



CERVICAL CANCER

Information, Education and Communication Booklet for Health Workers

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Comprehensive Community Cancer
Programme (CCCP)

Research is our resource

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SECTION ONE: CERVICAL CANCER BACKGROUND INFORMATION

What is Cancer?

Cancer is uncontrolled or abnormal growth of cells in the body that spread or capable of spreading to other parts of the body and interfere with normal body functions.

What is Cervical Cancer?

- ❖ Cervical cancer is a type of cancer that begins on the mouth of the womb (cervix). Cells on the cervix begin to grow slowly and abnormally over several years. These early (pre-cancerous) changes can disappear on their own without causing problems. But in some women, they grow into cancer if they are not identified and treated early.

- ❖ Cancer of the cervix is one of the cancers that develop from reproductive system, other examples of Reproductive tract cancers affecting Women & Men include:

Cancer of the Cervix (Mouth of the womb)

Cancer of the Uterus (The womb)

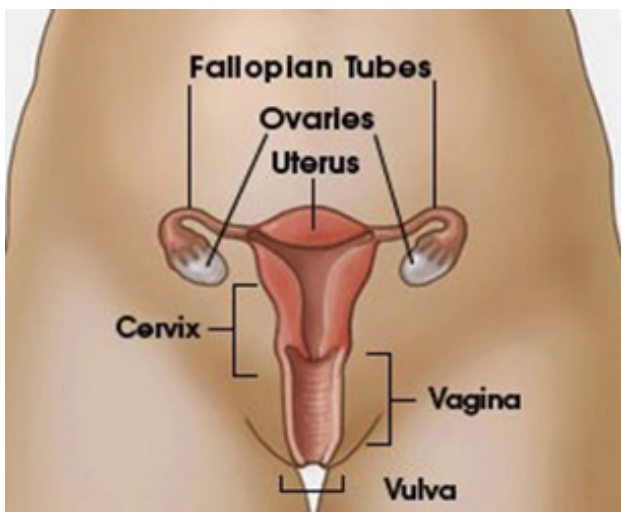
Cancer of the Ovary (where woman's eggs/ova come from)

Cancer of the Breast

Cancer of the Penis

Cancer of the Prostate

ANATOMY OF FEMALE GENITAL TRACT



Source: UCI - Fred Hutchinson Cancer Research Center

What causes Cervical Cancer?

Cancer of the cervix is caused by infection with a virus known as Human Papilloma virus (HPV). Most of the time, in the majority of women, HPV infection disappears without treatment. However, in some women, HPV stays in the cells for years and causes changes in these cells which may eventually become cancer.

HPV is a viral, sexually transmitted infection that very often occurs in young men and women, who may not be aware of it.

HPV is responsible for 99.7% of cervical cancer and Infects 75 - 80% of sexually active adults at some point, however, it can be cleared by the body's immune system most of the time and is preventable.

Common HPV Types and their effects

Over 100 types of HPV are currently known, most are not associated with cervical cancer or genital warts. The High risk types (16, 18) are associated with cancer and the low risk types (6, 11) are associated with genital warts as indicated below, however, all types can cause abnormal screening test like Pap smear tests.

	HPV Types	Lead to:
Low-Risk	HPV 6, 11, 40, 42, 43, 44, 54, 61, 70, 72, 81	Benign cervical changes Genital warts
High-Risk	HPV 16, 18, 31, 33, 35, 39, 45, 51, 52, 56, 58, 59, 68, 73, 82	Precancer cervical changes Cervical cancer Anal and other cancers

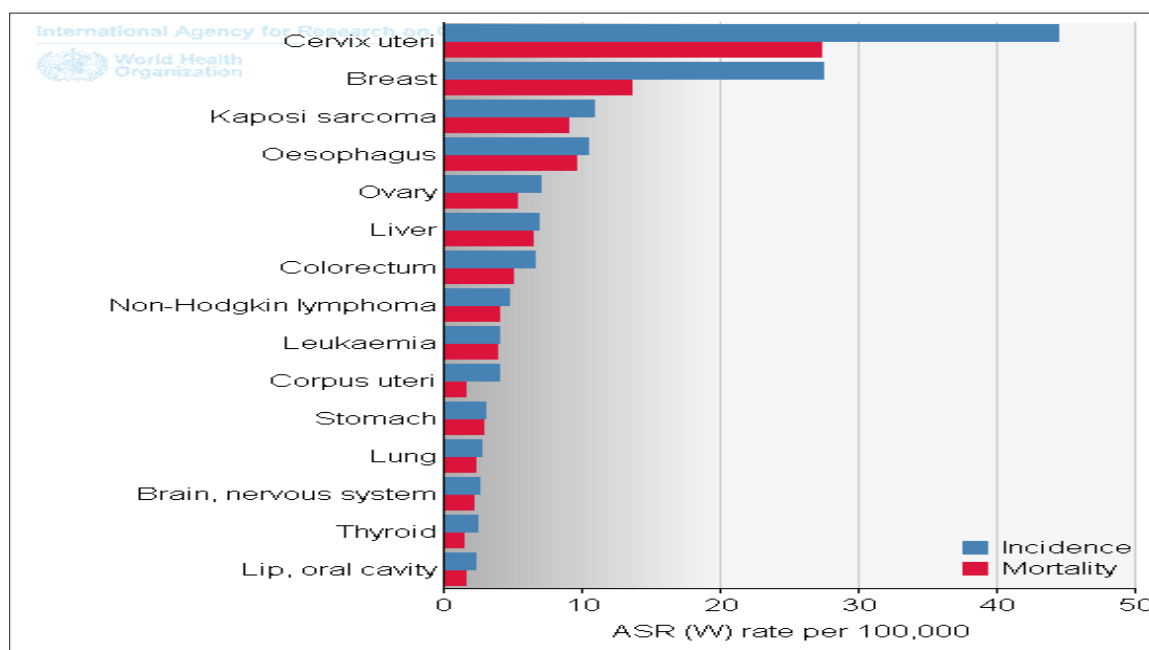
Source: Cox. Baillière's Clin Obstet Gynaecol. 1995;9:1. & Munoz et al. N Engl J Med. 2003;348:518. as cited by UCI - Fred Hutchinson Cancer Research Center

The risk factors for cervical cancer

- Early onset of sexual activity- this increases risk of HPV infection
- Multiple and/or high risk sexual partner – this leads to increased risk of HPV infection
- High parity- leads to increased risk of HPV infection.
- Suppressed immune system such as in person living with HIV. This is through two mechanisms; HIV's Immune suppression mechanism that diminish the body's innate tumor Surveillance ability and the HIV viral interaction with HPV oncoviruses, thus creating an environment that enhances tumor growth.
- Tobacco use - a known cancer causing product
- Low socio-economic status – this can lead to unsafe or high risk sexual practices for survival and therefore, increasing the risk of HPV infection.

What is the Burden of Cervical cancer in Uganda?

Cervical cancer is the leading cause of cancer deaths in women in Uganda. Research has shown that 48/100,000 women in Uganda have cervical cancer. This is among the highest prevalence rates in the world. Majority of women (over 80%) are diagnosed with cervical cancer at a late stage when no cure can be achieved. However, there are many more women who die of it but are not documented.



What are the symptoms and signs of cervical cancer?

a. Symptoms of Cervical cancer

Usually there are no symptoms during pre-cancer stage and early cancer. This is why it is so important to check (screen) for signs of pre-cancer.

The following are some of the commonest symptoms of cervical cancer:

Bleeding	• During or after contact/ sexual intercourse • During menopause • Between menstrual periods
Discharge	• Unpleasant odor • Change in color • Increasing discharge
Pain	• Back • Lower abdomen • During sexual intercourse

b. Signs of Cervical cancer

- Area that bleeds easily to the touch
- Fungating /exophytic cervical mass
- Necrosis
- Atypical vascularity
- Ulceration
- Color change (yellow, tan)
- Abnormal bimanual exam
- Enlarged, hard cervix
- Fixed cervix

A woman with any of these symptoms and signs, need to get an examination by a skilled health worker because the earlier cancer or pre-cancer are found, the better the chance of a cure.

How long does it take for an infection with HPV to develop into Cancer?

When a female gets infected with HPV during adolescence or after, HPV starts inducing changes in the cells on the mouth of the womb. If the virus persists, it causes pre-cancerous changes that may later develop into cancer. The estimated time for this process varies but ranges from 10 - 20 years. This is why cervical cancer can be prevented because it gives us a chance to check women (screen) for pre-cancer and provide treatment. It is also the reason why we recommend checking women between 25 and 60 years as they are most at risk of developing cancer. Screening can detect pre-cancer and most abnormal changes found on the cervix are treatable and curable.

Understanding the Natural History of Cervical Cancer

It is helpful for health care providers to be well educated about cervical cancer—with a good understanding of how cancer develops and how it attacks the body.

Before cervical cancer occurs, an area on the cervix will have been abnormal for 10 to 15 or 20 years. This abnormal area that precedes the development of cervical cancer is referred to as a precursor of cervical cancer or a precancerous lesion or pre-cancer. Pathologists refer to a precancerous lesion as cervical intraepithelial neoplasia (CIN) and grade it as mild, moderate, or severe (CIN 1, 2, or 3).

Screening tests such as the Pap smear and visual inspection with acetic acid (VIA) were designed for detection of CIN, since it is easily treated with an outpatient procedure. This is why much importance is placed on having screening done after the age of 25 years in Uganda or 30 in other countries but before the age of 40 to 50 years. Before age 30, many cases of CIN will regress to normal but after age 30, CIN is more likely to progress. If CIN is present, it can be eliminated by treatment such as cryotherapy and the woman's risk of developing cervical cancer is greatly reduced.

Without treatment, a woman with CIN will develop cancer in the abnormal area, invading the rest of the cervix and the adjacent tissues. The cancer grows slowly in the area of the cervix, vagina, and uterus at first, but then it spreads to the pelvic soft tissues and bones. A woman may have cervical cancer for years before she develops severe pelvic and low back pain and severe vaginal discharge. Death may occur due to blockage of the ureters (renal failure) or severe vaginal bleeding (anemia).

World Health Organization (WHO) Comprehensive Cervical Cancer Prevention and Control interventions

Primary prevention

- ✓ Health education to reduce high -risk sexual behavior to limit HPV transmission/acquisition
- ✓ Delay age of first sexual intercourse
- ✓ Limit number of partners, change in sexual behavior
- ✓ Condom use
- ✓ HPV vaccination targeting girls aged 9-13 years

Early detection (secondary prevention)

- ✓ **Screening:** Identify and treat precancerous lesions before they progress to cervical cancer
- ✓ **Early diagnosis:** Identify and treat early cancer while the chance of cure is still good (reduces cervical cancer mortality)

Tertiary prevention

- ✓ Treatment of invasive cancer
- ✓ Palliative care

SECTION TWO: CERVICAL CANCER SCREENING

- ❖ Early detection of cervical cancer, by screening women in the target age group of 25 years and above followed by treatment of detected precancerous lesions can prevent the majority of cervical cancers.
- ❖ Screening is a public health intervention provided to an asymptomatic target population.
- ❖ Screening is not undertaken to diagnose a disease, but to identify individuals with increased probability of having either the disease itself or a precursor of the disease.
- ❖ Not all diseases are appropriate for a screening programme. The following are the most important criteria to determine whether a disease is appropriate for a screening programme:
 - The disease must have serious consequences.
 - The disease must have a detectable preclinical / asymptomatic stage.
 - Treatment of the preclinical stage must favourably influence the long-term course and prognosis of the disease being screened for.
 - Treatment must be available and accessible for those who have a positive screening test.
- ❖ The natural history, screening tests and treatment options for cervical cancer meet these criteria.
- ❖ Decisions about the target age group and frequency of screening are usually made at the national level on the basis of the local proportion of women with pre-cancer or cancer out of all women of the same age, the number of new cervical cancer cases recorded in the last two or three years, and the availability of resources and infrastructure, as well as other factors, such as HIV prevalence.

Characteristics of a good screening test

A good screening test should be:

- ✓ Accurate: the result of the test is correct
- ✓ Reproducible: repeating the same test will give the same result
- ✓ Inexpensive: affordable to the health system in terms of both financial and human resources, and to all patients and their families in terms of access to necessary services
- ✓ Relatively easy: uncomplicated to perform and to provide follow-up care for women with abnormal results
- ✓ Acceptable: well tolerated by both the patient and the provider
- ✓ Safe: the test procedure and management of screen-positive subjects have no or minimal adverse effects
- ✓ Available: accessible to the entire target population.

Cervical cancer screening age and frequency

- ❖ The age and frequency of screening are based on current evidence and on the natural history of HPV and cervical pre-cancer.
- ❖ High-risk HPV infections are very common in young women, but most of these infections are transient: they are eliminated spontaneously by the woman's body. Only a small percentage of all HPV infections that persist for many years may lead to invasive cancer.
- ❖ Cervical cancer usually develops slowly, taking 10–20 years from early pre-cancer to invasive cancer, so cervical cancer is rare before the age of 30.
- ❖ Screening younger women will detect many lesions that will never develop into cancer, which will lead to considerable overtreatment, and is thus not cost-effective.

Cervical cancer screening age & frequency for women living without HIV

- ❖ WHO recommends that Cervical cancer screening should not start before 30 years of age.
- ❖ Screening women between the ages of 30 and 49 years reduces deaths from cervical cancer, therefore, Cervical cancer screening is recommended for every woman in this target age group, but this may be extended to younger ages if there is evidence of a high risk for CIN2+. This is why in Uganda it is recommended to a woman to start screening from the age of 25 years.
- ❖ Among women who test negative with visual inspection with acetic acid (VIA) or cytology, the interval for re-screening should be three to five years (currently after every three years in Uganda). Among women who test negative with HPV testing, re-screening should be done after a minimum interval of five years.
- ❖ After a subsequent screening with negative test results, and also for older women, the screening interval can be longer than five years.
- ❖ Women who have been treated for cervical pre-cancer should receive post-treatment follow-up after 12 months.

Cervical cancer screening age & frequency for women living with HIV

- ❖ Screening for cervical pre-cancer and cancer should be done in women and girls who have initiated sexual activity as soon as the woman or girl has tested positive for HIV, regardless of age.
- ❖ Women living with HIV whose screening results are negative (i.e. no evidence of precancer is found) should be rescreened within three years, currently in Uganda, it is advised to screen after every one year.
- ❖ Women living with HIV who have been treated for cervical pre-cancer should receive post-treatment follow-up after 12 months.
- ❖ Women living with HIV have a higher risk of having persistent HPV infections, and a higher risk of developing pre-cancer.
- ❖ In addition, women living with HIV are more likely to develop cervical cancer earlier and to die from it sooner. Because they develop pre-cancer at a younger age and the time for pre-cancer to progress to cancer can be shorter, women living with HIV are advised to follow a different screening schedule from those not living with HIV.
- ❖ HIV screening is not mandatory for cervical cancer screening. However, in an area with high endemic HIV infection, women should be screened for HIV so that they know their status and, if positive, they should be counselled on the meaning of the test result and provided with appropriate treatment and follow-up care.

Screening methods for cervical pre-cancer

World Health Organization (WHO) recommends the following methods for cervical pre-cancer screening:

- VIA / VILI - Visualization with acetic acid or visual inspection with acetic acid (VIA) or Lugol's iodine (VILI)
- Cytology (pap smear)
- HPV testing

Visual screening methods

- Visual inspection with acetic acid (VIA) is a method for detecting early cell changes that are visible when using a speculum to inspect the cervix with the naked eye after applying dilute (3–5%) acetic acid to it.
- It requires training and supervision of primary care providers, as well as ongoing quality control and quality assurance.

Who should be tested using VIA method?

- VIA is appropriate to use in women whose squamocolumnar junction (SCJ) is visible, typically in those younger than 50.
- This is because the SCJ gradually recedes into the endocervical canal when menopause occurs, making it possible to miss lesions when relying on visual inspection.

Overview of the procedure of VIA method

- VIA requires use of a speculum and light source, and a trained health-care provider.
- The health care provider performs a speculum examination, identifying the SCJ and carefully

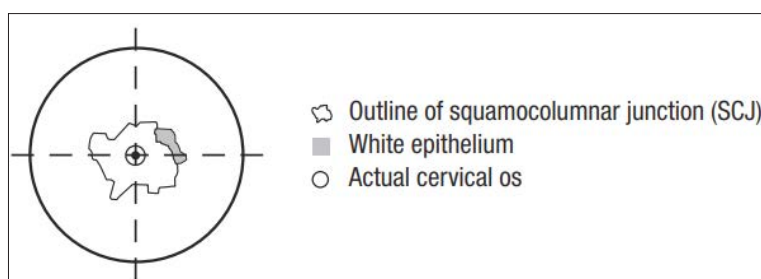
inspecting the cervix for visual signs suspicious for cancer or pre-cancer.

- A 3–5% acetic acid solution is liberally applied to the cervix with a large cotton swab. After removing the cotton swab, the provider waits for at least one minute, during which time any areas that became faintly white simply due to inflammation or physiological cell changes (metaplasia) will recede.
- Acetowhite changes on the cervix that do not recede after one minute are more likely to be associated with cervical pre-cancer or cancer.
- If these changes are seen in the transformation zone and have well-defined borders, they are considered a positive. If no persistent acetowhite changes are noted, a negative result is reported.



Source: Reproductive Health Division, Ministry of Health-Uganda

VIA results recorded on labelled drawing- source WHO



Source: WHO, 2014 Comprehensive cervical cancer control: a guide to essential practice – 2nd ed

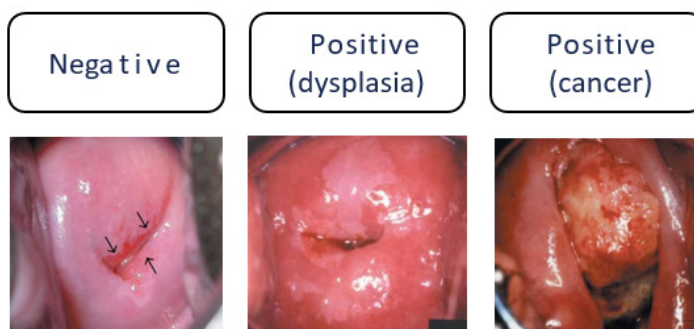
Strengths and limitations of VIA

- VIA testing can detect both early changes and those representing more advanced precancer.
- The immediate result allows the patient to be offered treatment at the same visit (i.e. the single visit approach). Alternatively, if the patient prefers not to do it immediately or if treatment is not available, then treatment can be done at a subsequent visit soon after.
- A diagnostic step, such as a colposcopy and/or biopsy, is usually not performed at this time (at the same screening facility), but if the cervix shows any unusual signs or the provider suspects cancer, the patient can be referred for further diagnosis.
- VIA is quite inexpensive, utilizes locally sourced supplies (vinegar and cotton), and does not rely on laboratory services. It can be performed by trained providers, with adequate visual acuity, at any level of the health system. Training can be accomplished in a few days using a

competency-based approach.

- VIA is a subjective test and therefore depends on the skills and experience of the provider executing the test. Skills must be used regularly, and refresher courses are recommended.
- Due to the subjective nature of the test, quality control and quality assurance for VIA is particularly important. This can be achieved through supervision and routine monitoring.

Illustration of possible VIA result



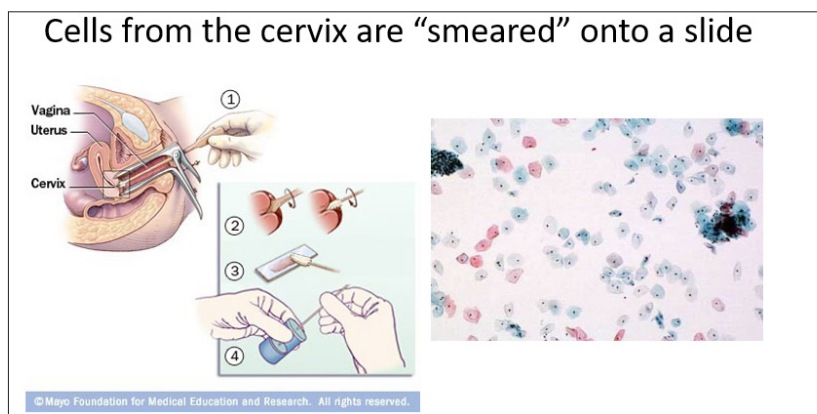
Source: UCI - Fred Hutchinson Cancer Research Center

Papanicolaou (“Pap”) smear test or cytology

- Cytology-based screening involves taking a sample of cells from the entire transformation zone.
- The cells are either fixed on a slide at the facility (Pap smear) or placed in a transport medium (liquid-based cytology) and then sent to the laboratory where expert cytotechnologists examine the cells under a microscope.
- If abnormal cells are seen on microscopic examination, the extent of their abnormality is classified using the Bethesda System.

Overview of Pap smear procedure

- ❖ Collection of a cytology sample requires a speculum and adequate lighting to visualize the entire surface of the cervix.
- ❖ The provider takes specimens from the face of the cervix and the endocervix using a spatula or brush and transfers the specimen to a slide (Pap smear) or a preservative solution (LBC).
- ❖ The sample must be appropriately labelled and transported to the laboratory, where skilled personnel are needed to process and interpret it.



Source: Mayo Foundation for Medical Education and Research as cited by UCI - Fred Hutchinson Cancer Research Center

Molecular screening method: HPV DNA test

- ❖ Molecular HPV testing methods are based on the detection of DNA from high-risk HPV types in vaginal and/or cervical samples.
- ❖ Testing women younger than 30 years old for these viruses is not advised because many young women are infected with them, but most HPV infections will be spontaneously eliminated from their bodies before they reach the age of 30. However, as a woman ages, if high-risk HPV is detected, it is more likely that her HPV infection is persistent.
- ❖ Since persistent HPV infection is the cause of nearly all cases of cervical cancer, a positive test result in a woman over the age of 30 indicates that she may have an existing lesion or may be at risk for future pre-cancer and cancer.

Overview of HPV DNA test procedure

- ❖ HPV testing does not necessarily require a pelvic examination or visualization of the cervix. A health-care provider can collect a sample of cells by inserting a small brush or other appropriate device into the vagina, and then placing it in a small container with an appropriate preservative solution.
- ❖ It may also be collected at the time of a speculum examination.
- ❖ The sample can also be self-collected by the woman; she can be given the brush and the special container and instructed how to use them.
- ❖ Currently expensive and long turnaround time, however, rapid testing and point of care technologies e.g. careHPV is in development process.



Source: UCI - Fred Hutchinson Cancer Research Center

Comparison of cervical pre-cancer screening methods

Method	Procedure	Strengths	Limitations
Molecular screening method: HPV DNA test	The sample is taken by the provider or by the woman herself, stored in a container with appropriate preservative solution and sent to the laboratory (or processed immediately on-site if a new test is used).	- Collection of the specimen is simple, allowing the possibility of self-collected specimens. - The assay result is a definite end-point. - If the new test with on-site processing and rapid results is used, a positive result can be followed by an offer of immediate treatment (i.e. single-visit approach).	- It requires proprietary supplies and equipment, which may not be easily accessible. - The unit cost is often high. - Storage of materials needed for tests can be problematic. - In general, the laboratory and specimen transport requirements are complex. - Using an HPV test that is currently available, the result will not be immediately available, requiring the patient to make multiple visits and increasing the risk of loss-to-follow-up.
Visual screening method: Visual inspection with acetic acid (VIA)	A trained provider examines the cervix at least 1 minute after applying 3–5% acetic acid, to visualize cell changes on the cervix.	- This method is relatively simple and inexpensive. - The results are available immediately. - VIA can be performed by a wide range of personnel after brief training. - Infrastructure requirements are minimal. - A positive result can be followed by an offer of immediate treatment (i.e. single-visit approach).	- After training, VIA providers need initial supervision and continuing education (refresher retraining) and quality control and quality assurance. - The end point is subjective; there is high variability in the accuracy of results between providers. - VIA is not appropriate for many postmenopausal women.

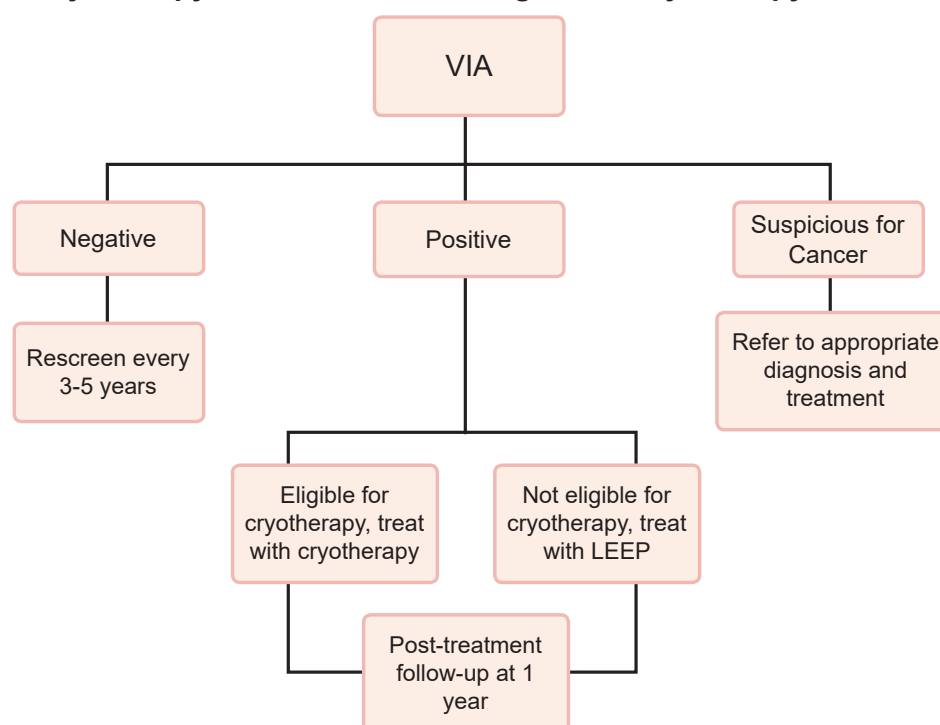
Cytologybased screening method: c. Conventional cytology (Pap smear)	A sample of cervical cells is taken by the provider using a spatula and/or small brush, fixed onto slides and examined by a trained cytotechnician in a laboratory	• This method has proven effectiveness to decrease cervical cancer in the context of a well-functioning system. • It is widely accepted in high-resource countries. • Training and mechanisms for quality control and quality assurance are well established.	• The method is difficult to introduce and maintain. • Systems are needed to ensure timely return and communication of test results and follow-up care for screen-positive women. • Transportation is required for specimens to the laboratory and for results back to the clinic. • Cytology programmes require clinical and laboratory quality control and quality assurance. • Interpretation is subjective. • Results are not immediately available, so multiple visits are required, increasing the risk of loss to follow-up.
d. Liquidbased cytology (LBC)	A sample of cervical cells is taken by the provider with a spatula and/or small brush, immersed in a preservative solution and sent to a laboratory for processing and review by a trained cytotechnician.	• Once cytotechnicians are proficient, LBC samples take less time to review. • Samples can also be used for molecular testing (such as for HPV DNA). • Training and mechanisms for quality control and quality assurance are well established.	• Supplies and laboratory facilities for LBC are more expensive than for conventional cytology. • Other limitations are the same as for conventional cytology

Screen-and-treat approach

- ❖ Adding a diagnostic step after screening, before treatment of pre-cancer, can result in high loss to follow-up because additional patient visits are required as well as a longer time interval between screening and treatment.
- ❖ To reduce such loss to follow-up, the screen-and-treat approach has been developed and this strategy is increasingly being adopted worldwide.

- ❖ The screen-and-treat approach utilizes a screening test that gives either immediate or rapid results that can be followed closely by treatment of those women who screen positive for pre-cancer.
- ❖ Ideally, the treatment can occur on the same day and at the same location (i.e. the single visit approach). If this is not possible or the patient declines, then treatment can be offered shortly after screening at an arranged time and location easily accessible to the patient.
- ❖ The screen-and-treat approach eliminates the extra visits and time required for the diagnostic step.
- ❖ A limitation to the screen-and-treat approach is that the lack of a diagnostic step can result in false-positive results and overtreatment. However, concerns about overtreatment must be weighed against the low morbidity associated with treatment using cryotherapy and the overall benefit of ensuring higher rates of treatment.
- ❖ Another concern about the screen-and-treat approach is that when cryotherapy is done immediately after positive VIA or HPV results, no tissue sample would be available if needed for histological examination at a later time.
- ❖ To try to reduce overtreatment while still retaining the benefits of the screen-and-treat approach, another strategy is to follow an initial positive screening test with a second test, and then only treat the patient if both tests are positive.

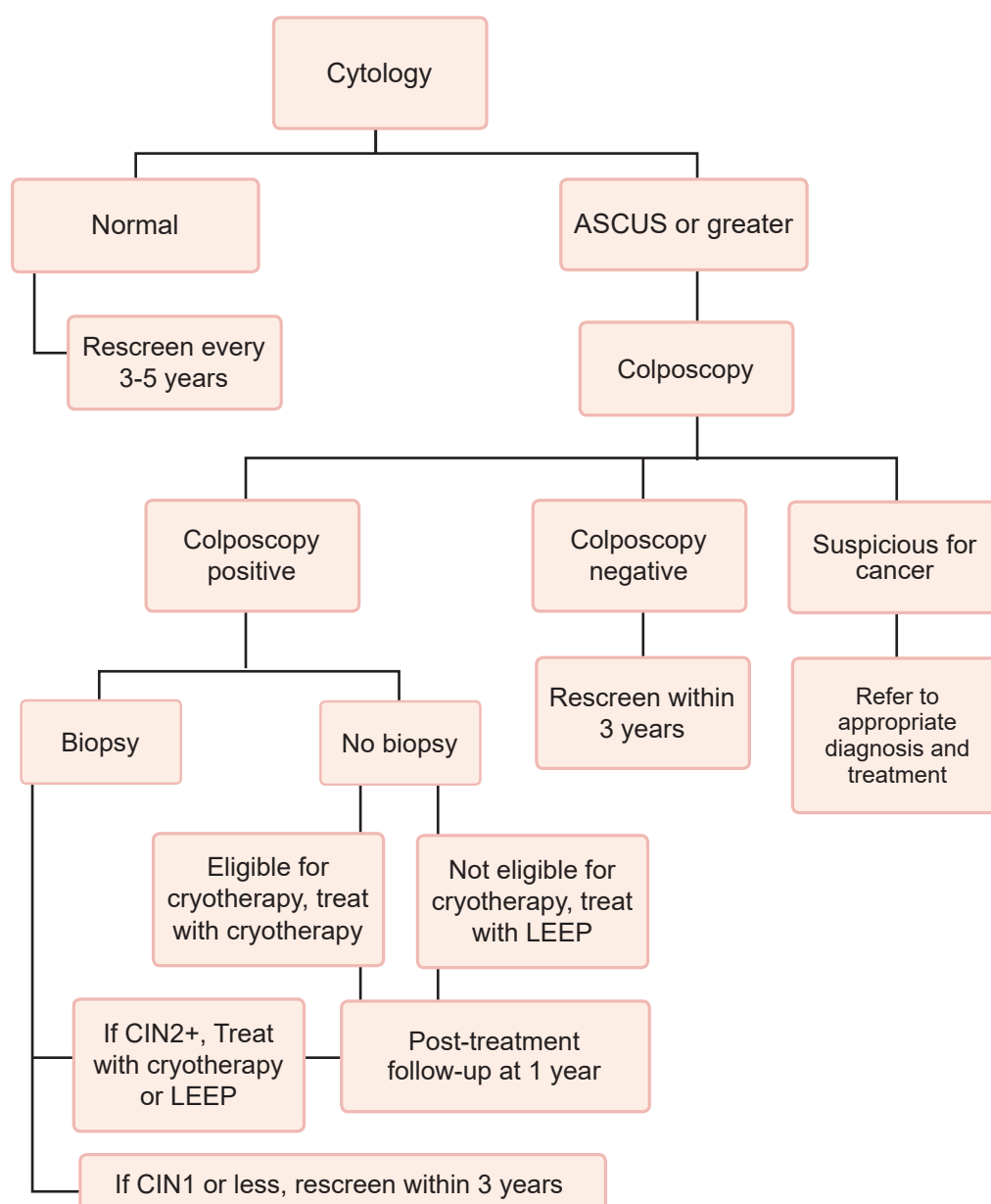
Flowcharts for screen-and-treat strategies (negative or unknown HIV status): Screen with VIA and treat with cryotherapy, or LEEP when not eligible for cryotherapy



Source: WHO; 2013. WHO Guidelines for screening and treatment of precancerous lesions for cervical cancer prevention

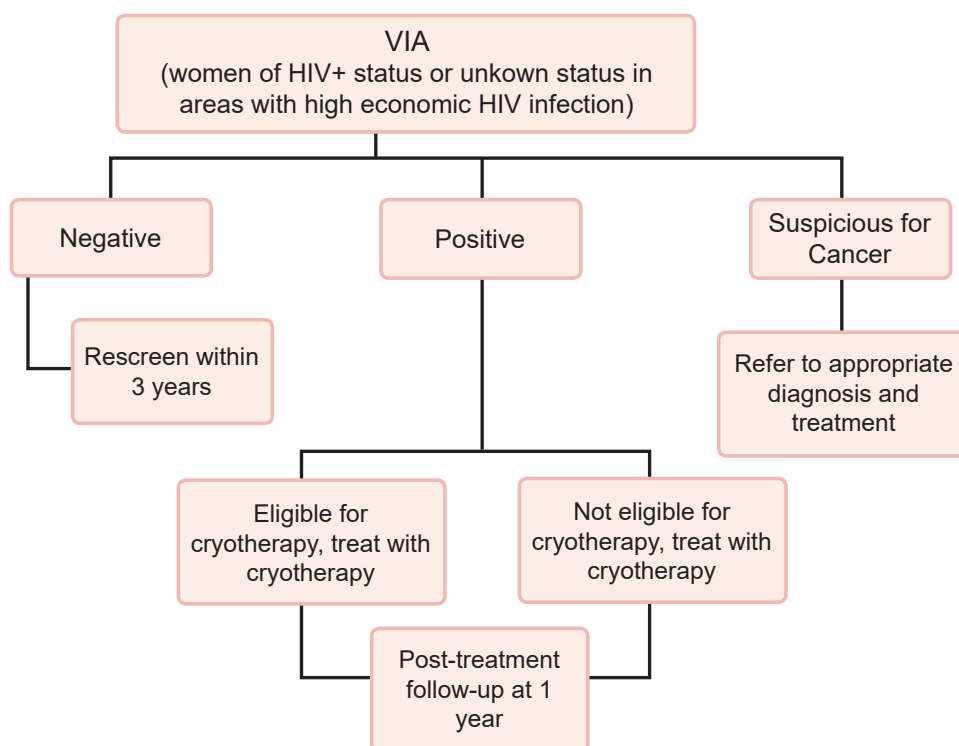
Currently in Uganda persons living without HIV are advised to screen for pre-cancer after every 3 years, following negative screening test.

Flowcharts for screen-and-treat strategies (negative or unknown HIV status) using cytology method



Source: WHO; 2013. *WHO Guidelines for screening and treatment of precancerous lesions for cervical cancer prevention*

Flowcharts for screen-and-treat strategies (HIV-positive status or unknown HIV status in areas with high endemic HIV infection)



Source: WHO; 2013. *WHO Guidelines for screening and treatment of precancerous lesions for cervical cancer prevention*

Currently in Uganda persons living with HIV are advised to screen for pre-cancer after every 1 year, following negative screening test.

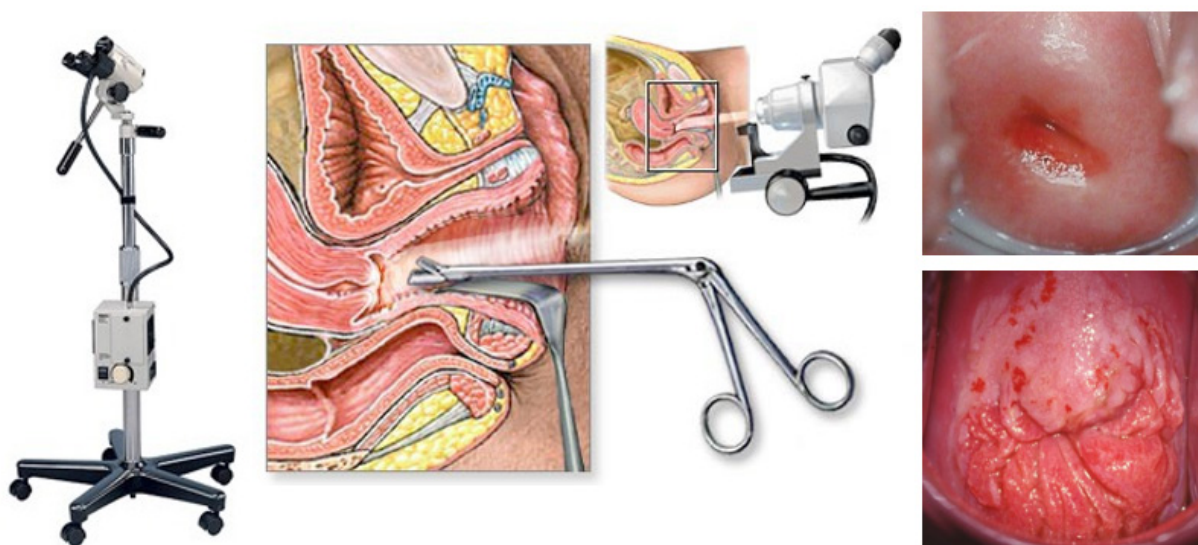
SECTION THREE: DIAGNOSTIC TESTS FOR DETECTION OF CERVICAL PRE-CANCER AND CERVICAL CANCER

How is Cervical cancer confirmed?

A diagnostic or confirmatory test is a medical test performed to aid in the diagnosis or detection of a disease. Because not all women with positive results on cervical screening tests actually have pre-cancer, a subsequent diagnostic test is sometimes used for definitive diagnosis or confirmation of pre-cancer or cancer.

Colposcopy and cervical biopsy

- Colposcopy, biopsy and endocervical curettage (ECC) are the most commonly used diagnostic tests for cervical pre-cancer. They require a high level of resources and training.
- If a colposcope, biopsy forceps and an endocervical curette are available, these procedures may be provided at the primary care level by physicians and midlevel providers who have had competency-based training and appropriate supportive supervision. More often, they are performed as outpatient procedures at the secondary care level (district and regional referral hospital).
- Colposcopy is the examination of the cervix, vagina and vulva with an instrument that provides strong light and magnifies a field, allowing specific patterns in the epithelial (surface) layer and surrounding blood vessels to be examined.
- This can be done with a colposcope, an expensive, specialized piece of equipment or using specially designed video or digital cameras. Typically, colposcopy is used on patients with positive screening results, to verify the presence, extent and type of pre-cancer or cancer, to guide biopsies of any areas that appear abnormal, and to help determine whether cryotherapy or LEEP is the most appropriate treatment.



Source: WHO, 2014 Comprehensive cervical cancer control: a guide to essential practice – 2nd ed

Biopsy

- Biopsy is the removal of small samples of abnormal tissue for microscopic examination to achieve a diagnosis. Biopsies can be taken from areas of the cervix that are VIA-positive or from areas that appear suspicious for cancer.
- If a lesion or abnormal structure of the cervix is not visible to the naked eye, colposcopy can assist in pinpointing the site or sites where one or more biopsies should be taken.
- Typically, a biopsy is taken from each abnormal area, although random biopsies may be useful under certain circumstances.
- Biopsy is used to determine the degree of abnormality of the cell changes at the cervix and to rule out cancer.
- After examination, the result is classified as normal, as cervical intraepithelial neoplasia (CIN), or as invasive carcinoma.
- The precancerous lesions are classified as low-grade (CIN1) or high-grade (CIN2 and CIN3, collectively referred to as CIN2+) pre-cancer.
- The classification is based on the thickness of the abnormal epithelium: the deeper the abnormal cells reach from the basement membrane toward the upper layer of cells, the higher the degree of CIN.
- The degree of abnormality informs recommendations for treatment: highgrade lesions (CIN2+) are moderate or severe pre-cancer and are treated, whereas CIN1 is a mild abnormality that typically represents an infection with a low-risk HPV type rather than a true precursor to cervical cancer, and so CIN1 is not usually treated.
- If invasive cancer is found on biopsy, the patient should be referred for treatment.

Endocervical curettage

- Endocervical curettage (ECC) is a procedure in which some surface cells are gently scraped from the endocervical canal with a special thin instrument or spatula, and the tissue is placed in a container with a fixative solution and sent to a laboratory for examination.
- ECC is used in the following circumstances:
 - i. rare cases when the screening test suggests there may be a pre-cancer or cancer that is not visible with colposcopy, leading the provider to suspect that the lesion is hidden inside the cervical canal;
 - ii. if the squamocolumnar junction cannot be fully visualized in the face of an already suspected lesion;
 - iii. if the Pap smear revealed a glandular lesion, which usually arises from the columnar epithelium inside the canal; and
 - iv. if screening and/ or colposcopy were not adequate because the transformation zone was not seen in its entirety and cancer is suspected.

The endocervical cytobrush specimen may be used as an equivalent approach instead of ECC.

SECTION FOUR: TREATMENT OPTIONS FOR CERVICAL PRE-CANCER

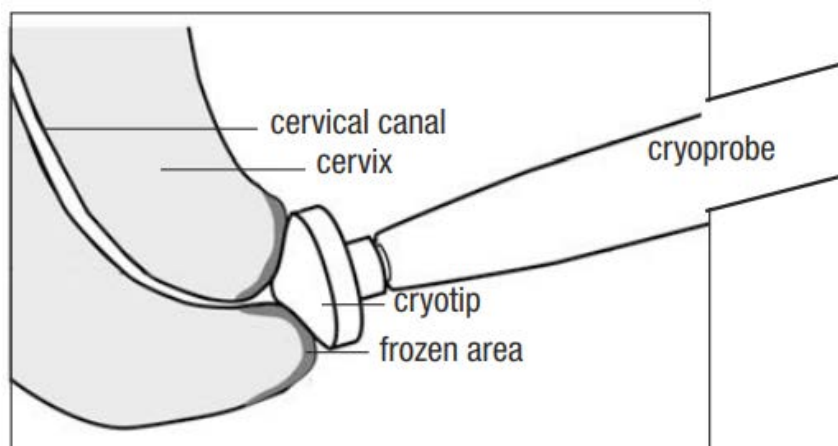
- Women with pre-cancer must receive effective treatment, which can usually be provided by trained health care provider at health centres, in contrast to treatment for suspected or confirmed invasive cancer, which requires specialist medical providers at higher-level facilities (hospitals).
- In the context of a screen-and-treat approach, treatment follows a positive pre-cancer screening test without diagnostic confirmation.
- Treatment aims to destroy or remove areas of the cervix identified as pre-cancer.
- Treatment methods may be ablative (destroying abnormal tissues by burning or freezing) or excisional (surgically removing abnormal tissues).
- Unless there are other compelling reasons to remove the uterus, hysterectomy should not be performed for precancer.
- The choice of treatment will depend on:
 - i. the benefits and harms of each method
 - ii. the location, extent and severity of the lesion
 - iii. the cost and resources required to provide treatment
 - iv. the training and experience of the provider.
- Regardless of the treatment method recommended by the provider, the woman needs information about the procedure so that she can make an informed choice.
- Consent from the patient is needed prior to the procedure, but it can be given verbally.
- If cancer is suspected: If a patient has a cervical abnormality that looks suspicious for cancer, the patient should NOT be treated with cryotherapy, LEEP or CKC. The appropriate next step for her is a cervical biopsy to confirm or rule out a diagnosis of cancer.
- If the provider has the appropriate training and equipment, he or she can perform the biopsy. If not, the provider should refer the patient for prompt further evaluation.

Option 1: Cryotherapy

- ❖ Cryotherapy eliminates precancerous areas on the cervix by freezing (an ablative method).
- ❖ It involves applying a highly cooled metal disc (cryoprobe) to the cervix and freezing the abnormal areas (along with normal areas) covered by it.
- ❖ The supercooling of the cryoprobe is accomplished using a tank with compressed carbon dioxide (CO₂) or nitrous oxide (N₂ O) gas.
- ❖ Cryotherapy can be performed at all levels of the health system, by health-care providers (doctors, nurses and midwives) who are skilled in pelvic examination and trained in cryotherapy. It takes about 15 minutes and is generally well tolerated and associated with only mild discomfort.

- ❖ It can, therefore, be performed without anaesthesia.
- ❖ Following cryotherapy, the frozen area regenerates to normal epithelium.

Position of cryoprobe on the cervix and ice forming



Source: WHO, 2014 Comprehensive cervical cancer control: a guide to essential practice – 2nd ed

Eligibility criteria cryotherapy:

- ❖ Screen-positive women (such as with VIA screening) or women with histologically confirmed CIN2+ are eligible for cryotherapy if the entire lesion and squamocolumnar junction are visible, and the lesion does not cover more than three quarters of the ectocervix.
- ❖ The patient is not eligible for cryotherapy if the lesion extends beyond the cryoprobe being used, or into the endocervical canal or if the lesion is suspicious for invasive cancer.

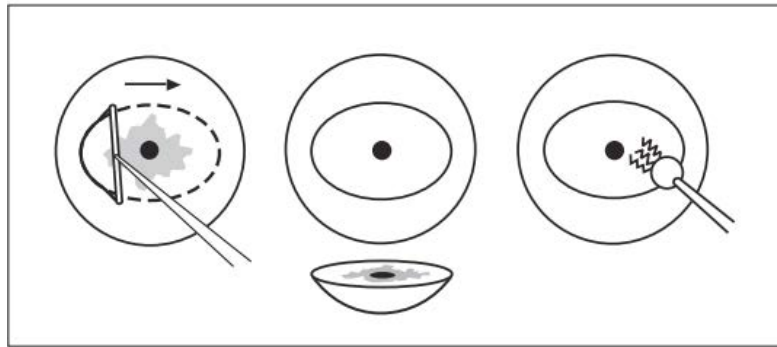
Post procedure cryotherapy:

- ❖ It takes a month for the cervical tissue to regenerate.
- ❖ The patient should be advised that during this time she may have a profuse, watery discharge and she should avoid sexual intercourse until all discharge stops, or use a condom if intercourse cannot be avoided.

Option 2: Loop electrosurgical excision procedure

- ❖ LEEP is the removal of abnormal areas from the cervix using a loop made of thin wire powered by an electrosurgical unit. The loop tool cuts and coagulates at the same time, and this is followed by use of a ball electrode to complete the coagulation.
- ❖ LEEP aims to remove the lesion and the entire transformation zone.
- ❖ The tissue removed can be sent for examination to the histopathology laboratory, allowing the extent of the lesion to be assessed.
- ❖ Thus, LEEP serves a double purpose: it removes the lesion (thus treating the pre-cancer) and it also produces a specimen for pathological examination.
- ❖ The procedure can be performed under local anaesthesia in hospital with gynecologist(s) on an outpatient basis and usually takes less than 30 minutes. However, following LEEP, a patient should stay at the outpatient facility for a few hours to assure bleeding does not occur.

LEEP of an ectocervical lesion with one pass: excision of the lesion with wire electrode and coagulation with ball electrode



Source: WHO, 2014 Comprehensive cervical cancer control: a guide to essential practice – 2nd ed

Eligibility criteria:

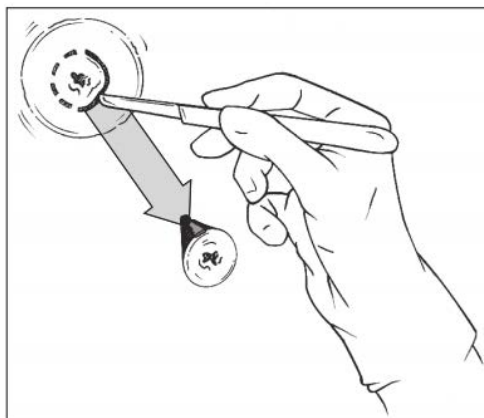
Screen-positive women (such as with VIA screening), or women with histologically confirmed CIN2+ are eligible for LEEP if the lesion is not suspicious for invasive cancer.

Post LEEP procedure:

- ❖ The patient should be advised to expect mild cramping for a few days and some vaginal discharge for up to one month.
- ❖ Initially, this can be bloody discharge for 7–10 days, and then it can transition to yellowish discharge.
- ❖ It takes one month for the tissue to regenerate, and during this time the patient should avoid sexual intercourse or use a condom if intercourse cannot be avoided.

Option 3: Cold knife conization (CKC)

- ❖ CKC is the removal of a cone-shaped area from the cervix, including portions of the outer (ectocervix) and inner cervix (endocervix).
- ❖ The amount of tissue removed will depend on the size of the lesion and the likelihood of finding invasive cancer.
- ❖ The tissue removed is sent to the pathology laboratory for histopathological diagnosis and to ensure that the abnormal tissue has been completely removed.
- ❖ A CKC is usually done in a hospital, with the necessary infrastructure, equipment, supplies and trained providers.
- ❖ It should be performed only by health-care providers with surgical skill – such as gynaecologists or surgeons trained to perform the procedure – and competence in recognizing and managing complications, such as bleeding.
- ❖ The procedure takes less than one hour and is performed under general or regional (spinal or epidural) anaesthesia.
- ❖ The patient may be discharged from hospital the same or the next day.

Removal of a cone-shaped area of the cervix

Source: WHO, 2014 Comprehensive cervical cancer control: a guide to essential practice – 2nd ed

Eligibility criteria:

- ❖ CKC should be reserved for cases that cannot be resolved with cryotherapy or LEEP.
- ❖ It should be considered in the presence of glandular pre-cancer or microinvasive cancer lesions of the cervix.

Post CKC procedure:

- ❖ Following CKC, patients may have mild cramping for a few days and a bloody vaginal discharge, transitioning into a yellow discharge for 7–14 days.
- ❖ It takes 4–6 weeks for the cervix to heal (depending on the extent of the procedure) and during this time the patient should avoid sexual intercourse or use a condom if intercourse cannot be avoided.

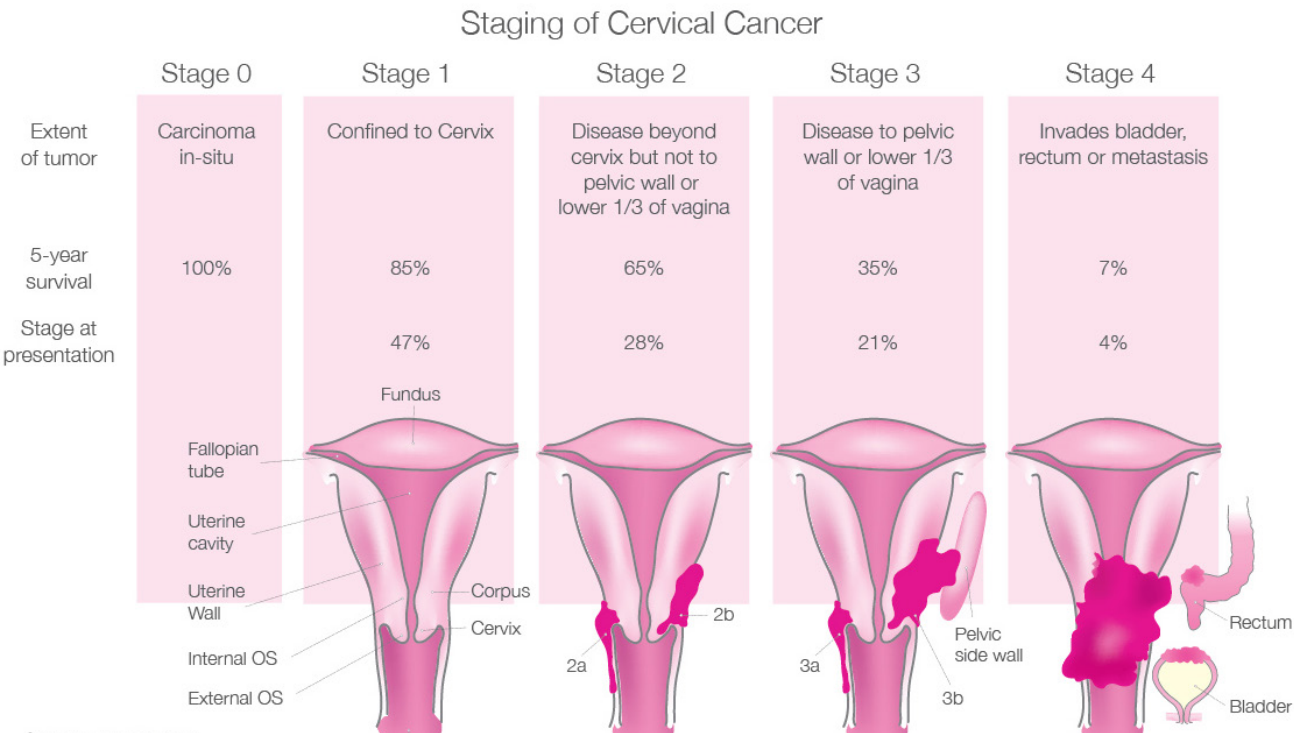
Stages of cervical cancer

The advancing spread of cancer within the body is described by stages, numbered from I to IV or 1 – 4 following pathology report and other tests for assessing metastasis (distant spread). Stages I & II are described as early stages while III & IV are late stages and decisions on whether curative or palliative therapy should be given are based on the stage of the cancer.

It is important for the health workers to understand where and how the cancer may be affecting a woman's body so that the therapy is appropriate and the patient's needs are anticipated.

Cervical cancer spreads by direct extension to vagina, uterus, parametrium, pelvic sidewall, bladder and rectum.

The figure below illustrates stages 1-4 of Cervical cancer



Source: <https://www.vagi-wave.co.uk/how-it-helps/cervical-cancer>

SECTION FIVE: CERVICAL CANCER TREATMENT

- ❖ Treatment of cervical cancer depends on the stage
- ❖ One, or combination of the following types of treatment options are used in the treatment of cervical cancer.

i. Surgery

- ❖ Cold knife cone biopsy
- ❖ Hysterectomy

ii. Radiation

- ❖ External beam
- ❖ Brachytherapy

iii. Chemotherapy

- ❖ By use of chemotherapy alone
- ❖ Chemo-radiation - By use of chemotherapy with radiation

Women with early stages of cervical cancer—cancer that has not spread beyond the cervix or adjacent vagina— may be treated by total abdominal hysterectomy (removal of the uterus) with or without removal of pelvic lymph nodes and radiotherapy if these treatments are available and affordable.

Similarly, those with cancer confined within the pelvis may be treated with radiotherapy and chemotherapy if these are affordable and available.

For many women with cervical cancer, the disease is so advanced by the time it is detected, and as such it cannot be cured. In these cases, providing palliative care to relieve the symptoms often is the best thing that can be done to help the woman and her family.

Follow up care

It is important to have regular follow-up exams after cancer treatment to ensure that any changes are noticed early.

Changes in the treated areas or in the other parts of the body should be reported to the doctor right away.

Tell your doctor about other physical problems like loss of appetite, weight loss, blurred vision, dizziness, headaches, shortness of breath, digestive problems that don't go away.

SECTION SIX: DELIVERING KEY CERVICAL CANCER MESSAGES TO TARGET AUDIENCE

Step 1. Remind client of good health practices.

- Protect her health by getting regular check-ups and participating in a cervical cancer prevention program.
- Tell the client(s) to be proud for taking steps to protect their health.
- Ask the client(s) what they know about cervical cancer.
- Find out what beliefs or fears they might hold about cervical cancer.

Step 2. Deliver key messages on Cervical Cancer

- Cancer of the mouth of the womb is a disease that kills many women in Uganda.
- Explain that cancer begins on the outside of the cervix (mouth of the womb) and spreads slowly.
- Women are usually above 25 years when this starts to happen.
- Women do not feel anything when it starts - no pain, no bleeding, no vaginal discharge.
- When it spreads very deep into the womb or when bleeding or pain starts, it is usually very difficult to treat.

Step 3. Explain that the good news is that Cervical Cancer can be prevented!

- A simple test is carried out at health facilities within Uganda. This test can 'determine if you have a sign of pre-cancer. One of the commonest test used is called visual inspection with acetic acid (VIA)
- When the mouth of the womb starts to change, it has not become cancer yet
- No one can tell by the way a woman looks whether the mouth of the womb is healthy or not until she is examined.
- We can treat pre-cancer by removing the bad part (like the skin of the fruit) that is not healthy and stop the unhealthy part from spreading and growing into cancer.
- Once the unhealthy part (pre-cancer) is removed, the woman's womb is healthy again. She can do all the things that she has always done.
- Remember, some women have this problem. But, they cannot know until they get a check-up.

Step 4. Explain what happens at the health facility.

- At the health facility, health workers will conduct an exam called the visual inspection in the acetic acid (VIA) or Pap smear. They will take a look at the mouth of the woman's womb to see if it has started to change.
- If there is a change on the woman's cervix, she will be referred for treatment.
- At the treatment clinic, a trained health worker can take care of the problem.
- Even if a woman is screened and no problems were found, she needs to return, in three years' time to make sure no new changes have happened.
- Persons living with HIV need to return once in every year.

Step 5: Remind the women why going for cervical screening at the health facility is important.

It is healthy and very important for women between 25 - 60 years to get a check-up every three years to prevent cervical cancer.

- You can prevent it by getting a check-up and treatment if needed
- You do not have to be sick to get a check-up.
- The test is quick. It is safe. It works. It is generally not painful.
- The test is very simple and quick to do, and it is free of charge in health. units but may have a small cost in private units.

Step 6: Test for understanding

- Review information if the client(s) looks worried or puzzled about anything.
- Ask client questions to determine if she understood what you have said to her.
- If client answers incorrectly, review the information again.
- Repeat Steps 1-through 4, if needed.

Step 7: Invite or refer the clients for check-up

Make a formal invitation to all eligible women (ages 25-60 years) wishing to participate in the screening. Give directions to the nearest health centre or hospital where cervical cancer screening services are provided. If there are husbands, ask them to accompany or send their spouses for screening. Thank the audience.

Delivering Key Messages to Men

Step 1: Repeat key messages for women, and background information on cervical cancer

Step 2: Basic Information for Men

In addition to the background information, inform the men about the following:

- HPV infection can easily be passed between people who have sexual contact. It causes no symptoms.
- HPV can also threaten men's health, if it persists, by causing cancer of the penis.
- HPV can live on genital skin, so it is not sexual penetration alone that can transmit HPV.
- Using condoms may not offer complete protection but it reduces number of infections and thus has a role in prevention of cervical cancer.
- Men have a key role to play in prevention of cervical cancer in women by
 - Reducing the number of their sexual partners.
 - Using condoms if they have more than one relationship (sexual partner).
 - Using condoms to prevent S.T.Is including HIV/AIDS.
 - Encouraging their partners to be screened if they are over 25 years.
 - Avoiding unwanted pregnancies and pregnancy at a very young age.

Step 2. Make the following additional points:

- Remind male partners/spouses on the importance of having a healthy family.
- It is especially important for the mother to be healthy because she takes care of the rest of the family and often the farming/ agricultural works or business.
- He can do his part to prevent cervical cancer in his own family.
- If a husband really loves his wife, he will support her going for the screening test.
- His support for his family's health is part of being a responsible husband and good father.

- Remind the man that a cervical cancer prevention program is taking place at a nearby health facility (name facility).
- The test generally will not hurt. It is safe and it works.
- It is quick and simple to do.
- The health care providers are very respectful and will treat his wife well.
- After the test, the woman can do all the things that she has always done.
- The test does not in any way negatively affect the health of the woman.

And finally,

- Remind the male partner/spouse to do his part. He can support his spouse to get screened in a number of ways such as:
- He should encourage his wife to get screened.
- The test is free of charge in most public health units but may have a minimal cost in private hospital or private services section of public health facilities but the male spouse can help with transport costs, granting permission for her to go for screening.
- He can offer to tend the garden and domestic chores while she goes for screening.
- He can even accompany his spouse to the health facility so that he can obtain more information about the test with a health provider.
- He should cooperate and abstain from sexual intercourse following some tests and treatment.
- He should reduce the work burden when his wife has undergone treatment to allow her rest and recover.
- If his wife has advanced disease, he should provide maximum comfort.
- He can reduce cancer deaths in the community by advocating for women's health programs.

Delivering Key Messages at Public Events



In a public event communicate key messages especially the following:

- Cancer of the cervix is a serious problem among women in Uganda and kills many women.

- It can easily be prevented with a simple check-up and treatment if needed. This test and treatment can stop cervical cancer in Uganda.
- This test is now available at several health facilities throughout Uganda (list the nearest health facilities in the district or the region where screening is available).
- All women between the age of 25 and 60 years even if they feel healthy, should get this special check up every three years, but persons living with HIV should test after every one year.
- Women in this age group are the most likely to benefit because if they have health problem with the cervix (mouth of the womb), it can be seen and easily treated.
- A woman does not have to be sick to get a check-up for cervical cancer.
- The test is quick, safe, works well and is generally not painful.
- The test is very simple and quick to do and is generally free of charge to the woman in most facilities except in private wing of public health facilities and private hospital where very little money may be charged.

Here is where you can go for further information:

- Health Centres III & IV in your area.
- District and Regional Referral Hospitals.
- Other registered Hospitals (NGO/Private)
- Your DDH's office.
- The Ministry of Health.

Remember to encourage all women between 25 - 60 years in your community or workplace to go for screening.

Delivering Key Messages on Cervical Cancer Prevention to Women at the Health Facility



Start Session with Background Information on Cervical Cancer and Basic Information for men.**Step 1: Remind client of good health practices.**

- Protect her health by getting regular check-ups and participating in a cervical cancer prevention program.
- Tell the client to be proud for taking steps to protect her health.

Step 2: Explain key points about Cervical cancer and its consequences.

- Cancer of the mouth of the womb is a disease that kills many women in Uganda.
- Pre-cancer starts on the mouth of the womb and spreads slowly if not treated
- Women do not feel anything when it starts - no pain, no bleeding, no discharge.
- When it spreads very deep into the womb or when bleeding or pain starts, it is very difficult to treat.

Step 3: Explain that Cervical Cancer can be prevented.

- When the mouth of the womb starts to change, it has not become cancer yet.
- We can remove the part that is not healthy by a treatment method called cryotherapy (like removing the bruised skin of the fruit).
- Removing the bad part will stop it from spreading and growing into cancer.
- Once the unhealthy part is removed, the woman's womb is healthy again.

Step 4: Tell clients why Cervical screening at the Health Facility is important

- All women between the ages of 25 and 60 should get a screening check-up at the health facility every three years - even if they feel healthy.
- No one can tell from the way a woman looks whether the mouth of the womb is healthy or not. The only way to know is if she is examined.
- Like maize, you must remove the husk/coverings to see if there are any bad kernels or seeds or maize cob. We really don't know if a maize cob is unhealthy until we peel away the outside. The only way to know is by checking. This is why it is important that women are checked.
- At the health facility, health workers will conduct a cervical exam. They will take a look at the mouth of the womb to see if it has started to change.
- The women who have this problem cannot know until a health worker has had a look at it.
- If there is a change on the woman's cervix, the health provider will refer her to the District or regional or national referral Hospital. At the Hospital, a trained health provider or doctor can take care of the problem.
- Tell the client that if she is referred to the Hospital, it is very important that she goes to get the problem taken care of.
- All women aged 25 - 60 years should return for check-ups every three years. Even if a woman is screened and no problems were found, she needs to return in three years just to make sure

Step 5: Test for understanding

- Review information and check for understanding.
- Ask client(s) to repeat what she/they heard.

- Ask the women questions to determine if they understood what you have said to them.
- Correct any misinformation.

Step 6: Discuss client's right to decide for herself.

- Before the exam is conducted, remind client(s) that the health provider should ask permission to carry out the exam. Tell her/them that this is called "Informed Consent."
- Remind clients that it is their right to decide to be screened or receive treatment. Even in the exam room, she can still change her mind and come back another time.
- Remind client that if at any time during the exam there is something she does not understand; she should talk to the health provider.

Step 8: Individual Counseling and Consent.

- The client or clients who accept screening should proceed to the individual counseling session & screening (**Use Flip Chart for Counseling and Consent**)

Delivering Key Messages to Community Leaders and Policy makers about Cervical Cancer prevention

STEP 1: GETTING STARTED

- Introduce yourself appropriately to the audience
- Give an outline of the objectives of your session (For example; to raise awareness about cervical cancer, its problems/complications and policy Implications).
- Introduce the cervical cancer screening program.

STEP 2: DELIVER (BASIC FACTS) ON CERVICAL CANCER.

- Cervical Cancer affects many women worldwide with over 528,000 new cases diagnosed annually. Over 80% of these are in developing countries of which Uganda is one.
- It is estimated that over 1 million women worldwide have cervical cancer. Majority of these have not been diagnosed or they have no access to treatment that could cure or prolong life.
- Cervical cancer is the leading cause of cancer deaths in women in Uganda. Research has shown that in 2012, 48/100,000 women in Uganda had cervical cancer, representing more than 4,000 women with cervical cancer. This is among the highest prevalence rates in the world. Majority of women (over 80%) are diagnosed with cervical cancer at a late stage when no cure can be achieved. However, there are many more women who die of it but are not documented.
- Experience in the developed world shows that well planned, organized screening program achieve high coverage and significantly reduce new cases of cervical cancer and the associated mortality.
- Most new infections of HPV resolve spontaneously but if they persist, they can lead to pre cancer. If pre-cancer is left un treated it can lead to cancer. This usually takes 10-20 years the cancer to develop into cancer. This means that with effective screening programmes majority of the Cervical Cancer cases can be prevented by early detection and treatment precancerous lesions.

- The most affected women are women over 25 years with majority of deaths occurring between 40-60years.
- If untreated invasive cervical cancer is fatal, causes enormous pain and suffering and has significant adverse effects on families and communities.

STEP 3: BARRIERS TO CONTROL OF CERVICAL CANCER

- Where cervical cancer screening programmes have failed the following are the reasons:

Political Barriers:

- Lack of enabling national policies & evidence based management guidelines.
- Lack of prioritization of women's sexual & reproductive health and
- Failure to allocate resources to Cervical Cancer control.

Community & Individual Barriers:

- Lack of awareness that Cervical Cancer is a major health problem among the population, health care providers, leaders & policy makers.
- Poor attitudes, misconceptions & beliefs that cancer is untreatable and failure to openly discuss issues & diseases of the genital tract presents major barriers to cervical cancer control.
- Poorly organized health systems, lack of appropriate equipment & trained providers limits access to prevention activities, screening, diagnosis treatment, follow up and palliative care

STEP 4: HOW CAN LEADERS & POLICY MAKERS HELP REDUCE NEW CERVICAL CANCER CASES & DEATHS?

- Facilitating & supporting formulation of enabling policies and evidence based management guidelines.
- Supporting the allocation of adequate resources to implement the policy on Cervical Cancer screening & treatment.
- Advocating for prioritization of cancer prevention and early detection on the National and local district agenda.
- Mobilizing resources for Cervical Cancer prevention & treatment.
- Advocating for & mobilizing Men and Eligible women to utilize screening services.
- Supporting the efforts to motivate & remunerate health providers in their work.
- Participating in supervision & monitoring of the implementation of health programmes.
- Fostering and building of multidisciplinary teams for the prevention of Cervical Cancer.

Step 5: Take Home Message

1. Cervical Cancer is preventable, unlike many other cancers. The slow progression of cervical pre-cancer to cancer provides a window of opportunity of up to 10years to detect & treat precancerous lesions and prevent their progression to cancer.
2. Cervical cancer screening and treatment are justified on the basis of the general principles of public health screening.
3. Regardless of the screening test used, the focus should maximize coverage and link screening to treatment and palliative care services. This depends on available resources.

4. Treatment with Cryotherapy can be performed by doctors, nurses, & midwives at all levels of health care with comparable safety and acceptability.
5. Policy makers must get committed to invest in and devote the necessary resources and dedicated staff to program planning, implementation & monitoring.
6. Policy phase should be participatory and involve key stakeholders, clearly basing policy decisions on needs and health priorities of Uganda.

Delivering Key Messages to Adolescents in Schools & out of schools on Cervical Cancer Prevention

GETTING STARTED

- Identify a suitable place to talk
- Introduce yourself appropriately
- Introduce the Cervical Cancer prevention program

Step 1: DELIVERING KEY MESSAGES

- Cervical Cancer kills many women worldwide
- Cervical Cancer is the abnormal uncontrolled growth of cells on the Cervix.
- It is caused by Human Papilloma Virus (HPV), a sexually transmitted virus.
- Many people get the virus while still young and they don't get symptoms.
- Although Condoms do not completely prevent transmission, they reduce the number of infections and therefore Cervical Cancer.
- Young people who engage in early sexual intercourse and deliver at a young age are most at risk.
- It takes several years for a persistent HPV infection to cause precancerous changes in the cervix. It also takes up to 10 years and more for pre-cancer to develop into cancer.
- This provides a great opportunity to screen all females 25 years and above for pre-cancer and provide them curative treatment.
- Avoiding early sexual intercourse is one of the most important ways to prevent cervical cancer.
- Since the HPV can live on the genital skin and condoms are not 100% effective in preventing transmission, abstinence during adolescence is the best prevention strategy.
- Boys should know that persistent HPV infection in them can lead to cancer of the penis.
- For young people who are not yet sexually active the HPV vaccine that has been developed prevent cervical cancer.
- The HPV vaccine is available in public health facilities countrywide for girls 9-13 years of age or girls in primary four class.

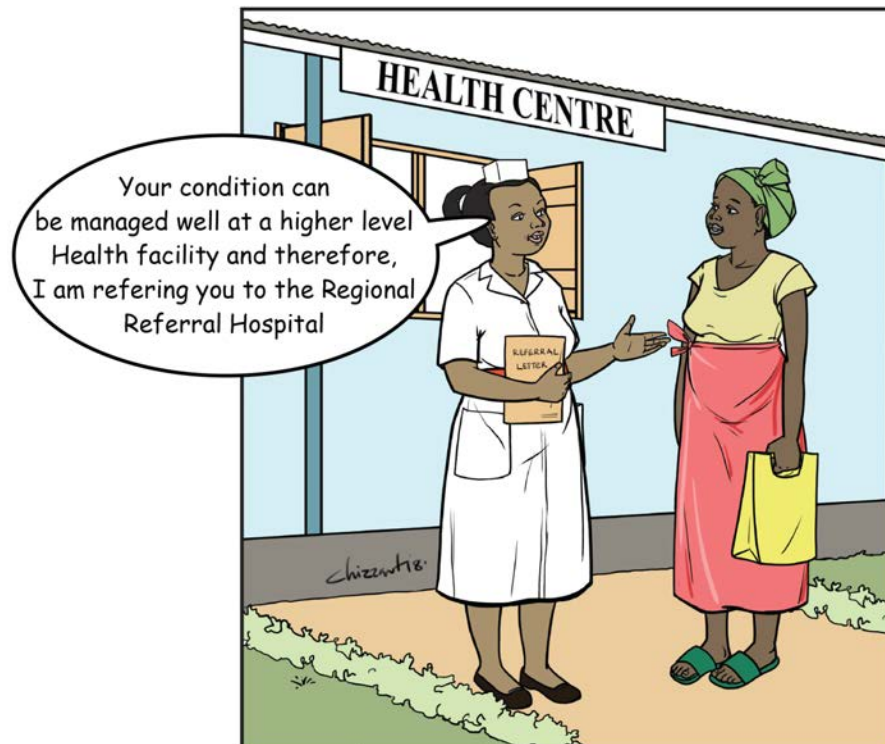
Role of community health workers in HPV Vaccination



Community health workers (CHWs) are in constant contact and communication with families in their communities and they are the bridge between the community and the facility-based health-care providers. In an HPV vaccination programme, their role may include:

- Raising awareness about cancer risk factors and the availability of the HPV vaccine and its importance for preventing cervical cancer, targeting the community at large, local health and community managers, local authorities, religious leaders and civil society representatives;
- Educating girls and their parents and other community members about the benefits of the HPV vaccine and other available cervical cancer prevention strategies;
- Countering misinformation and rumours that undermine acceptance of vaccination, by providing accurate information;
- Reminding girls and their families to get the subsequent dose(s) needed for full protection
- Working with health facility staff to vaccinate girls, either in the community, at schools or other selected venues, and/or documenting vaccination-related activities; and
- Assisting in the delivery of additional interventions that improve the health of the community

Making a Follow-up call and visit following Cryotherapy Treatment



If the client has been:

To the Hospital and was treated with cryotherapy **less than one month** ago, **Do this:**

- Determine if client is having problems with the take-home instructions.
- Ask if she is experiencing any problems such as fever or pain in the womb or lower back. Ask if she has bleeding more than normal monthly bleeding. If yes, refer her immediately to the health facility. Remind her to take her client card with her.
- Remind client not to insert anything into the vagina (herbs, tampons, a penis). She needs to give her body time to heal.
- Remind client to use a condom if she must have sexual relations
- Tell client it takes about four weeks (one month) her body to heal.

If the client has been:

To the District or Regional Referral Hospital and was treated with cryotherapy more than one month, do the following:

- Remind client to go to the District or Regional Referral Hospital for review.
- Tell her she will be counseled and also receive a vaginal exam to see how she is healing. Remind her to prepare for the vaginal exam.
- Remind her to go for a one-year clinical exam when time comes.
- Check if she has scheduled dates for these visits.

If the client has been:

Referred to a Regional or National Referral Hospital,

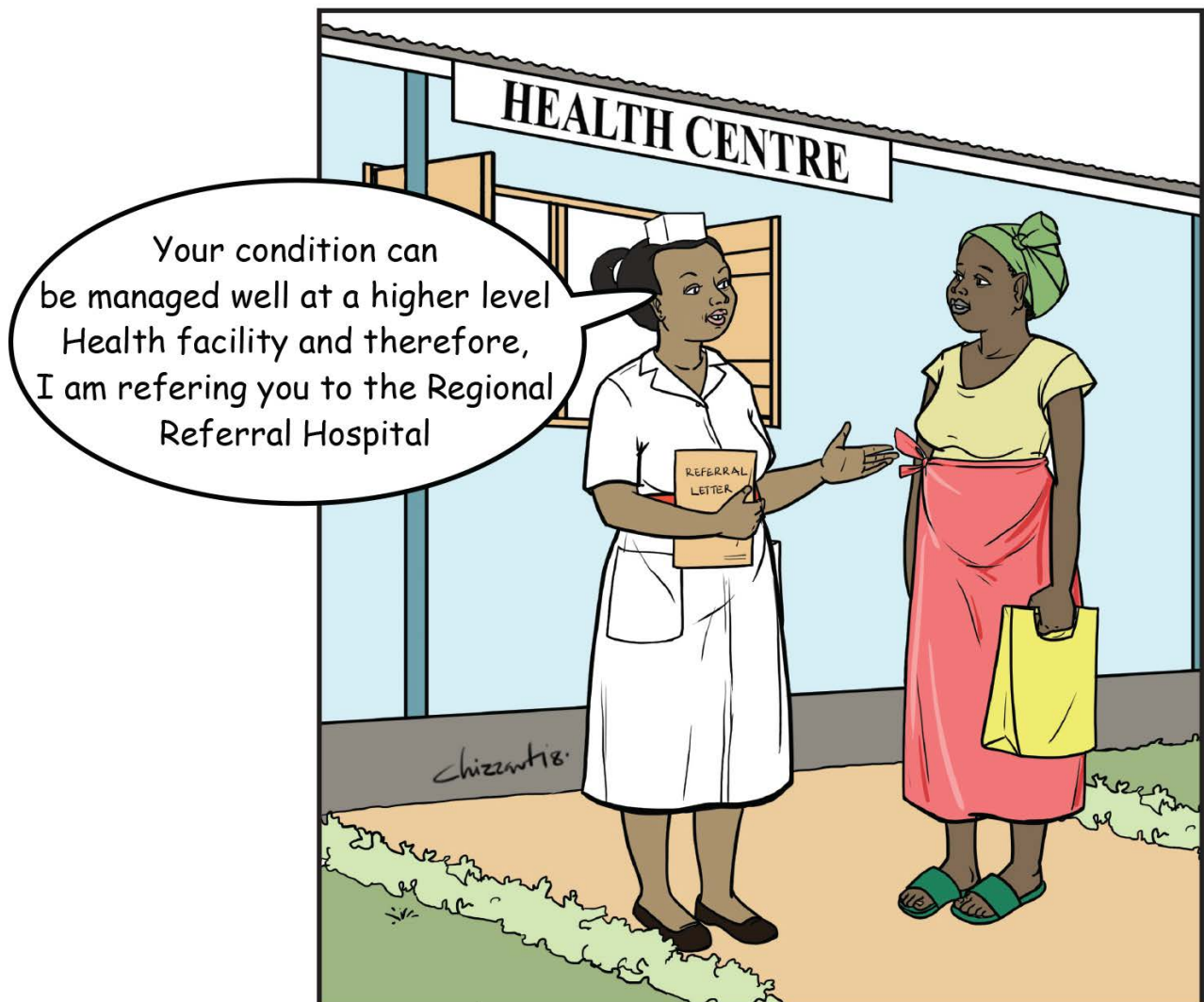
Do the following:

- Tell client that she has a problem that needs to be treated. This can only be done at the Hospital

she was referred to.

- Remind her that she needs to go as soon as possible. Otherwise, she may get very ill and possibly get unpleasant complications
- After third follow up visit and she still hasn't gone, refer client to your supervisor.
- Follow-up visits should be conducted at monthly intervals.

Talking to Women who need further care beyond the district Hospital



Who needs further care?	What you can do for this woman:
Women who have been treated for cervical cancer. These are women who have received treatment for cervical cancer at the Regional Referral Hospital, or they have gone to Mulago Hospital, or Uganda Cancer Institute in Kampala for further tests and treatment. The types of treatment they may have received are Wertheim's hysterectomy, LEEP, or curative radiotherapy.	— Remind the client that she should now have peace of mind. The surgery or treatment most likely managed the problem. — Examine the client card for any follow-up visits. — Remind the client to return for her scheduled follow-up visits. The visit is to make sure everything is OK. — Refer client to the health facility if she or her family has questions about her health after surgery. — Remind client that if she had a surgery (hysterectomy) as part of her cancer treatment, the uterus has been removed, and with it, the cancer. This means that the client will be unable to have pregnancy. — Provide emotional support. Encourage client and her family to seek palliative care. — Be truthful about her condition and why palliative care is important. — Talk about the client's condition in a positive manner. — Explain that a health provider gives palliative care instructions. She will counsel them on what to expect and how to manage the illness at home. — Encourage client and her family to seek out a clergy member or religious group for spiritual support. — If you can do these things, she is more likely to die with dignity and respect. — Link the client to HOSPICE AFRICA or any other palliative care organization in your area.
They do not need palliative care visits.	
Women who need supportive (palliative) care. These are women whose cancer cannot be cured. These women will need end-of-life support.	

SECTION SEVEN: COMMONLY ASKED QUESTIONS AND RESPONSES ABOUT CERVICAL CANCER PREVENTION SERVICES

A. Questions for the Health Centre Screening Visit

Q 1. Why aren't all women recommended for cervical screening?

A. There are several reasons for this.

- Women between the ages of 25 - 60 years are most likely to develop problems on their cervix. These can be seen and are treatable. Women in their teens and 20s are less likely to get pre-cancerous lesions on their cervix. If they do get them, they usually go away without treatment. This is not so with women who are older.
- In places where health services are limited, it is important to devote services to women above 25 years. This is why it is important that women are screened at that age - before the cancer advances.
- Any woman above 25 years should be screened every three years. If this is not possible, - at least once every five years.

Q 2. What exactly does the screening Test do?

A. The screening test identifies pre-cancerous changes on the woman's cervix. The health worker applies medicine on the cervix and looks for a change in color. (A bad spot will turn "white" when the medicine is put on it.) If a woman has a white spot on her cervix, she will be referred for further exam/evaluation and/or treatment.

Q 3. My husband is a polygamist. Can my co-wife get cervical cancer from me?

A. That's a good question. What you and your co-wife should know is that any woman who has had sexual relations in her life should get screened at least once in her lifetime, ideally when she is in her 30s, to make sure she stays healthy.

Q 4. Will this exam hurt?

A. No. The exam may be a little uncomfortable, but it will not be painful.

Q 5. Are the instruments clean?

A. Yes. They have been sterilized (cleaned) so that there is no danger of infection and most of the instruments are used once and disposed of.

B. Questions for the District Hospital Visit

- Q 7. If the health worker finds that I have a problem with the cervix, what will happen?**
- A. The health workers will confirm this test and they will remove or destroy the abnormal changes with treatment or refer you if the level of the health centre cannot handle the your problem. Treatment involves freezing the spot on the mouth of the womb. This makes the cervix healthy again. If the health worker thinks you should have the treatment, he or she will explain the process to you.
- Q 8. Will treatment affect my daily life?**
- A. If you are treated for a problem on the cervix, there are certain things you can do to make sure that your cervix heals properly. The health provider will explain more about this to you.
- Q 9. How much will the exams cost?**
- A. There is no charge for this service in public health facility, except minimal charge may apply in private services section or in private hospital.
- Q 10. What if I can't afford to go to the Hospital?**
- A. If it is difficult for you to go to the health centre, you can discuss this with your husband, community health workers or a local leader. They can help you find solutions to these problems.
- Q 11. How do I get to the Hospital? Where is it?**
- A. (Answer appropriately)
- Q 12. How long will my appointment at the Hospital take?**
- A. The exam takes about 15 minutes. We don't know how long you may have to wait because there may be many women ahead of you or if you do need treatment, your visit may be longer. It is important to travel early to the Hospital on the appointment date.
- Q 13. What if my husband won't support my going to the Hospital? What can I do?**
- A. Explain why the visit is so important to protect your health. If he still does not want you to go, request a community health worker to talk to your husband. If he still doesn't want you to go, ask him to come with you to the health centre. A nurse or doctor can explain everything to him.

References and where you can find more information

1. Reproductive Health Division-Ministry of Health Uganda. 2007. Cervical cancer prevention in Uganda: Counseling and Community mobilisation guide.
2. WHO; 2013. Monitoring National cervical cancer prevention and control programmes: quality control and quality assurance for visual inspection with acetic acid (VIA)-based programmes. Geneva: (<http://www.who.int/reproductivehealth/publications/cancers/9789241505260/en/>).
3. WHO; 2013. WHO Guidelines for screening and treatment of precancerous lesions for cervical cancer prevention. Geneva: (http://www.who.int/reproductivehealth/publications/cancers/screening_and_treatment_of_precancerous_lesions/en/).
4. WHO; 2014. WHO guidelines for treatment of cervical intraepithelial neoplasia 2–3 and adenocarcinoma in situ. Geneva: (http://www.who.int/reproductivehealth/publications/cancers/treatment_CIN_2-3/en/).
5. WHO, 2011. WHO guidelines: use of cryotherapy for cervical intraepithelial neoplasia. Geneva: (<http://www.who.int/reproductivehealth/publications/cancers/9789241502856/en/>).
6. WHO; 2012. WHO technical specifications on cryosurgical equipment for the treatment of precancerous cervical lesions and prevention of cervical cancer: (<http://www.who.int/reproductivehealth/publications/cancers/9789241504560/en/>).
7. WHO; 2014 Comprehensive cervical cancer control: a guide to essential practice – 2nd ed



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