide, fixative spray, an Aylesbury spatula.
- Overheads: *Quality 1-2*

Preparation

- Have overhead and overhead projector available
- Have all resources needed to do a Pap smear available
- Remind yourself of the Pap smear procedure

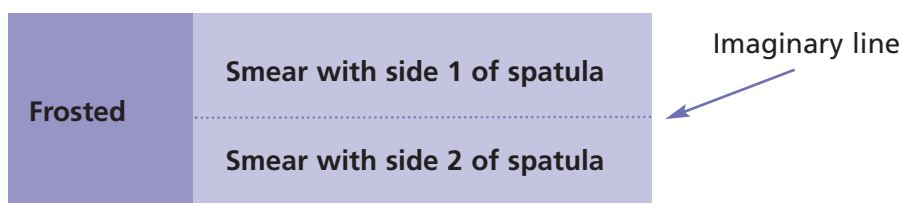
Key Messages

- Get everything you need ready before doing the Pap smear – preparation is an important step in the Pap smear procedure
- A good quality smear is one that is taken from the transformation zone, has an endocervical component and is not obscured by blood, mucus or other discharge
- Check your smear adequacy rates and rates of endocervical component regularly

Training Steps

- Show the participants what is needed (equipment, forms, register) to take a Pap smear and how to get everything ready. Emphasise to participants that preparation is an important step in the Pap smear procedure. Highlight that the following must be done prior to taking a Pap smear:
 - Take the client's history
 - Fill in the laboratory request form. Note that part of the form will need to be filled in after doing the Pap smear
 - Label the slide
- Explain to participants the procedure of taking a Pap smear, highlighting the following:
 - Explain the procedure to the client
 - Assist the client to lie on an examination couch in the lithotomy position
 - Use a good light source to target the perineum
 - You can use either lukewarm water or normal saline to lubricate the speculum. Do not use any other lubricant
 - Spread the labia and insert the speculum with the blades in a vertical position. Rotate speculum into a horizontal position and open blades
 - Ensure that cervical os can be seen clearly
 - Swab the os free of blood or discharge, if necessary
 - Firmly scrape the os of the cervix (360 degrees)
 - Spread the scrapings along a glass slide. Start at the junction of the frosted and clear glass. Smear the material with an even pressure and continuous movement to the end of the slide, leaving room on part of the slide. Flip the spatula over and spread the material on the area you have not already covered. See Figure 2.

Figure 2: Pap Smear Glass Slide



- Spray fix immediately with a gentle steady stream of spray. Hold the can of spray about 30 cm away from the slide. Air-dry the specimen
- Complete the cytology request form

Remind participants that there will be a practical demonstration later in the workshop.

- Using Overhead: *Quality 1* explain to participants what a good quality smear is.
- Go through some common problems experienced by the laboratory in trying to interpret cytology specimens (Overhead: *Quality 2*).
- Remind participants to monitor the quality of the Pap smears that they perform.
- End the session by highlighting the key messages.

Module 3: **Session 3**

Infection Prevention

Objectives

By the end of this session participants will understand the proper procedures for adequate disinfection of the equipment used for taking Pap smears.

Time: 30 minutes

Teaching Method

Discussion: Infection prevention steps

Facilitator Resources

- Suggested reading:
 - EngenderHealth, *Infection Prevention manual. Infection Prevention: A Reference Booklet for Health Care Providers*. EngenderHealth, New York 2000
- Facilitator notes
- Handouts 1-3: *Infection prevention*
 - Handout 1 : Instrument processing
 - Handout 2 : High-level disinfection : Boiling
 - Handout 3 : High-level disinfection : Chemical
- Overheads: *Infection Prevention 1-4*

Preparation

- Read the facilitator notes
- Take a look at the facilitator resources
- Check that there are an adequate number of handouts
- Have overheads and overhead projector available

Key Messages

- It is important to prevent transmission of infections from one client to another and to prevent transmission of infections to staff.
- The 4 important steps in infection prevention are:
 - decontamination
 - cleaning
 - sterilisation or high level disinfection (HLD)
 - storage.

Training Steps

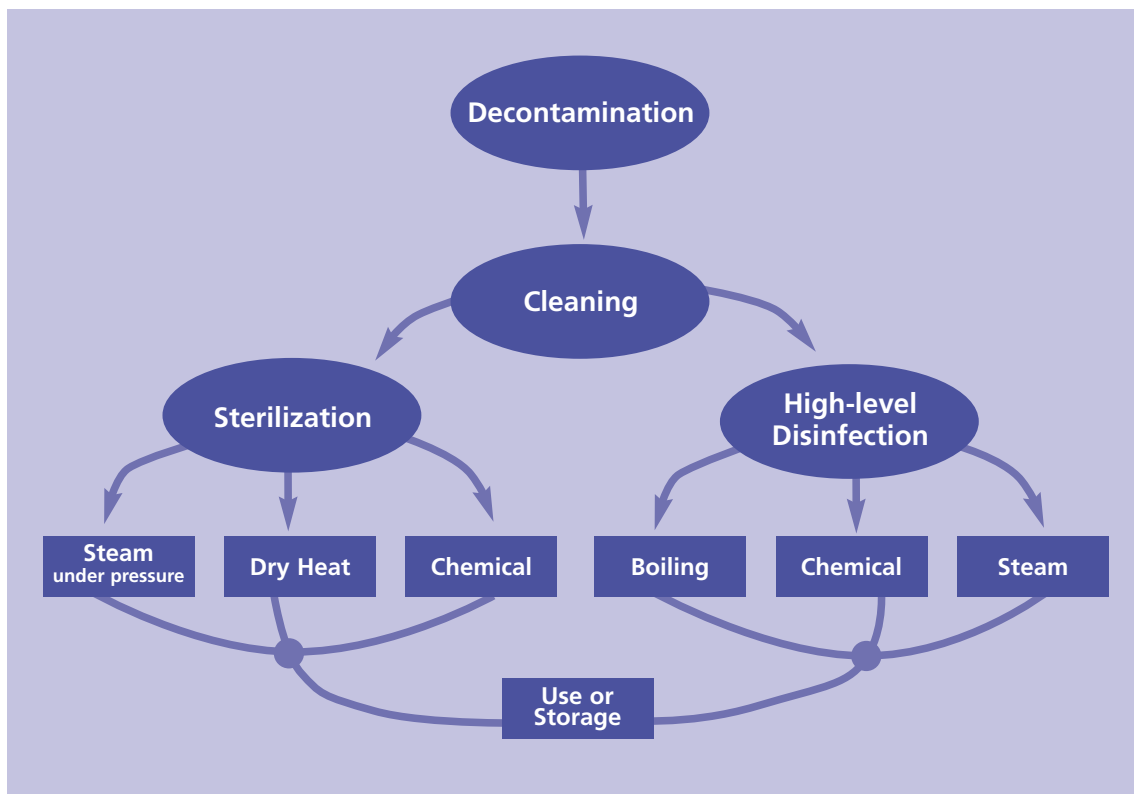
- Discuss the 4 important steps in infection prevention, using the following questions to promote interaction:
 - *Why is it important to have good infection prevention?*
 - *What is the first thing that needs to be done to process soiled instruments, how do we do it and why?*
 - *After decontamination, what needs to be done, how and why?*
 - *After cleaning the instruments, what is the next step?*
 - *After sterilisation or HLD, what is the last step?*Use Overheads: *Infection Prevention 1 and 2* to summarise the discussion.
- Discuss HLD (boiling and chemical) using Overhead: *Infection Prevention 4* and highlight that:
 - All instruments should be decontaminated, cleaned and dried before HLD can be done.
 - HLD can be achieved by soaking in chemicals, boiling or steaming.
 - If boiling is used, instruments must be submerged properly in constantly boiling water for 20 minutes.
 - Glutaraldehyde (Cidex) or 0.5% chlorine may be used for chemical HLD. Instruments must be completely covered with the chemical solution and soaked for 20 minutes.
 - After chemical HLD, make sure to rinse instruments thoroughly with boiled water - *Cidex and Chlorine are toxic to tissues and skin.*
- Give participants the *Infection Prevention* handouts.



Handout 1:

Infection Prevention:

Instrument Processing



Source: *Infection Prevention: A Reference Booklet for Health Care Providers.* EngenderHealth, New York, 2001



Handout 2:

Infection Prevention:

High-level Disinfection: Boiling

Decontaminate and clean the instrument



Boil in a covered container for 20 minutes at 100° C



Remove instrument from the boiling water



Allow to dry. Use immediately or store in a dry covered place



Handout 3:

Infection Prevention

High-level Disinfection: Chemical

Decontaminate and clean, place in chemical solution in a container e.g. 2% glutaraldehyde (Cidex)



Cover the container and soak for 20 minutes



Remove instrument from the solution using forceps



Rinse instrument thoroughly with boiled water to remove chemical residue



Allow to dry. Use immediately or store in a dry covered place

Facilitator Notes

It is important to process instruments properly to prevent transmission of infections from one client to another and to prevent transmission of infections to staff.

Processing soiled instruments

Decontamination

This is the first step in instrument processing. It makes instruments safer to handle – it kills viruses (including Hepatitis B and HIV). It also makes instruments easier to clean because it prevents blood and other fluids drying on the instrument. Example of decontaminating solution: 0.5% chlorine solution.

Procedure: Immediately after using instrument, soak it in the solution for 10 minutes. Remove instrument from solution and clean immediately or soak in plain water until it can be cleaned. Note that instruments can be ruined if soaked too long in chlorine.

Cleaning

This step removes organisms, dirt etc from the instruments.

Procedure: After decontaminating, and wearing gloves, clean instrument thoroughly with a brush, water and detergent to remove blood, fluids, etc.

N.B.: Water alone is not effective. Rinse instrument with clean water and dry before next step.

Sterilisation or HLD

Sterilisation kills all micro-organisms including bacterial endospores. It is recommended for items such as needles and surgical instruments that come into contact with the blood stream or tissues under the skin. Sterilisation can be performed by: autoclaving, i.e. using steam under pressure, using dry heat (dry heat oven) or using chemicals.

In the absence of sterilisation, HLD is the only acceptable alternative. HLD kills bacteria, viruses and fungi but does not reliably kill all bacterial endospores. Bacterial endospores cause diseases such as tetanus. HLD is suitable for instruments that come in contact with broken skin or intact mucous membranes. It is appropriate for instruments used for cervical screening. There are 3 methods for HLD: boiling, chemical HLD or steaming.

If boiling is used, instruments must be submerged properly in constantly boiling water for 20 minutes. Glutaraldehyde (Cidex) or 0.5% chlorine may be used for chemical HLD. Instruments must be completely covered with the chemical solution and soaked for 20 minutes. After chemical HLD, make sure to rinse instruments thoroughly with boiled water - *Cidex and Chlorine are toxic to tissues and skin.*

Storage

All instruments should be used or properly stored immediately after processing, otherwise they may be contaminated. Always store instruments dry. Never store them in solutions.

Module 3: **Session 4**

Understanding Cervical Cytology Results

Objectives

By the end of this session participants will understand cytology results.

Time: 30 minutes

Teaching Method

Lecture: What is contained in cytology reports?

Facilitator Resources

- Suggested reading:
 - D Solomon, D Davey, R Kurman et al, 'The 2001 Bethesda System. Terminology for reporting results of cervical cytology'. *JAMA* 2002; 287: 2114-2119
- Facilitator notes
- Overheads: *Cytology Reports 1-2*

Preparation

- Read the facilitator notes
- Take a look at the facilitator resources
- Have overheads and overhead projector available

Key Messages

There are 3 main components of the cytology report:

- Comments on the adequacy of the specimen
- The cytological findings
- Management recommendations

Training Steps

- Show Overhead: *Cytology Reports 1* and discuss the three main parts of a cytology report.
- Show Overhead: *Cytology Reports 2* and discuss the various categories of abnormality.

Facilitator Notes

Cytology reports

Introduction

A wide range of terminology has been used to describe the cytological changes of cervical dysplasia. In 1988 cytopathologists met in Bethesda, to develop a universal and standard reporting system that is now referred to as the Bethesda System. This system was revised in 1991 and 2001 and has replaced the CIN terminology. The Bethesda system is aimed at producing more effective communication of cervical cytology from the laboratory to the clinician. The South African Society for Clinical Cytology has endorsed the New Bethesda System, however few public sector laboratories have implemented Bethesda 2001. The National Health Laboratory System has plans to implement a standardised cytology reporting format based on the New Bethesda System.

Components of the cytology report

The cytology report has 3 main components. (Overhead: *Cytology Reports 1*)

First, the laboratory will comment on the adequacy of the smear. The smear will be reported as being either satisfactory or unsatisfactory for evaluation. Unsatisfactory smears will need to be repeated. Reasons for unsatisfactory smears include:

- Lack of sufficient endocervical cells
- Obscured by blood
- Obscured by inflammation
- Specimen too degenerate

Second, the cytology report will show the results. It will show that either pre-malignant or malignant cells are absent, or that pre-malignant or malignant cells are seen and will note the presence of organisms. If pre-malignant or malignant cells are seen, the category of abnormality will be noted. The categories of abnormality include (Overhead: *Cytology Reports 2*):

- ASC-US: Atypical squamous cells of undetermined significance. This term is used to describe cellular changes that are more marked than reactive changes but that fall short of a definitive diagnosis of a squamous intra-epithelial lesion
- LSIL: Low-grade squamous intra-epithelial lesions. Previously called Cervical Intra-epithelial Neoplasia 1 (CIN 1)
- ASC-H: Atypical squamous cells where HSIL cannot be excluded
- HSIL: High-grade squamous intra-epithelial lesions. Previously called CIN 2, CIN 3
- 2nd LSIL or ASCUS after a previous LSIL or ASCUS
- Malignant cells of squamous carcinoma
- AGC: Atypical glandular cells
- AIS: Adenocarcinoma in situ
- Adenocarcinoma

Third, the report will contain management recommendations. These will be discussed in the next session.

Module 3: **Session 5**

Managing Clients with Cervical Abnormalities

Objectives

By the end of this session participants will know how to manage clients with abnormal cervical lesions.

Time: 45 minutes

Teaching Method

Discussion: Management of clients with abnormal cervical lesions

Facilitator Resources

- Handouts 1-2:
 - Handout 1: sample referral letter
 - Handout 2: recommendations for management of cervical screening clients at primary care level
- Facilitator notes
- Overhead: *Managing Clients 1*

Preparation

- Check that there are an adequate number of handouts
- Have overhead and overhead projector available

Key Messages

All clients with abnormal Pap smears must be followed up and managed appropriately.

Training Steps

- Discuss the management of clients with abnormal results using Overhead: *Managing Clients 1*. Highlight the following points:
 - It is important to ensure all clients are managed according to standard clinical management guidelines, in line with the national Guidelines
 - Standard guidelines will ensure all clients are managed in the same manner for a given cytological result
 - Some laboratories may use slightly different result categories and have different management recommendations, but soon the National Health Laboratory Service will be implementing standard practices.

- Remind participants that clients with LSIL or ASC-US must have a repeat smear in one year but that clients with HSIL must be referred for colposcopy immediately. Direct verbal communication of the result is preferable for clients who need a repeat smear and for clients who need to be referred for further management. The return visit is an opportunity for the health worker to explain the results, discuss their implications, and counsel clients about the importance of adherence to follow-up and other recommended management. In some settings it may be more feasible to inform clients that they need referral and that an appointment has been made for them at the referral centre. An example of a letter that can be used to inform a woman that she has an abnormal smear and needs referral is provided. Handout the sample referral letter to participants.
- Ask participants how they will track these clients, i.e. clients requiring repeat Pap smears and clients requiring referral. Briefly discuss the client recall and tracking system that has been described in Module 2: Session 4.
- Briefly discuss the presenting features of cervical cancer. Remind participants that clients with suspected cervical cancer can be referred to a hospital for further investigation and management.
- Hand each participant a copy of the *Recommendations for management of cervical screening clients at primary care level*. Go through the management flow chart with participants. Encourage participants to have this flow chart available at their workstations.



Handout 1:

Sample Letter informing client of the need for colposcopy

Page 1 of 2

Date

Dear (client name)

The results of your recent Pap smear (test of the cells of the mouth of the womb/cervix) show that there are some abnormal changes in your cervix. This abnormality is not cancer, but if left untreated may develop into cancer in the future. It is important that you have these abnormalities checked now, with a colposcopy examination (see over).

An appointment has been made for you at (colposcopy clinic name and address):

.....
.....

on (date) at (time)

If:

- The above appointment does not suit you OR
- You will be menstruating on the above date OR
- You have any further questions or concerns

Please contact us at

Yours sincerely,

.....



Handout:

Sample Referral Letter

Page 2 of 2

Information about the colposcopy examination

What is a colposcopy?

A colposcopy is an examination using a colposcope. A colposcope is a type of magnifying glass that allows a doctor to examine the cervix (mouth of the womb) more closely.

What happens during the colposcopy examination?

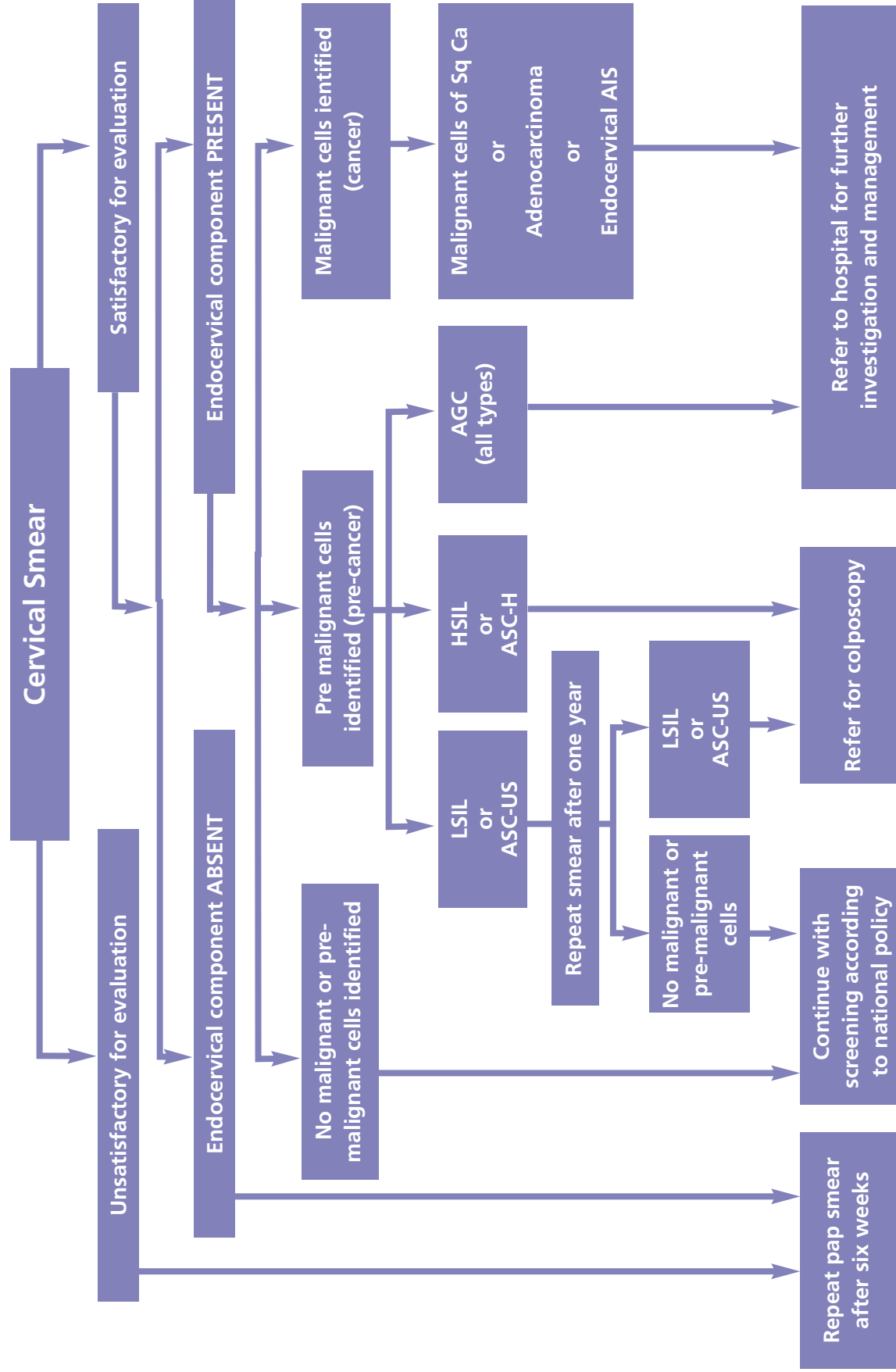
The first part of the colposcopy examination is very much like having a Pap smear. As with the smear, the doctor will gently insert an instrument (speculum) into the vagina. The doctor will then use the colposcope to examine the mouth of the womb (cervix). The colposcope never actually touches you. If necessary, a tiny piece of tissue will be taken from the cervix. This is not painful but you may feel a slight discomfort. The piece of tissue will be sent off to the laboratory for further examination. You might be offered treatment immediately or called back for further follow-up and treatment.

Why should I go for a colposcopy examination?

Your Pap smear showed that there are some abnormal changes in your cervix. It is likely that these changes can easily be treated. This treatment can prevent you getting cancer, so it is important that you attend the colposcopy clinic.



Handout 2: Recommendation for Management of Cervical Screening Clients at Primary Care level



AGC: Atypical Glandular Cells. **AIS:** Adenocarcinoma-in-situ **ASC-H:** Atypical Squamous Cells – cannot rule out HSIL **ASC-US:** Atypical Squamous Cells of Undetermined Significance **LSIL** = Low Grade Squamous Intraepithelial Lesions **HSIL:** High Grade Squamous Intraepithelial Lesions **Sq Ca:** Squamous Carcinoma Where presence of organisms is noted, treat client accordingly

Facilitator Notes

Management of cervical lesions

A. Pre-cancerous lesions

A critical component of an effective cervical cancer screening program is the appropriate treatment of pre-cancerous lesions. Clients with a LSIL or ASC-US diagnosed for the first time should have a repeat Pap smear in a year. If the repeat Pap smear still indicates the presence of a LSIL or an ASC-US the client should be referred for colposcopy. All clients with HSIL and ASC-H must be referred for colposcopy. Colposcopy is an examination of the cervix and vagina using an instrument (colposcope) that magnifies the cervical and vaginal tissue.

Various treatment options are available for the treatment of pre-cancerous lesions. Methods commonly used include:

Excision methods

Excision methods involve cutting off the part of the cervix that is affected. The loop electrosurgical excision procedure (LEEP), which is also called the large-loop excision of the transformation zone (LLETZ) is highly recommended as it can be performed as an out-patient procedure, reducing costs to the health service. The loop procedure is done under colposcopic guidance. Conisation of the cervix is still used in some settings, but this requires in-patient care and has significant side effects. Excision methods have the advantage of providing tissue for histopathological diagnoses.

Ablative methods

These methods involve destroying abnormal cervical tissue, ideally after visualisation with a colposcope. Cells are destroyed by cryotherapy (freezes the abnormal cells), cold coagulation, electrosurgical cauterisation or vaporisation with a laser beam.

B. Cervical cancer

It is inevitable that in a cervical cancer screening program women with invasive cancer will be picked up. Cervical cancer is curable if detected and treated in its early stages. It is important that providers have a basic understanding of the signs and symptoms of cervical cancer so that clients can be appropriately managed in a timely manner.

The clinical presentation of invasive cervical cancer depends on the location and spread of the cancer. Some of the presenting features include vaginal bleeding, foul-smelling bloody discharge, blood in the urine, symptoms of bowel obstruction, severe backache, severe anaemia, weight loss and on pelvic examination a growth on the cervix. If the cancer spreads to the bladder or rectum it may lead to the formation of fistulae between these organs and the vagina. This can result in the uncontrolled release of urine and/or faeces through the vagina. Note that in the very early stages of cervical cancer there are usually no signs and symptoms.

Clients with suspected cervical cancer must be referred immediately to hospital for confirmation of the diagnosis and further management. Invasive cervical cancer may be treated by surgery and/or radiotherapy with or without chemotherapy.

Module 3: **Session 6**

Pap Smear Technique: Practical Session

Objectives

By the end of this session participants will acquire the skills for taking a good quality Pap smear.

Time: 3 hours and 30 minutes

Teaching Methods

Demonstration and observation

Facilitator Resources

- Consulting room with examination couch and light source
- Equipment required for taking Pap smear:
 - vaginal speculums
 - swab holding forceps
 - receiver for soiled instruments
 - brush to wash soiled instruments
 - spatulas
 - gloves
 - linen saver
 - glass slides
 - slide marker
 - fixative spray
 - cytology forms
 - Pap smear register
 - decontamination fluid
 - sterilisation equipment.

Key Messages

- Get everything you need ready before doing the Pap smear – preparation is an important step in the Pap smear procedure
- Before taking the smear, counsel the client about the importance of screening and of returning for results
- A good quality smear is one that is taken from the transformation zone, has an endocervical component and is not obscured by blood or an exudate
- Remember to enter relevant information into the Pap register

Preparation

- Book an adequate number of clients prior to the session. Book sufficient clients so that the trainer and each participant are able to do at least two Pap smears each
- Explain to the client beforehand that you will be teaching nursing staff how to take a good Pap smear. Ask for client's permission to perform a vaginal examination and take a Pap smear.

Training Steps

- **Demonstrate the Pap smear technique to 1 or 2 participants at a time.**

You should demonstrate the Pap smear technique on a client. Explain each step of the procedure as you perform it, emphasising the key points discussed in Session 2. Remember to also demonstrate:

- Good client counselling and information-sharing skills
- How to fill in the cytology forms
- The rationale for and relevance of each field on the cytology request form
- How to fill in the Pap smear register and rationale for each data field
- The infection prevention procedure after the Pap smear has been done

- **Give participants the opportunity to ask questions, preferably after the client has left the room.**

- **Observe the participants taking Pap smears**

During this session, each participant should be given the opportunity to take a Pap smear from clients (ideally, each participant should perform 2 or more Pap smears during this session). Before taking the smear, the participant should counsel her/his respective client about the importance of screening and of returning for results. The participant then performs the Pap smear under the supervision of the facilitator. The participant should also fill in the cytology request form and enter all required patient information in the Pap register.

- **Give feedback to participants**

The facilitator should provide instant feedback regarding counselling, the Pap technique and record-keeping to the participant, highlighting areas for improvement.

Module 3: Objectives

- Learn how to take good quality Pap smears
- Understand cervical smear results, how to manage clients with abnormal Pap smears and how to implement good infection prevention procedures
- Learn how to monitor the quality of cervical smears

Ensuring Good Quality Pap Smears

A good smear is one that:

- is taken from the transformation zone
- has endocervical component
- is satisfactory for cytology evaluation

QUALITY 1

Problems Experienced by the Laboratory

Problem	How to avoid problem
Air-drying. If the cells are dried before it is spray-fixed, the cells enlarge and then the nuclear detail is lost.	Spray-fix the smear immediately!
Blood, mucus and pus. It distorts and obscures the epithelial cells.	Gently dab the cervix when there is copious discharge present. Use a swab holding forceps and a swab.
Traumatised cells – from excessive pressure when transferring the cells onto the glass slide.	The spatula must be scraped across the slide with a continuous stroke and using firm, gentle pressure.
Smudged patient information on the slide.	Write patient information on the frosted end of the slide. Place a paper clip over the writing on the frosted end of the slide and handle the slide by placing your fingers over the paper clip.

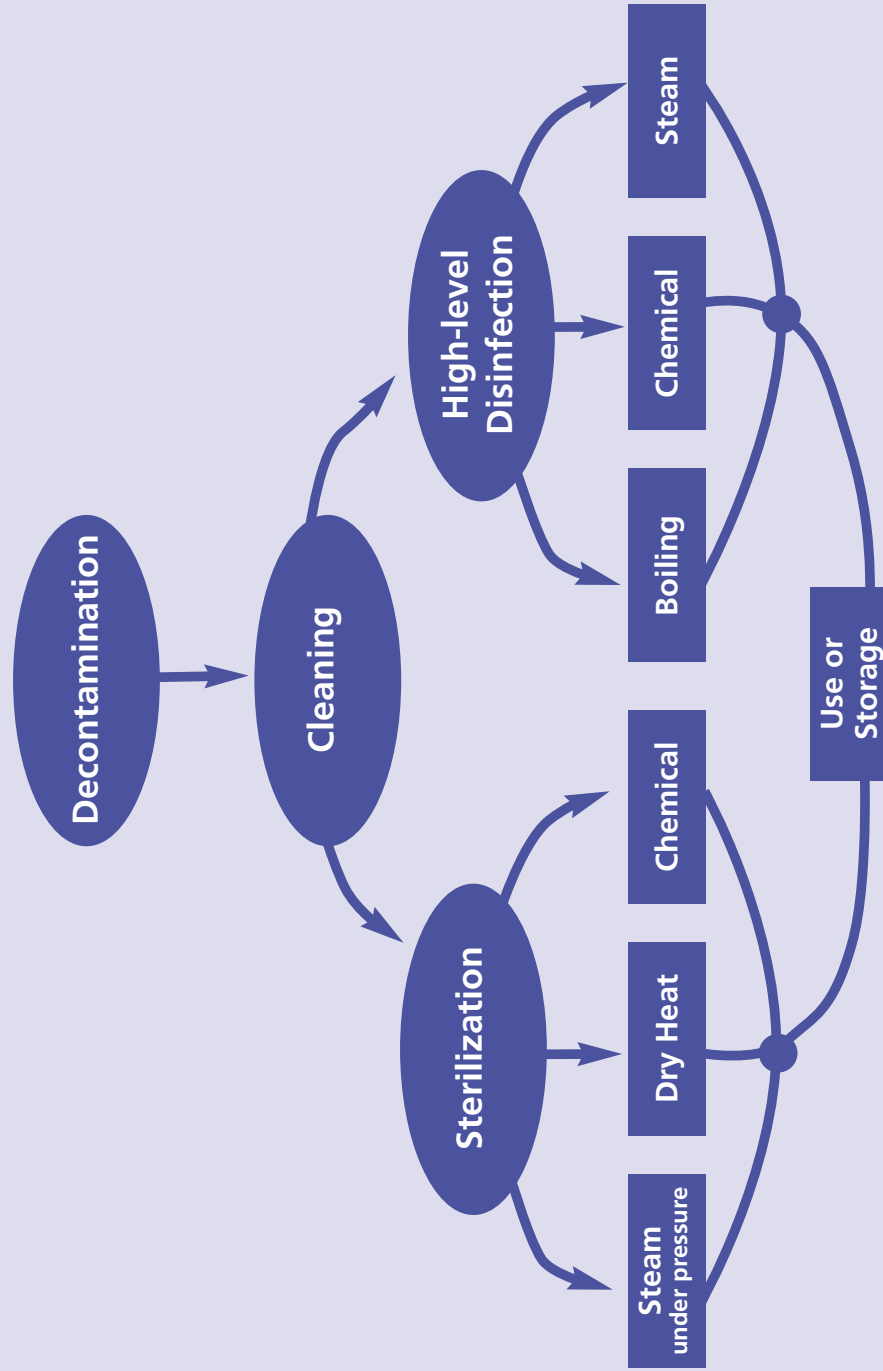
Infection Prevention

Process instruments properly after using them to reduce:

- transmission of infection from one client to another
- risk of infection for staff

INFECTION PREVENTION 1

Instrument Processing



Source: *Infection Prevention: A Reference Booklet for Health Care Providers*. EngenderHealth, New York, 2001

High-level Disinfection: Boiling

Decontaminate and clean the instrument



Boil in a covered container for 20 minutes at 100° C



Remove instrument from the boiling water



Allow to dry. Use immediately or store in a dry covered place

High-level Disinfection: Chemical

Decontaminate and clean, place instrument in chemical solution in a container e.g. 2% Glutaraldehyde (cidex)



Cover the container and soak for 20 minutes



Remove instrument from the solutions using forceps



Rinse instrument thoroughly with boiled water to remove chemical residue



Allow to air dry. Use immediately or store in a dry, covered place

Components of Cytology Reports

- Comment on adequacy
- Results:
 - no premalignancy or malignancy
 - premalignancy or malignancy present
 - organisms
- Management recommendations

Understanding Cytology Reports: Categories of Abnormalities

- ASC-US:** Atypical squamous cells of undetermined significance
- LSIL:** Low-grade squamous intra-epithelial lesions. Previously called Cervical Intra-epithelial Neoplasia I (CIN 1)
- ASC-H:** Atypical squamous cells where HSIL cannot be excluded
- HSIL:** High-grade squamous intra-epithelial lesions. Previously called CIN II or CIN III

Malignant cells of squamous carcinoma

- AGC:** Atypical glandular cells
- AIS:** Adenocarcinoma in situ

Adenocarcinoma

Managing Clients with Abnormal Results

ASC-US	→	repeat in 1 year
LSIL (CIN I)	→	repeat in 1 year
ASC-H	→	refer for colposcopy
HSIL (CIN II or CIN III)	→	refer for colposcopy
2nd LSIL or ASCUS after previous LSIL or ASCUS	→	refer for colposcopy
Malignancy	→	refer for further management
AGC	→	refer for further management
AIS	→	refer for further management
Adenocarcinoma	→	refer for further management

Training for Support Staff

M A N U A L B



This manual consists of 4 sessions

- Session 1: Introduction to the workshop
- Session 2: Cervical cancer and cervical screening
- Session 3: The *National Guidelines for a Cervical Cancer Screening Programme*
- Session 4: The role of support staff in promoting the *National Guidelines for a Cervical Cancer Screening Programme*

Time Required: 2 hours

Number of Participants: maximum 20

Overheads for the sessions above can be found at the end of Manual B

Manual B: **Session 1**

Introduction to the Workshop

Objectives

The objectives of this session are to:

- create a supportive learning environment
- introduce the agenda, objectives and discuss any housekeeping issues.

Time: 15 minutes

Facilitator Resources

- Facilitator notes under *Conducting Workshop Introductory Sessions* see page 19.
- Overhead: *Support Staff Manual: Introduction*

Preparation

Have overhead and overhead projector available.

Training Steps

- Ask participants to fill in and put on their name tags/labels.
- Facilitator/s introduce her/himself/themselves.
- Get participants to introduce themselves to one another – see *Conducting Workshop Introductory Sessions* see page 19.
- Go through the workshop objectives, using the Overhead: *Support Staff Manual: Introduction*.
- Present the agenda to the participants.
- Discuss any housekeeping issues.

Manual B: **Session 2****Cervical Cancer and Cervical Screening****Objectives**

By the end of this session participants will understand:

- how cancer of the cervix develops
- the importance of cervical cancer in South Africa
- how cancer of the cervix can be prevented.

Time: 45 minutes

Teaching Method

Discussion: Overview of cervical cancer

Facilitator Resources

- Suggested readings:
 - PATH. *Planning Appropriate Cervical Cancer Prevention Programs*, USA, 2000
 - L Denny, *Cervical cancer screening*. *Continuing Medical Education (CME)* 17. February 1999: 153-159
 - Department of Health. *National Guidelines for a Cervical Cancer Screening Programme*. 2000
- Facilitator notes
- Overheads: *Cervical Cancer 1-2*

Preparation

- Read the facilitator notes
- Take a look at the facilitator resources
- Have overheads and overhead projector available
- Have equipment (slide, spatula and speculum) available

Key Messages

Cancer of the cervix is a serious disease *but* it can be prevented.

Training Steps

- Ask participants to name the types of cancer they have heard of and ask whether they know what cancer is? Summarise their responses and provide additional information from the facilitator notes.
- Using Overhead: *Cervical Cancer 1*, discuss the importance of cervical cancer in SA.
- Discuss how cervical cancer can be prevented. Describe the Pap test and show participants a speculum, slide and spatula. Using Overhead: *Cervical Cancer 2* emphasise that a Pap smear:
 - is a simple test
 - is cheap
 - should not be painful
 - must be done regularly (at least once in 10 years).
- End the session emphasising that cancer of the cervix is a serious disease but that it can be prevented.

Facilitator Notes

Cervical cancer and cervical screening

Cancer is a disease that makes the body sick. It can affect any part of the body. Cancer starts when the cells of the body become sick. Cells are the smallest part of the body: so small that you need a microscope to see them. There are many different kinds of cells, each doing a special job. Cancer cells are sick cells that multiply and do not do the job they are supposed to do. Cancer can spread to other parts of the body (this is called invasive cancer). When a woman has cervical cancer the cells of the cervix/mouth of the womb are sick.

Cancer of the cervix is a very serious disease. Many women in South Africa and in the world get this type of cancer and a large number of them die every year. In South Africa 1 in 29 women get cancer of the cervix (i.e. when one counts 29 women, then 1 out of the 29 women will get cervical cancer in her lifetime). Overhead: *Cervical Cancer 1* illustrates this point.

Cervical cancer takes a long time to develop. It is most common among older women – women over the age of 50 years. This is an age where women are often caring for children and parents, bringing in an income and also playing important roles in their communities. So the loss of a woman at this age affects all of us.

The good news is that having a Pap smear can prevent cervical cancer!

A Pap smear is a test to check for sick cells on the skin of the cervix (mouth of the womb). The Pap smear is a very easy test that can be done by a doctor or a nurse. The patient lies on her back, on an examination couch in the clinic/hospital with her knees bent (legs pulled up and open) and apart, feet flat on the couch. An instrument (the speculum) is placed into the woman's vagina, so that the mouth of the womb is seen. A sample of the cells of the cervix is taken with a flat, thin, wooden stick (like a sucker stick), which is turned gently in the cervix. The sample is put onto a glass slide and sent to the laboratory. A Pap smear:

- is a simple test
- is cheap
- should not be painful
- must be done regularly (at least once in 10 years).

A Pap smear picks up abnormal cells when a woman does not know that she has any problem. These abnormal cells can be removed and the woman will not develop cervical cancer. If all women have 3 Pap smears 10 years apart once they are 30 years or older, we can reduce the number of women who get cervical cancer by half.

Cancer of the cervix is a serious disease *but* it can be prevented.

Manual B: **Session 3**

The National Guidelines for a Cervical Cancer Screening Programme

Objectives

By the end of this session participants will be aware of the goal and main components of the National Guidelines for a Cervical Cancer Screening Programme.

Time: 15 minutes

Teaching Method: Discussion

Facilitator Resources

- Suggested reading:
 - Department of Health. *National Guidelines for a Cervical Cancer Screening Programme*. 2000
- Overhead: *National Guidelines 1*

Preparation

- Take a look at the facilitator resources
- Refer to Manual A: Training for health care providers, Module 1, Session 5
- Have overheads and overhead projector available

Key Message

All women are entitled to have three free Pap smears in their lifetime, starting at the age of 30 years or older, with a 10-year gap between each smear.

Training Steps

- Ask participants if they are aware of what the government is doing to prevent cervical cancer?
- Using Overhead: *National Guidelines 1* briefly describe the National Guidelines for a Cervical Cancer Screening Programme
- Explain to participants that public sector services are preparing to offer women these 3 free Pap smears. Emphasise the important role that support staff can play in encouraging female clients, family and friends who are 30 years or older to have a Pap smear.

Manual B: **Session 4**

The Role of Support Staff in Promoting the National Guidelines for a Cervical Cancer Screening Programme

Objectives

By the end of this session participants will understand:

- how they can help to promote and support the cervical screening programme
- the role of support staff in encouraging women to come for screening.

Time: 45 minutes

Teaching Method

Role-play

Facilitator Resources

Role-play briefs

Preparation

Read through the role-play and discussion questions

Key Message

Support staff play an important role in promoting cervical screening

Training Steps

- Ask for 2 volunteers to take part in a role-play.
- Explain to the audience that the volunteers have been asked to play a specific role to highlight an important message. Take the 2 volunteers out of the room. Ask one of the volunteers to take the role of the client and the other the role of the receptionist. Give each one a written description of the role they must play and stay close by in case they have any questions. Leave the 2 role-players outside the room and prepare the room for the role-play (2 chairs and a table in the middle of the room).
- Allow the role-players to start when they are ready.
- After the role-play, use some questions to start the discussion. Ask:
 - *The client how she felt about the treatment received and the attitude of the staff at the health facility.*
 - *The receptionist how he/she felt about the client's attitude and about assisting the client.*
 - *The audience if the role-play represents a real life situation and if not, how it would be different in reality.*

- Summarise that the intention of the role-play was to:
 - make staff aware of the needs of clients who attend health facilities (privacy, confidentiality, to be treated with respect etc)
 - highlight the important role that support staff play in promoting screening for cervical cancer.

The role-play describes what actually takes place in many health care facilities.

Emphasise that a client who is treated with respect and dignity will feel satisfied and be an advocate for others to come and have a Pap smear. A considerate, caring, confidential environment will also encourage clients to feel free to discuss their concerns and ask questions at the health facilities. Support staff play an important part in creating this caring environment.

- End the workshop by reminding participants to encourage friends, family, neighbours and women in clinics to be screened.

Role 1**The Receptionist**

You are a receptionist at a busy clinic. The reception area is noisy. There are still many clients waiting to get their folders. Babies are crying, clients are grumbling about waiting too long and there are also clients that are angry with you because their folders cannot be found. It is still early in the morning but you have just had enough.

A soft-spoken client approaches you. She looks healthy and well – unlike so many of the clients waiting to be seen. You think that this well woman is wasting your time when there are so many sick people to attend to.

The client asks you if the clinic does Pap smears. You've heard that this is some sort of a test done on women but you are not exactly sure what a Pap smear is or if it is done at the clinic.

Instructions for Actor

- Act out how the receptionist in this busy clinic would respond to the client.
- The receptionist needs to come across as loud, rude and unhelpful.

Remember: This is just a role-play.

Role 2**The Client**

You are a softly spoken 35-year-old woman. A friend of yours had cancer of the womb and has died. You have heard that you can have a test called a Pap smear to check yourself. You are quite anxious in case you are not well. Also you are not too keen because you know that you have to be examined down there and you feel uncomfortable about it. You are not too sure where you can get this Pap smear done. Anyway you decide to go to your clinic to ask for a Pap smear.

The clinic is busy. You wait your turn in the reception room and then go up to the receptionist thinking: s/he should know if a Pap smear is done here and perhaps s/he will know whether you should be having a Pap smear.

You ask the receptionist for help.

Instructions for Actor

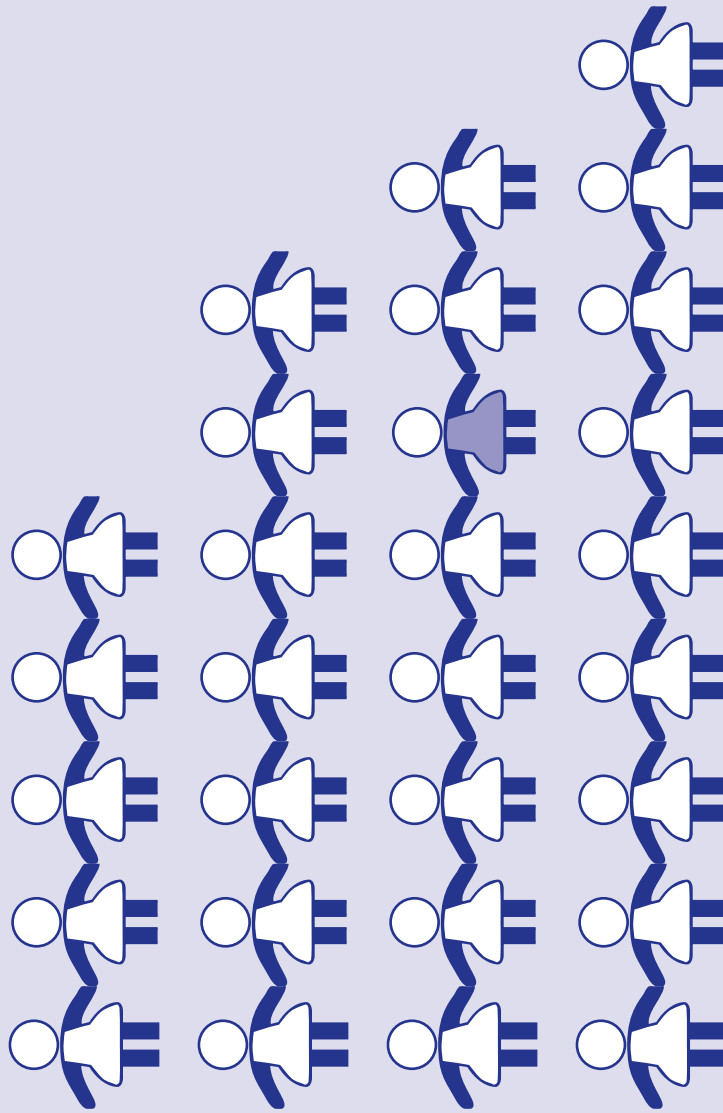
- Just for this role-play please forget everything you have just learnt about cervical cancer and screening.

Remember: This is just a role-play.

Workshop Objectives

- What is cervical cancer?
- How cervical cancer can be prevented
- The National Guidelines for a Cervical Cancer Screening Programme
- Your role in preventing cervical cancer

Risk of Getting Cervical Cancer



 Women without cervical cancer

 Woman with cervical cancer

CERVICAL CANCER 1

Pap Smears

- A simple test
- Cheap
- Should not be painful
- Must be done regularly (at least once in 10 years)

The National Guidelines for a Cervical Cancer Screening Programme

All women are entitled to 3 free Pap smears in her lifetime, with a 10 year interval between each smear, starting at the age of 30 years or older.

Goal: to screen at least 70% of women in the target age group within 10 years

Commonly Used Terms

Adenocarcinoma: A malignant neoplasm of the glandular epithelium of the cervix arising mainly in the endocervical canal. If the neoplasm does not extend beyond the basement membrane it is referred to as adenocarcinoma in-situ (AIS)

Atypical glandular cells (AGC): A glandular cell abnormality less severe than the precursor lesion adenocarcinoma in situ

Atypical squamous cells of undetermined significance (ASC-US): Cellular abnormalities that are more marked than reactive changes but that quantitatively or qualitatively fall short of a definitive diagnosis of a squamous intra-epithelial lesion. Where high-grade squamous intra-epithelial lesions cannot be excluded the abnormality is referred to as ASC-H

Bethesda classification system: A system of reporting cervical cytology results. It is aimed at producing more effective communication of cervical cytology from the laboratory to clinicians. The system includes a descriptive diagnosis and an evaluation of specimen adequacy

Carcinoma in situ (CIS): Early changes of cervical cancer involving the full thickness of the epithelium, but not extending through the basement membrane. This is recognised as the precursor of squamous carcinoma of the cervix

Cervical Intra-epithelial Neoplasia (CIN) classification system: This system grades the severity of cervical lesions. According to the system, mild cervical dysplasia is classified as CIN I, moderate dysplasia as CIN II and severe dysplasia and carcinoma in situ as CIN III. It has now been replaced by the Bethesda classification system

Colposcopy: Examination of the vagina and cervix using an instrument (colposcope) that magnifies the vaginal and cervical tissue

Columnar epithelium: This is a single layer of tall glandular cells (secretes mucus) that line the endocervix

Cone biopsy: A surgical procedure involving the removal of a cone shaped section of the cervix using a 'cold knife' (scalpel). This procedure is done either under regional or general anaesthesia. The excised tissue is available for histopathology

Cryotherapy: An outpatient treatment that uses extremely low temperatures to freeze and destroy abnormal tissue

Cytology: The scientific study of cells, using a microscope

Dysplasia of the cervix: An older term used to describe abnormality of the cervical squamous epithelium

Epidemiology: The study of the distribution and determinants of disease, health states and events in populations and the application of this study to control health problems

High-grade squamous intra-epithelial lesion (HSIL): A term used in the Bethesda classification system to describe cervical epithelial abnormalities that have a high likelihood of progressing to cervical cancer if not treated. Includes CIN II and CIN III

Histology: The scientific study of tissue (obtained during biopsy) using a microscope

Hysterectomy: Surgical removal of the uterus including the cervix

Hysteroscopy: A procedure that allows a clinician to inspect the cavity of the uterus using a hysteroscope (an instrument similar to a telescope). The hysteroscope is introduced through the vagina

Incidence: Incidence is the number of new cases arising in a given period in a specified population. It is usually expressed as the number of cases per 100,000 people

Large loop excision of the transformation zone (LLETZ): Also called loop electro-surgical excision procedure (LEEP). This is a procedure in which a thin wire electrode is used to remove the entire transformation zone. Excised tissue is available for histo-pathological examination

Low-grade squamous intra-epithelial lesion (LSIL): A term used in the Bethesda classification system to describe mild cervical cellular abnormalities. LSIL is likely to spontaneously regress to normal. It includes CIN I lesions

Metaplasia: This refers to a normal process by which one type of normal cells change into another type of normal cells. Transformation of endocervical cells into squamous cells (squamous metaplasia) occurs at the transition zone of the cervix

Microinvasive cancer: Presence of cancer in the stromal tissue immediately adjacent to the epithelium, usually to a depth of no more than a few millimetres; the earliest stage of malignant neoplastic invasion

Pap smear: A test in which a sample of cervical cells is examined to detect abnormalities

Pathology: The study of disease and its effect on body tissue

Prevalence: The prevalence of a disease is the total number of cases in a defined population at a specific point in time. It is usually expressed as a percentage of population

Squamocolumnar junction: The area at which the endocervical columnar cells meet ectocervical squamous cells on the cervix. This junction marks the inner extent of the transformation zone

Squamous epithelium of the cervix: This consists of multiple layers of thin flat irregular shaped cells, which covers the outer cervix

Squamous carcinoma: A malignancy of squamous cells

Transformation zone (T-zone): This area is located on the surface of the cervix. In this area the columnar cells are constantly changing into squamous cells. Cervical cancer generally originates in the transformation zone close to the squamocolumnar junction and a Pap smear picks up cell abnormalities from this area

Vault smear: A smear taken from the top of the vagina in women who have had a hysterectomy

Abbreviations

AGC	Atypical glandular cells
AIS	Adenocarcinoma in situ
ASC	Atypical squamous cells
ASC-H	Atypical squamous cells where HSIL cannot be excluded
ASC-US	Atypical squamous cells of undetermined significance
CANSA	The Cancer Association of South Africa
CHIP	Cervical Health Implementation Project
CIN	Cervical intra-epithelial neoplasia
HIS	Health information system
HLD	High-level disinfection
HPV	Human papillomavirus
HSIL	High-grade squamous intra-epithelial lesion
IEC	Information, education and communication
LEEP	Loop electro-surgical excision procedure
LLETZ	Large loop excision of the transformation zone
LSIL	Low-grade squamous intra-epithelial lesion
NCCP	National Cancer Control Programme
NDOH	National Department of Health
NHLS	National Health Laboratory Services
Pap	Papanicolaou
QA	Quality assurance
SASCC	South African Society for Clinical Cytology



