National Guideline for Cervical Cancer Screening and Prevention in Nepal

Department of Health Services
Ministry of Health & Population
Government of Nepal
Family Health Division
Teku, Kathmandu
2010
Message

Cervical cancer is the second common cancer worldwide. About half a million cervical cancer cases are diagnosed each year, with 80% of them occurring in developing countries. National Cancer Registry Programme (NCRP) of B.P. Koirala Memorial Cancer Hospital comprising of data collected from 7 major hospitals of Nepal shows that cervical cancer is among the top ten cancers, and is the number one cancer among women. Data from NCRP for 2005 shows that cervical cancer accounts for 21.4% of all cancer in women, appearing most frequently in women aged 35–64. It is the second most common cancer after lung cancer in Nepal.

There is a sufficient scientific evidence to conclude that screening for cervical, breast and colorectal cancer can result in significant reduction in mortality. Evidence from Nordic countries as well as UK and other developed countries where screening is implemented as a nationwide population based public health programme shows 30% reduction in mortality in breast cancer, 20% in colorectal cancer and almost 40–50% in cervical cancer with screening programs having nationwide coverage.

In Nepal where there is no nationwide population based screening program, and it will need great efforts and resources to establish one, FHD has taken the initiation to prepare this document as a guideline to screen the cervical cancer. Many organizations have contributed in various ways to develop this document. BP Koirala Memorial Cancer Hospital which has the mandate for cancer control, several NGOs and INGOs have been part of the process of developing this document. WHO’s support for all the work from the start to the finalization of this National Guideline is highly appreciable.

I would like to thank Family Health Division, Department of Health Services, WHO, Technical Working Group, National and External Consultants, experts in the field and all the other partner organizations that have worked very hard to develop this document. I hope eventually we will be able to establish screening for cervical cancer as a Nationwide Public Health Programme in Nepal, and would like to state that the Ministry of Health and Population will remain supportive to make this programme a success.

Dr. Sudha Sharma
Secretary
Ministry of Health and Population
Burden of Non Communicable Disease (NCD) in the context of Nepal is also considered as a major public health problem as it is true for both developing as well as developed countries. Ministry of Health and Population, focal point for NCD in Nepal has identified cancer along with cardiovascular, Chronic obstructive pulmonary disease, diabetes mellitus, mental disorders, dental disorders and arsenicosis as non communicable diseases.

It is seen that Nepal has made a marked reduction in maternal and neonatal mortality as well has very effective Tuberculosis and HIV/AIDS control programme. Comparatively there is no Nationwide public health program or policy/guideline for control of preventable Non Communicable Diseases like cervical, oral, colorectal and breast cancer.

In this context, FHD has taken the initiation to develop this guideline for cervical cancer screening which constitutes the number one cause of cancer death in women in Nepal and accounts for about 21.4% incidence as is shown by National Cancer Registry program conducted by BP Koirala Memorial Cancer Hospital, Bharatpur.

This Guidelines has suggested the VIA/SVA as the screening tool and proffered method of cervical cancer prevention in Nepal which is an easy, inexpensive method using ordinary vinegar in screening women and cryotherapy as basic method of treatment of precancerous lesions. However, careful training is needed to minimize the risk of false positive results which could lead to over treatment. Midwives, nurses and health workers can be trained to perform the procedure which can contribute to make success of this program. Integration into the existing health service system and carefully planning the program will definitely lead to the successful implementation and will result in reduction of mortality in future.

I would like to appreciate the efforts of FHD who has taken the initiative to develop this guideline and would like to thank WHO, Technical working group, BPKMCH, other National and International organizations and experts in the field. I am quite convinced that this program will be implemented successfully.

Dr. Yasho Vardhan Pradhan
Director General
Department of Health Services
Cervical cancer is the leading cause of cancer death among women in the developing countries. It is estimated that around 274,000 women die globally every year in these countries due to cervical cancer. There are about 500,000 new cases of cervical cancer of which over 85% occur in developing countries, making the major bulk in these countries. This makes cervical cancer one of the greatest threats in women’s lives in these countries.

In the developed countries it has been shown that organized screening program has reduced the incidence, mortality and morbidity from cervical cancer very effectively. However, in the context of Nepal the challenge is to start from the Grass-Root. Although there have been some efforts made by the tertiary level hospitals, INGOs and NGOs there is no national level policy or guidelines yet in the country. It was felt that, there was a clear need for formulating the Guideline for cervical cancer screening to be implemented in the country.

The objective of this exercise was to formulate a guideline for cervical cancer screening and control in Nepal in most feasible and effective way choosing appropriate techniques and utilizing existing resources. This guideline aims at laying a foundation for achieving the implementation of cervical cancer control program in Nepal to reach the target population.

Family Health Division (FHD), Department of Health Services, Ministry of Health and Population (MoHP), Federal Democratic Republic of Nepal, had taken initiation to develop National guideline for cervical cancer screening and prevention in the country and coordinated with WHO for support. The advisory committee and a Technical working Group was formed including the officials from MoHP, policy makers, representation from WHO, professional organisations, INGOs and NGOs. Several meetings were held to discuss on a preliminary outlines. The Preliminary Guideline Draft was formatted by the National Consultant Dr. Aarati Shah which was reviewed and revised by Dr. S.S. Shastri, as External Expert from WHO/SEARO and WHO Collaborating Centre, TMH, Bombay incorporating the various sources and discussions along with the experts and Technical working Group recommendations.

A consultative meeting was held to discuss on the draft guideline and to give it a final shape. This guideline is thus a result of discussion and recommendations from Technical working group, various experts, both national and international, field visits to the existing screening programs at various hospitals and projects, discussions with policy makers, advisors and stakeholders in many sittings and is presented in the present form. Thus, this guideline is a result of assessment of existing facilities, feasible techniques and strategies, the recommendations from the experts and the workshop.

There might be still many shortcomings, which FHD will be very thankful to anticipate the suggestions and to incorporate into further revisions.

Dr. Naresh Pratap KC
Director
Family Health Division
Kathmandu
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UNFPA
## ABBREVIATIONS

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Full Form</th>
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<tbody>
<tr>
<td>ANM</td>
<td>Auxiliary Nurse Midwife</td>
</tr>
<tr>
<td>BPKMCH</td>
<td>BP Koirala Memorial Cancer Hospital</td>
</tr>
<tr>
<td>CBS</td>
<td>Central Bureau of Statistics</td>
</tr>
<tr>
<td>CCSP</td>
<td>Cervical Cancer Screening and Prevention</td>
</tr>
<tr>
<td>DH</td>
<td>District Hospital</td>
</tr>
<tr>
<td>DHO</td>
<td>District Health Officer</td>
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<tr>
<td>DoHS</td>
<td>Department of Health Service</td>
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<tr>
<td>DPHO</td>
<td>District Public Health Officer</td>
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<tr>
<td>FHD</td>
<td>Family Health Division</td>
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<tr>
<td>HC</td>
<td>Health Center</td>
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<tr>
<td>HMIS</td>
<td>Health Management Information System</td>
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<tr>
<td>HP</td>
<td>Health Post</td>
</tr>
<tr>
<td>HPV</td>
<td>Human Papilloma Virus</td>
</tr>
<tr>
<td>IEC</td>
<td>Information, Education and Communication</td>
</tr>
<tr>
<td>INGO</td>
<td>International Non Governmental Organization</td>
</tr>
<tr>
<td>Jhpiego</td>
<td>Jhpiego, an affiliate of the Johns Hopkins University</td>
</tr>
<tr>
<td>LEEP</td>
<td>Loop Electrosurgical Excision Procedure</td>
</tr>
<tr>
<td>LMD</td>
<td>Logistic Management Division</td>
</tr>
<tr>
<td>MO</td>
<td>Medical Officer</td>
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<tr>
<td>MoHP</td>
<td>Ministry of Health and Population</td>
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<tr>
<td>NAHUDA</td>
<td>Natural and Human Resources Development Association</td>
</tr>
<tr>
<td>NCRP</td>
<td>National Cancer Registry Program</td>
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<tr>
<td>NESOG</td>
<td>Nepal Society of Obstetricians and Gynecologists</td>
</tr>
<tr>
<td>NGO</td>
<td>Non governmental Organization</td>
</tr>
<tr>
<td>NHEICC</td>
<td>National Health Education, Information and Communication Center</td>
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<tr>
<td>NHTC</td>
<td>National Health Training Center</td>
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<tr>
<td>NNCTR</td>
<td>Nepal Network for Cancer Treatment and Research</td>
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<tr>
<td>PHCC</td>
<td>Primary Health Care Center</td>
</tr>
<tr>
<td>PS</td>
<td>Papsmear</td>
</tr>
<tr>
<td>RH</td>
<td>Regional Hospital</td>
</tr>
<tr>
<td>RTI/STI</td>
<td>Reproductive Tract Infection/ Sexually Transmitted Infection</td>
</tr>
<tr>
<td>SN</td>
<td>Staff Nurse</td>
</tr>
<tr>
<td>STD</td>
<td>Sexually Transmitted Diseases</td>
</tr>
<tr>
<td>SVA</td>
<td>Single Visit Approach</td>
</tr>
<tr>
<td>VIA</td>
<td>Visual Inspection with Acetic Acid</td>
</tr>
<tr>
<td>WHO</td>
<td>World Health Organization</td>
</tr>
<tr>
<td>ZH</td>
<td>Zonal Hospital</td>
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</tbody>
</table>
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INTRODUCTION

Cervical cancer is the second most common cancer in women worldwide (1). Close to half a million new cases of cancer cervix are diagnosed each year and over a quarter million women die of this disease annually. It is the leading cancer and the leading cause of cancer deaths in women in developing countries with over 80% of the cases occurring in developing countries (2). The highest incidence and mortality rates are in sub-Saharan Africa, Latin America, and South Asia (Figure 1). Overall, the mortality rates in developing countries are about four times those in industrialized countries with 80–85% of cervical cancer deaths occurring in developing countries. Cervical cancer generally affects women with multiple school-age children, and their deaths have a major negative impact on the social fabric of their communities (1–4, 9–10, 13–16).

The incidence and mortality rates of cervix cancer have declined significantly in the more developed countries in the past four decades due to organized population based screening with conventional cytology (Papsmear) (3,4). The natural history of human papilloma virus (HPV) infections provides us with significant scope for the introduction of screening programs as an effective tool for cervical cancer control. Screening programs do not exist in many developing countries. In some low-resource settings where cytology programs do exist, they have not been effective in reducing the disease burden (5).

Visual tests constitute a promising approach in low-resource settings and there is good evidence on their ability to reduce incidence of and mortality from cervical cancer (6,7). Testing with acetic acid (VIA) is a good option for early detection of cervical neoplasia in settings where good quality cytology or HPV testing is not available at the primary care level due to technical, personnel and infrastructural constraints. The sensitivity of cytology and HPV testing increases significantly by adding a visual test, such as VIA (8).

National Cancer Registry Program (NCRP), Nepal which collects hospital based data from seven major hospitals and is the only aggregate data on cancer in the country shows that cervical cancer is among the top 10 cancers and number one among the women. According to the most recent report available, from NCRP 2005, cervical cancer accounts for 21.4% of all cancer in women, appearing most frequently in women aged 35–64. It is the second most common after lung cancer including both men and women. (Cancer Registry, BPKMCH, 2005).

No estimates of cancer deaths by cervical cancer can be exactly quoted due to lack of nationwide population based data and documentation of all the cases. At a minimum it is estimated that there are about 10,020 new cases of invasive cervical cancer and about 26,000–45,000 precancerous lesion as an estimate made by a situational analysis study undertaken by Jhpiego (Nepal Cervical Cancer Prevention Situation Analysis, 2008).

For a program to be implemented successfully, it must be guided by a good policy and delivered through a well functioning health system. It requires all the necessary equipments are in place, the service providers are trained properly and up to standard, the facilities and centres for
screening, diagnosis and treatment are available, there is a good communication system for further referrals, treatment follow up and palliative care (Comprehensive Cervical Cancer Control, WHO 2006).

Recognizing that every Nepali woman has the right to be screened for cervical cancer and treated if required, cervical cancer screening and treatment services should be incorporated into the government public health system so that it is available for the target population of women throughout the country.

![Figure 1. Incidence of Cervical Cancer](image)

Source: GLOBOCAN 2002, IARC

**OBJECTIVES**

**General Objective:** The aim of formulating this guideline is to lay foundation for achieving the implementation of cervical cancer screening and prevention program in Nepal to reach the target population.

**Specific Objectives:**

1. Develop educational materials and messages to raise awareness on cervical cancer screening and prevention and develop outreach strategies
2. Identification of the service sites
3. To develop service providing strategy and outreach strategies
4. To establish referral system and follow up mechanism
5. To develop supervision and monitoring plans
6. To develop training strategy
7. To plan for integration of cervical cancer screening and prevention program into the national health policy/reproductive health programs
8. To establish network among key stakeholders in the country and abroad

**GOAL**

FHD aims at achieving the goal of screening at least 50% of the target population in five years time with the reduction in mortality by cervical cancer by at least 10%

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CHAPTER : 1
AWARENESS AND HEALTH EDUCATION

1. COMMUNITY INFORMATION AND EDUCATION

Awareness and health education should be an integral part of cervical cancer screening program. These activities are necessary to inform and educate women, men and their families about cervical cancer both to encourage and support women to participate in screening services and to ensure the program reaches its coverage goals. The aim of awareness and health education should be to ensure that women, their families and community at large understand that cervical cancer is preventable. These activities should be implemented in communities and health facilities through various media. Linkages must be established between the community and the health facilities.

In this regard following strategies will be implemented:

1. FHD will collaborate with National Health Education, Information and Communication Center (NHEICC) to develop a comprehensive behavior change communication strategy to address key behaviors that promote awareness and service-seeking among target identified audiences. Women and their families need to know the risks of cervical cancer, benefits of screening and service options.

2. FHD will collaborate with NHEICC to utilize existing communication strategies and mechanisms to raise awareness and promote health education, such as FCHVs, women’s groups, other health-related mass media campaigns and the information and educational materials. Information, education and communication (IEC) materials already developed and being utilized by the INGOs, NGOs and the cancer hospitals will be reviewed and adapted under the communications strategy in the cancer screening program. Every health facility will be provided with the IEC materials developed.

3. Training of the human resources on awareness and health education related to cervical cancer screening and prevention will be the responsibility of National Health Training Center (NHTC) at the central level. It will collaborate with other organizations, national and international, for the training, materials and the funding. The health workers involved in screening program will be trained in education and awareness program.
CHAPTER : 2  
STRATEGIES FOR CERVICAL CANCER SCREENING

Objective of Cervical Cancer Screening and Prevention (CCSP) is to provide cervical cancer screening services to the target population who attend the health centres or are invited for screening at the nearest possible vicinity in a nationwide scale.

Table 1. Age-Specific Female Population of Nepal, Eligible for Cervical Cancer Screening

<table>
<thead>
<tr>
<th>AGE GROUP</th>
<th>2006</th>
<th>2011</th>
<th>2016</th>
<th>2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>30–34</td>
<td>930,564</td>
<td>1,075,404</td>
<td>1,223,906</td>
<td>1,378,645</td>
</tr>
<tr>
<td>35–39</td>
<td>777,905</td>
<td>915,024</td>
<td>1,059,865</td>
<td>1,208,446</td>
</tr>
<tr>
<td>40–44</td>
<td>643,984</td>
<td>761,034</td>
<td>897,527</td>
<td>1,041,809</td>
</tr>
<tr>
<td>45–49</td>
<td>530,011</td>
<td>625,001</td>
<td>740,921</td>
<td>876,053</td>
</tr>
<tr>
<td>50–54</td>
<td>429,381</td>
<td>507,772</td>
<td>601,181</td>
<td>715,049</td>
</tr>
<tr>
<td>Total</td>
<td>3,313,851</td>
<td>3,886,246</td>
<td>4,525,416</td>
<td>5,222,023</td>
</tr>
</tbody>
</table>

Source: Central Bureau of Statistics (CBS)/UNFPA Population statistics of Nepal, 2004

2. SCREENING STRATEGIES

FHD should be the focal point for placing the developed protocol into the national policy and action for implementation. Once the screening program is adopted into the MoHP systematically it will go into schedule in health care of government as TB and other programs.

2.1. Target Population: Women Aged Between 30–60 Years

- All women will be screened who attend the health centres/facilities who are in target age group.
- Infrastructure will be developed to reach these women who can not come to the health centres themselves e.g. by organizing health camps to reach these women.
- All women in the target group will be encouraged and invited for the screening through the communications strategy (Chapter 1).
- Screening in high HIV prevalence subpopulations or groups: Regardless of HIV status all women will be screened for cervical cancer. HIV-positive women are at high risk for developing cervical cancer and need to be screened more frequently for cervical cancer.
- Screening of pregnant women: Pregnant women who attend antenatal clinics and who are within the target population should be educated about CCSP and advised to return for screening 12 weeks after giving birth.
- Screening in postnatal and family planning clinics: Screening will be performed in the women attending these clinics who are at target age group.
- Screening in women with RTI/STI: Women attending the clinics with RTI/STI can be screened for cervical cancer only if there is no visible acute infection. Otherwise they are given appropriate treatment and advised to return for screening after the infection is controlled.
Although cervical cancer has been detected in some women below 30 years of age, the high risk population is between 30–60 years and screening this age group would be able to cover majority of high risk population. Since early marriage is common in Nepal once the high risk populations are screened, the program may in the future consider screening women above 25 years of age if resources are available.

2.2. Screening Interval
Once in five years

2.3. Coverage Goal
50% of the target population with in a span of five years

2.4. Documentation of the Screened Population
National citizenship card should be used for case documentation. It can be a consistent source of identification for re-screening and follow up.

2.5. Screening Methods

2.5.1. Visual Inspection with Acetic Acid (VIA)
VIA will be used in all the levels from primary health care centre (PHCC) to the tertiary level. The test can be performed with satisfactory standard by the trained health workers and the nursing staff at the primary care setting. The results are immediately available and further management can be decided.

Visual inspection of the cervix using acetic acid means looking at the cervix with a naked unaided eye to detect abnormalities after application of dilute (3–5%) acetic acid or vinegar. The area that is abnormal turns acetowhite, which shows that it may have precancerous lesions. VIA is recommended practice for low-resource settings compared to other screening tests such as Papsmear because:

- It is safe, inexpensive and easy to perform;
- The test performance is similar to other tests used for cervical cancer screening;
- It is non-invasive and effectively identifies many precancerous lesions;
- It can be learned and provided by almost all health professionals at all levels of the health care system;
- It provides immediate results on which decisions about management (treatment or referral) are based;
- Most equipment and supplies for this service are locally available; and
- Instant treatment (cryotherapy) can be linked to this type of screening to offer women screening and treatment in a single visit.

2.5.2. VIA and Treatment by Cryotherapy as a Single Visit Approach (SVA)
Screening by VIA and immediate treatment of precancerous lesion in one visit to the screening and treatment service site is recommended wherever the resources and trained manpower are available. SVA will be the final goal in the CCSP aimed at achieving in five years time at all levels.
2.5.3. **Cytology/Papsmear**

Papsmear is recommended where technical and laboratory facilities are available for taking the Papsmear and providing the results. Although Papsmear is the golden standard for cervical cancer screening it is not appropriate as a tool for large scale national screening program in the developing countries such as Nepal where resources are limited.

<table>
<thead>
<tr>
<th>Screening by VIA and immediate treatment of precancerous lesion in one visit—referred to as a single visit approach (SVA)—is recommended wherever the resources and trained manpower are available. VIA/SVA will be the final goal in the CCSP aimed at achieving in five years time from the initiation at all levels.</th>
</tr>
</thead>
</table>

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CHAPTER : 3
TIERS IN NATIONAL HEALTH SYSTEM FOR CERVICAL CANCER SCREENING AND PREVENTION

3.1. FOCAL POINT

FHD at MoHP will be the focal point for national level CCSP. Coordinators as required will be designated from other units for this program which can include either national or international bodies. The main responsibility of FHD will be as follows:

- Policy making for primary, secondary and tertiary prevention
- Implementation plans
- Supervision and monitoring
- Human Resource management
- Logistic management
- Co-ordination with national bodies like NHTC, NHEICC, LMD and HMIS and international bodies as appropriate and delegate the responsibilities.

3.2. TIERS FOR CERVICAL CANCER SCREENING AND PREVENTION

Screening for women/as entry points will be initiated at following levels of health care

1. Mobile VIA/SVA clinics and Mobile Screening Health Camps
2. PHCC
3. District Hospitals
4. Zonal/Regional Hospitals
5. Tertiary care Hospitals/Cancer Hospitals

CCSP services will be available at these facilities as well integrated into the existing family planning clinics, gynaecology clinics, HIV/AIDS and RTI/STI clinics wherever women of the target group already seek services.
Table 2. Tiers for Cervical Cancer Screening and Prevention

<table>
<thead>
<tr>
<th>LOCATION/LEVEL</th>
<th>TECHNIQUE</th>
<th>PERSONNEL</th>
<th>FACILITIES NEEDED</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PHCC</strong> Primary Health Care Centres</td>
<td>1. VIA/SVA</td>
<td>ANM/Nurse</td>
<td>Basic Gynec Examination and VIA/SVA</td>
</tr>
<tr>
<td>Mobile VIA/SVA clinics/Camps</td>
<td>1. VIA/SVA</td>
<td>ANM/Nurse</td>
<td>Basic Gynec Examination/VIA/SVA Referral Protocols for further management</td>
</tr>
<tr>
<td><strong>District Hospitals</strong></td>
<td>1. VIA/SVA</td>
<td>ANM/SN</td>
<td>VIA/SVA</td>
</tr>
<tr>
<td></td>
<td>2. Colposcopy / Biopsy</td>
<td>MO/Gynaecologist (if available)</td>
<td>Colposcopy/Biopsy/sample collection for BX</td>
</tr>
<tr>
<td><strong>Regional/Zonal Hospitals</strong></td>
<td>1. VIA/SVA</td>
<td>ANM/Nurse</td>
<td>Basic Gynec Examination + VIA/SVA +/- PAP arrangements</td>
</tr>
<tr>
<td></td>
<td>2. Colposcopy/ Biopsy</td>
<td>Gynaec/MO</td>
<td>Colposcope</td>
</tr>
<tr>
<td></td>
<td>3. Cryotherapy/ LEEP/ Conisation</td>
<td>Gynaec/MO/Cyto-pathologist</td>
<td>Colposcope, Minor OT + Cryotherapy equip + LEEP equipment + Cone Biopsy Equipment/ +/- HP arrangements</td>
</tr>
<tr>
<td><strong>Bharatpur and Bhaktapur Cancer Hospitals/ Teaching Hospitals/ Maternity Hospital/ Bir Hospital/ Private cancer treatment centres</strong></td>
<td>1. VIA/SVA</td>
<td>ANM/Nurse/ Technician</td>
<td>Basic Gynec Examination + Acetic Acid + PAP arrangements</td>
</tr>
<tr>
<td></td>
<td>2. Papsmear (sample collection and processing)</td>
<td>Gynaecologist/Oncologist</td>
<td>Colposcope</td>
</tr>
<tr>
<td></td>
<td>3. Colposcopy/ Biopsy</td>
<td>Gynaecologist/Oncologist</td>
<td>Colposcope, Minor OT + Cryotherapy equip + LEEP equipment + Cone Biopsy equipment/HP arrangements</td>
</tr>
<tr>
<td></td>
<td>4. Cryotherapy/ LEEP/ Conisation</td>
<td>Gynaecologist/Oncologist/Medical officer</td>
<td>Surgical OT and equipment</td>
</tr>
<tr>
<td></td>
<td>5. Surgery</td>
<td>Gynaecologist/Gen. Surgeon</td>
<td>Medical Oncology Set up</td>
</tr>
<tr>
<td></td>
<td>6. Chemotherapy</td>
<td>Oncologist</td>
<td>Radiation Oncology Set up</td>
</tr>
<tr>
<td></td>
<td>7. Radiation Therapy</td>
<td>Radiation Oncologist</td>
<td>Radiation Oncology Set up</td>
</tr>
</tbody>
</table>

**Note:** VIA = Visual Inspection with Acetic Acid
SVA = Screening and Visual Assessment
LEEP = Loop Electrosurgical Excision Procedure
BX = Biopsy
HP = Heated Probe
Basic Gynec Examination and VIA/SVA
Gynaec/MO/Cyto-pathologist
Gynaecologist/Oncologist/Medical officer
Gynaecologist/Gen. Surgeon
Oncologist
Radiation Oncologist
CHAPTER : 4
ESTABLISHMENT OF CCSP SERVICES

4.1. CCSP SERVICES IN MOBILE CAMPS

- **Setting up the VIA/SVA Mobile Clinics/Camps**
  Special VIA/SVA mobile clinics/camps will be conducted when feasible to reach large numbers of women until the health facilities have VIA/SVA capacity. Mobile camps would be effective especially in remote areas and places underserved by facility-based CCSP services. It is likely that this approach will be more frequent and diminish over time as these guidelines get implemented and more facilities routinely offer CCSP.

- **Integrating VIA/SVA into Other FP/RH Mobile Camps**
  There are so many RH camps offered by government and NGO/INGOs which are well-publicized and well-attended where VIA/SVA could be integrated.

- **Service Providers**
  In camp settings, CCSP providers include auxiliary nurse midwife (ANM), staff nurse (SN) and the medical officer (MO)—as well as gynaecologist if available. All the manpower who will be assigned for the CCSP will be trained before they start providing the service.

- **Screening Services**
  Screening services should follow the same procedure as in PHCC (see Section 4.2 below).

- **Records and Logistics**
  The medical officer or whoever is responsible running the camp also is responsible for record keeping and the logistics management. He/she will ensure the cases are registered, the registration card filled up and identification card handed over to the women. The details of VIA screening should be documented in the designated form.

  The VIA-positive women if eligible for SVA should be correctly treated or referred with correct documentation. Those will VIA negative results should be given appropriate advice and recalled for screening after five years.

- **Quality Assurance, Supervision and Monitoring**
  During the camp, the organizers are responsible for supervision and monitoring of the quality of CCSP services. They will also be responsible for proper recording system. Supervision and monitoring visits will be conducted to HP/PHCCs by the DHO/DPHO as well as FHD. The focal point at FHD will also routinely ensure clinical supervision and monitoring for both government-run and non-state (NGO/INGO) camps.

- **Reporting: Monthly and Annual Reports**
  For both government-run and non-state (NGO/INGO) camps, the incharge will be responsible for preparing monthly reports, annual reports and sending it to the focal point at FHD.
4.2. CCSP SERVICES AT PHCC

- **PHCC as First Entry Point**
  
The CCSP will be integrated into the existing health care system of MoHP starting at the PHCC level utilizing the existing resources and manpower already posted in the centres. It is likely the PHCCS will be better equipped and staffed to be able to deliver CCSP services.

- **Service Providers**
  
The basic service providers will be the ANM, SN and the MO posted in the centre. If not sufficient additional ANM/SN will be recruited as per the policy of the Government. All the manpower who will be assigned for the CCSP will be trained before they start providing the service. In charge will be designated among the staffs either SN or the MO who will be responsible for every matter concerning the CCSP and will liaison between the centre and the higher level.

- **Screening Services:**
  
  Twice a week/or every day service will be provided from all the centres as per the facilities and trained manpower available in the existing health care centres.

  There will be the system of

  - **Registration:** All the cases that come for screening will be registered and given identification numbers for screening, management and further referral.
  - **Counseling:** It is essential for clients to make decision about cervical cancer screening. During counseling there should be exchange of relevant, accurate and complete information about cervical cancer. All women who have decided to have a screening as well as those who have chosen to have the service and seeking additional information should be counseled.
  - **Informed consent:** Women undergoing screening should give informed consent. Giving an informed consent should mean that the women has understood what is to take place, including the potential risk and complications involved in undergoing and not undergoing the procedure and has given permission for the procedure.
  - **Screening:** The women will be screened by ANM/Staff nurse/or medical officer from PHCC level onward. The service providers will be the trained personnel who will be capable of performing the screening by VIA/SVA and identify the screen positive and negative cases.
  - **Diagnosis:** They will be able to do the diagnosis and will decide for further management.
  - **Treatment:** Service providers will perform the treatment as SVA per the treatment protocol for precancerous lesions or refer (see Chapter 6). SVA will be encouraged and will be the policy at every centre within five years from the initiation of the screening program.
  - **System for conveying the results and further referral.**
    - **Screen positive cases** will be referred:
      - If there is difficulty in diagnosis/or
      - If the women need further investigations such as colposcopy, biopsy /or
Lesion is not suitable for cryotherapy in health facility, /or
In case of treatment need other than cryotherapy

- **Screen negative cases**
  The service providers will well explain the women who are VIA negative to return for the screening after five years.
  The women should report to PHCC if she develops any symptoms.

- **Records and Logistics**
  The incharge of PHCC or the incharge of the screening service/or the MO whoever is designated as nodal officer is responsible for record keeping and the logistics management. He/she will ensure the cases are registered, the registration card filled up and identification card handed over to the women. The details of VIA screening should be documented in the designated form.

  The VIA-positive women if eligible for SVA should be correctly treated or referred with correct documentation. Those will VIA negative results should be given appropriate advice and recalled for screening after five years.

- **Quality Assurance, Supervision and Monitoring**
  Supervision and monitoring visits will be conducted to HP/PHCCs by the DHO/DPHO as well as FHD. They will also be responsible for proper recording system. Supervision and monitoring visits will be conducted to HP/PHCCs by the DHO/DPHO as well as FHD. The focal point at FHD will also routinely ensure clinical supervision and monitoring for HP/PHCCs offering CCSP services.

- **Reporting: Monthly and Annual Reports**
  The incharge will be responsible for preparing monthly reports, annual reports and sending it to the focal point at FHD.

### 4.3. CCSP SERVICES AT THE DISTRICT HOSPITAL (DH)

- **DH as CCSP Service Site as well as First Referral Point**
  District Hospital will act as first entry point for screening for those who come to the hospital directly. Some District Hospitals will also be developed as training sites for CCSP (VIA/SVA) (see Chapter 8).

- **Service Providers**
  At the DH, CCSP providers include auxiliary nurse midwife (ANM), staff nurse (SN) and the medical officer (MO) as well as gynaecologist if available. All the human resource who will be assigned for the CCSP will be trained before they start providing the service. The gynaecologist will be trained to perform colposcopy guided biopsy and treatment procedures.

- **Screening Services**
  District hospitals will offer:
  1. VIA/SVA and will follow the same procedures as detailed (Section 4.2 on screening; Chapters 5 and 6 on SVA)
2. Colposcopy and guided biopsy where a Gynaecologist is available (see Chapter 7 for detailed procedures)

- **Records and Logistics**

  The incharge of the screening service or the hospital superintendent is responsible for record keeping and the logistics management. He/she will ensure the cases are registered, the registration card filled up and identification card handed over to the women. The details of VIA screening should be documented in the designated form.

  For cases where women are initially screened, the VIA-positive women if eligible for SVA should be correctly treated or referred with correct documentation. If colposcopy and biopsy services are also available, the VIA-positive woman should first receive these services before cryotherapy is offered (see Chapter 5). Those with VIA negative results should be given appropriate advice and recalled for screening after five years.

- **Quality Assurance, Supervision and Monitoring**

  Supervision and monitoring of staff and ensuring the quality assurance measures of the CCSP program will also be the responsibility of the incharge. They will also be responsible for proper recording system. Supervision and monitoring visits will be conducted to DHs by the DHO/DPHO as well as FHD. The focal point at FHD will also routinely ensure clinical supervision and monitoring for DHs offering CCSP services.

- **Reporting: Monthly and Annual Reports**

  The incharge will be responsible for organizing to maintain records of daily screening, colposcopy, biopsy, treatment records by cryotherapy, and records of referral from lower level and further referral to regional, zonal, or tertiary centres and submitting the monthly and annual reports to the focal point at FHD. The MO or Gynaecologist will be the incharge of the CCSP at district level hospital who will be responsible for managing the clinic, supervising and monitoring daily screening activities. The incharge will also be responsible for organizing the training program at district level and submitting related training reports. (see Chapter 8).

- **Referral System**

  1. Screening will be repeated at District Hospital if the diagnosis is not confirmed or not done at PHCC level.

  2. District hospital will have a system for referral to regional/tertiary level hospital for management of invasive and advanced cases found during screening in the hospital. They will be referred for surgery, radiotherapy, chemotherapy or palliative care.

- **District Level Training Centre**

  In addition to providing the screening and treatment facilities, some of the district hospitals identified by FHD will also act as the training centre for VIA/SVA, by itself or in collaboration with the higher levels. (See Chapter 8 for details)

4.4. CCSP SERVICES IN REGIONAL/TERTIARY LEVEL AND ZONAL HOSPITALS

- **Regional, Zonal and Tertiary Hospitals as CCSP Referral and Treatment Sites**

  CCSP clinics and services will be established in each of these centres. Presently existing services if any will be collaborated within the national policy. FHD will identify the
CCSP centers in this tier. FHD will identify the centres and the coordinators for CCSP from these centers.

Within the CCSP this tier will also be identified as training centers; regional, national or international (see Chapter 8). In addition to the screening services and treatment of pre-malignant and malignant cases, these hospitals will have contributory role on training the human resource and supporting FHD for successful implementation of CCSP in the country.

Cancer institutes and centers, in addition to all above, will provide radiotherapy, chemotherapy and palliative care services.

- **Service Providers**
  At this tier, VIA/SVA providers for first entry point clients include auxiliary nurse midwife (ANM), staff nurse (SN) and the medical officer (MO) as well as Gynaecologist if available. All the human resource assigned for the CCSP will be trained before they start providing the service.

  At this RH/ZH level, medical officers and gynaecologists at the site will be trained to perform cryotherapy, colposcopy guided biopsy, LEEP and conisation.

- **Screening Services**
  Regional and zonal hospitals will offer:
  1. VIA/SVA will follow the same procedures as detailed in Section 4.2 on screening; Chapters 5 and 6 on SVA
  2. Colposcopy, LEEP and conisation where a gynaecologist or trained MO is available (see Section 7 for detailed procedures)

- **Records and Logistics**
  The incharge of the screening service or the hospital superintendent is responsible for record keeping and the logistics management. He/she will ensure the cases are registered, the registration card filled up and identification card handed over to the women. The details of VIA screening should be documented in the designated form.

  For cases where women are initially screened, the VIA-positive women if eligible for SVA should be correctly treated or referred with correct documentation. If colposcopy and biopsy services are also available, the VIA-positive woman should first receive these services before cryotherapy is offered (see Chapter 5). Those VIA negative with results should be given appropriate advice and recalled for screening after five years.

- **System for Quality Assurance, Supervision and Monitoring**
  Supervision and monitoring of staff and ensuring the quality assurance measures of the CCSP program at the centre will be the responsibility of the incharge. The incharge will be responsible for managing the clinic, supervising and monitoring daily screening activities. He/She will also be responsible for proper recording system. The focal point at FHD will also routinely ensure clinical supervision and monitoring for RH/ZHs offering CCSP services.

- **Reporting: Monthly and Annual Reports**
  The incharge will be responsible for organizing to maintain records of daily screening, colposcopy, biopsy, LEEP/conisation and treatment records by cryotherapy as well as records of referral from lower level and further referral to regional, zonal, or tertiary
centres. S/he will submit the monthly and annual reports to the focal point at FHD. The incharge will also be responsible for organizing the training program and submitting related training reports.

- **Referral system**
  It will be a two-way system.
  1. RH/ZHs will be set up as a referral centre for PHCC and DHs for management of screen positive cases. Screening will be repeated if the diagnosis is not confirmed or not done at PHCC level.
  2. RH/ZH will also have a system for further referral for management of invasive and advanced cases found during screening in the hospital. They will be referred for surgery, radiotherapy, chemotherapy or palliative care.

### 4.5. CANCER INSTITUTES AND CENTERS

Cancer institutes and centers, in addition to all above, will provide radiotherapy, chemotherapy and palliative care services. The guidelines for the management of invasive cancer of cervix has been published by BPKMCH which should be referred by Cancer institutes and centre.

### 4.6. NON-STATE (NGO/INGO) CCSP SERVICES

NGOs and INGOs who are currently conducting any cervical cancer prevention activities will collaborate with FHD under these national guidelines. These organizations will be collaborated further for technology transfer, educational materials, training programs and funds.

Wherever feasible NGOs and INGOs working in FP/STI/HIV should integrate VIA/SVA as detailed in Section 4.2 on PHCCs and consistent with the national guideline. Reporting and monitoring should be streamlined through FHD.
5. MANAGEMENT GUIDELINES FOR SCREENING POSITIVE CASES AT ALL LEVELS

There will be a protocol for conveying the results after VIA and Papsmear (if performed) and further referral for colposcopy/biopsy/diagnosis and management of precancerous lesions in all the centres.

- All the cases that are found screen positive after VIA should be provided with treatment or referred for colposcopy and further management as per the protocol.
- A colposcopy clinic set up in district hospital or higher centres will be seeing all the screen positive cases that are referred from lower level, or coming directly to the centres from the screening unit, will undertake a repeat VIA, Papsmear (where available), perform colposcopy and punch biopsy in an outpatient basis.
- The results should be conveyed to the women, either calling the negative cases for follow up for next screening only or they need to go for further management in the same centre or in higher centres.
- If found positive for precancerous lesions, the centre should arrange for treatment by cryotherapy/SVA/cold coagulation/LEEP or further referred for same to higher centres.
- The clinic should be operational at least once a week or on daily basis.
6. MANAGEMENT GUIDELINES FOR PRECANCEROUS LESIONS

6.1 Treatment by Cryotherapy/Cold Coagulation

All the screening clinics under the CCSP will be equipped with the treatment facility for precancerous lesions by cryotherapy/SVA and/or cold coagulation.

Cryotherapy is the choice of treatment for ecto-cervical lesions that occupies less than \( \frac{3}{4} \) of transformation zone and that can be covered with the cryo-probe.

Either the CO\(_2\) or NO\(_2\) gas will be used for freezing.

Similarly cold coagulation equipment will be made available (if resources permit) which can be used even for high grade lesions in these centres.

6.2 Biopsy

Where available, it will be taken before undertaking these ablative procedures and wait until the biopsy report is available and/or further management undertaken accordingly.

6.3 Treatment by SVA (Single Visit Approach)

VIA/SVA is the clinical standard where clinically indicated and possible given trained staff and basic equipment ideally in the mobile screening camps/PHCC/District/ zonal/ tertiary level hospitals are available.

Women with VIA-positive are eligible for SVA if:

- Acetowhite lesions covering less than 75% of the cervix (if more than 75% of the cervix is covered, further consultation with a Gynaecologist should be done)
- No suspected invasive cancer
- Lesion that does not extend to the endocervical canal
- Lesion that extends less than 2 mm beyond diameter of the cryotherapy probe

Cryotherapy is not an appropriate treatment method if:

- Acetowhite lesion greater than 75% of face of cervix
- Acetowhite lesions extending into the endocervical canal or extending more than 2mm beyond the outer or inner edge of the cryotherapy probe
- Acetowhite lesion where client requests alternate treatment to cryotherapy or requests additional diagnostic tests
- Invasive cancer is suspected
- During bimanual examination, an ovarian mass or fibroid is suspected
6.4 Policies for Further Referral at Cryotherapy Clinic

Women who are not eligible for VIA/SVA will be referred to zonal/regional/tertiary or national level hospitals for management by LEEP or conization/or surgery.

Women will be explained about their diagnosis, treatment procedures undertaken and plan for further follow up and next screening date.
CHAPTER : 7  
MANAGEMENT GUIDELINES FOR LEEP IN REGIONAL/ZONAL/TERTIARY OR NATIONAL LEVEL HOSPITAL

7. MANAGEMENT GUIDELINES FOR REGIONAL AND TERTIARY LEVEL HOSPITALS

- All necessary information should be given to the women before undertaking the procedure and informed consent taken.
- All women not suitable for treatment by cryotherapy or cold coagulation should be referred/undertaken for LEEP.
- Indications for LEEP will be as follows
  - High grade lesions,
  - Large lesions not reachable by cryo-probe or cold coagulation probe,
  - Endo-cervical lesions
  - Cryotherapy failures
- The specimen should be subjected to histopathology after the LEEP procedure.
  - It should be reviewed with the biopsy report in one month time.
  - It should be examined for any evidence of invasive disease.
  - All women should be explained about their diagnosis, treatment procedures undertaken.
  - Examined for any evidence of complications and managed.
  - Suggest plan for further follow up and next screening date.
- Policies for further referral at LEEP clinic
  - If there is any evidence of invasive disease in biopsy specimen, the woman should be referred to the tertiary/oncology centre for appropriate treatment.
- Management of invasive disease
  - If any woman is found to be having the evidence of invasive disease they should be referred to the tertiary/national level or/oncology centres for appropriate treatment. Guidelines for these services are detailed in the guidelines published by BPKMCH, Bharatpur.
Figure 2. Cervical Cancer Screening, Treatment and Follow-up Algorithm: VIA/SVA (1 step approach)

1. VIA Screening
   - Positive
     - Cryotherapy
       - Large lesion
       - Colposcopy
         - Normal
         - Abnormal
           - Punch Biopsy + Cryotherapy
             - LEEP
             - Conization
               - Normal
               - No Malignancy
                 - Follow-up after 1 year
               - Malignancy
                 - Surgery, Radiation Chemotherapy
               - Follow-up after 1 year
     - Follow-up at 1,3,12 months
   - Negative screening
     - Repeat after 5 yrs.
Figure 3. Cervical Cancer Screening, Treatment and Follow-up Algorithm: VIA/SVA (1 step approach)
CHAPTER : 8
HUMAN RESOURCES

8. HEALTH CARE PROVIDER TRAINING

8.1. Focal Point
- FHD will be the focal point for initiating and implementing CCSP.
- FHD will liaison with national and international organizations for the training courses and materials. NHTC will be the national body for training and certification of service providers.
- FHD will also collaborate with other national/international organizations to organize the training courses and will be responsible for identification of the training centres.
- FHD will be responsible for training of service providers, as well as monitoring and supervision.
- FHD will liaison with the international organizations like WHO, Jhpiego, UNFPA and other partners in all aspects for the successful implementation of CCSP in the country including the experts, training materials, training courses, as well as in the policy making process.

8.2. Training Sites

8.2.1. District Hospitals
At least one each at five development region will be developed into training centres for VIA/SVA in addition to the screening and treatment services.

8.2.2. Regional/Zonal Hospitals
Some of the regional/zonal hospitals will be developed into training centres for Colposcopy, Cryotherapy, LEEP, biopsy and cold coagulation.

8.2.3. Tertiary Level Hospitals
They will be the centres for advanced training and for training the master trainers as well as provide the refresher training courses.

8.3. Master Trainers

8.3.1. Clinical Trainers for VIA/SVA
Medical officers at district, regional/zonal hospitals will be developed as VIA/SVA clinical trainers.

8.3.2. Master Trainers
They will be identified by the FHD in each of these training centres for training the manpower and for maintaining the quality service. Master trainers will also be identified from national and international organizations.

8.4. Training of Personnel
All levels of personnel responsible for the cervical cancer prevention would have to be initially trained. A training plan for all levels of personnel is described in Table 3.
Table 3. Personnel Training Plan for Cervical Cancer Prevention in Nepal

<table>
<thead>
<tr>
<th>PERSONNEL</th>
<th>TRAINING NEEDS</th>
<th>TRAINING SITE</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANM</td>
<td>VIA procedures and test reading SVA (cryotherapy)</td>
<td>DH</td>
</tr>
<tr>
<td>Nurse</td>
<td>VIA procedures and test reading SVA (cryotherapy)</td>
<td>DH</td>
</tr>
<tr>
<td>Technician</td>
<td>Biopsy sample collection, primary processing</td>
<td>NPL/Tertiary hospital</td>
</tr>
<tr>
<td>Medical officer</td>
<td>VIA/SVA/colposcopy, biopsy and LEEP procedures</td>
<td>Tertiary hospitals/Cancer hospitals</td>
</tr>
<tr>
<td>Gynaecologist oncologist</td>
<td>VIA/SVA/colposcopy, biopsy, LEEP, conisation, hysterectomy and associated Surgical procedures</td>
<td>Cancer hospitals/Tertiary hospitals</td>
</tr>
<tr>
<td>Pathologist</td>
<td>Cervical Cytology and Histopathology</td>
<td>NPL/Tertiary hospitals</td>
</tr>
<tr>
<td>Radiation oncologist</td>
<td>Treatment planning and radiation therapy</td>
<td>Cancer hospitals/Tertiary hospitals</td>
</tr>
<tr>
<td>Medical oncologist</td>
<td>Medical oncology management</td>
<td>Cancer hospitals/Tertiary hospitals</td>
</tr>
<tr>
<td>Surgical oncologist</td>
<td>Surgical oncology management</td>
<td>Cancer hospitals/Tertiary hospitals</td>
</tr>
<tr>
<td>Palliative care specialist</td>
<td>Palliative care management</td>
<td>Cancer hospitals/Tertiary hospitals</td>
</tr>
</tbody>
</table>

Groups of 2–5 personnel from each category should be initially trained as master trainers with the help of in-country and international experts. These trained personnel will serve as in-country trainers for the remaining health services personnel of the same categories in Nepal. Updating and refresher course will be held from time to time as necessary.
CHAPTER : 9
QUALITY CONTROL

9. QUALITY CONTROL MEASURES FOR CCSP
Internal and external quality assurance programmes should be inbuilt into the model cancer control programme. At least 2% of all procedures should be independently evaluated by in-country and regional experts, till such time as good agreement rates between the service providers and experts become evident.

9.1. The Quality Control Measure
1. Training requirement.
2. Infrastructure set up /equipment
3. Human resources
4. Performance in screening
5. Performance in Treatment procedures and compliance
6. Policies on further referral of the cases
7. Logistics in daily Registration, treatment, referral and follow up of the cases.
8. Monthly Reports
9. Annual Reports.
10. Assessment by FHD

9.2. Monitoring Indicators: at PHCC

<table>
<thead>
<tr>
<th>SITE</th>
<th>MONTH/YEAR</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. No of women contacted</td>
<td>(A)</td>
</tr>
<tr>
<td>2. No of women attended for VIA/SVA</td>
<td>(B)</td>
</tr>
<tr>
<td>3. No of women with positive test result</td>
<td>(C)</td>
</tr>
<tr>
<td>4. Test positivity rate</td>
<td>(C/B) %</td>
</tr>
</tbody>
</table>
9.3. Monitoring Indicators: At District Hospitals

<table>
<thead>
<tr>
<th>SITE</th>
<th>MONTH/YEAR</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. No of women referred from PHCC</td>
<td>(A)</td>
</tr>
<tr>
<td>2. No of referred women registered at District Hospital</td>
<td>(B)</td>
</tr>
<tr>
<td>3. Compliance to Referral</td>
<td>(B/A)</td>
</tr>
<tr>
<td>4. No of women who had Colposcopy</td>
<td>(C)</td>
</tr>
<tr>
<td>5. Compliance to colposcopy</td>
<td>(C/A)</td>
</tr>
<tr>
<td>6. No of cases in which suspicious lesions were found on colposcopy</td>
<td>(D)</td>
</tr>
<tr>
<td>7. No of women who had biopsy</td>
<td>(E)</td>
</tr>
<tr>
<td>8. Proportion of colposcopically abnormal women who had biopsy</td>
<td>(E/D)</td>
</tr>
<tr>
<td>9. No of women detected to have CIN on biopsy</td>
<td>(F)</td>
</tr>
<tr>
<td>10. No of women with CIN who received treatment</td>
<td>(G)</td>
</tr>
<tr>
<td>11. Compliance to treatment</td>
<td>(G/F)</td>
</tr>
<tr>
<td>12. Proportion of women referred for positive screening tests who</td>
<td>(D/C)</td>
</tr>
<tr>
<td>had abnormality on colposcopy</td>
<td></td>
</tr>
<tr>
<td>13. Proportion of women referred for positive screening test who</td>
<td>[F+(D-E)/C]</td>
</tr>
<tr>
<td>had CIN on histology /or colposcopy</td>
<td></td>
</tr>
<tr>
<td>14. No of women referred to tertiary centres for invasive cancers</td>
<td></td>
</tr>
<tr>
<td>and their treatment status.</td>
<td></td>
</tr>
</tbody>
</table>

CHAPTER : 10
CERVICAL CANCER VACCINE AND HPV TESTING

10.1 CERVIX CANCER VACCINE INITIATIVE
Cervix Cancer Vaccine initiatives are being proposed by international donors. Two vaccines (a bivalent-HPV 16 and 18 and a quadrivalent-HPV 16, 18, 11 and 6) are currently available worldwide and have been shown to be equally efficacious. Considering vaccination as a public health approach for Nepal, the following are important factors:

1. The current costs of the vaccine.
2. The logistics and costs of vaccine delivery.
3. Issues related to cultural acceptability of the vaccine in various socio-economic strata of the country.

The current vaccines are expected to provide protection in only around 70% of the HPV infections in Nepal. Also the current worldwide experiences of the efficacy of both vaccines are only about seven years old and it remains to be seen whether the vaccines truly reduce the incidence of and mortality due to cervix cancer, which might take another 30–50 years to understand.

Under no circumstance the cervix cancer vaccines should be provided as an alternative to screening. They may be provided (if at all) as a prevention method that is complementary to screening.

To understand the logistic, economic and socio-cultural aspects of a cervix cancer vaccination programme in Nepal, a completely donor-funded vaccination programme may be piloted.

10.2 HPV DNA TESTING
HPV DNA tests as primary screening methods is recommended whenever/wherever feasible. They can be used in conjunction with other screening tests where resources exist. Given the current costs, logistics and capacity in Nepal, HPV DNA testing is not a current strategy for CCSP.
Breast cancer and Oral cancers stand 2nd and 3rd in the list of common cancers among women in Nepal (17). The primary care workers can be trained with minimal additional training investments to provide clinical breast examination (CBE) and oral examination for oral cancer screening to the women of the same age group as those needing cervix cancer screening. Thus a comprehensive programme addressing the three top cancers, cervix, oral and breast (that are fortunately preventable) can be launched from the same platform albeit in a phased manner.
ANNEXES

ANNEX 1: SETTING UP VIA CLINIC

Supplies and Equipment Required for VIA
- Clinic space
- Service providers
- Examination table
- Vaginal speculum
- Cotton tipped swabs
- Freshly prepared 5% acetic acid
- Halogen lights
- VIA forms
- Registers
- Materials and methods for sterilization

ANNEX 2: SETTING UP THE VIA/COLPOSCOPY/BIOPSY/CRYOTHERAPY/ COLD COAGULATION SERVICE/LEEP

- Clinic space
- Service providers
- Examination table
- Halogen lights
- Vaginal speculum,
- Ayer spatula/endo-cervical brush
- Glass slides
- Coplins jar and 95% ethyl alcohol
- Colposcope
- Cervical punch biopsy forceps
- Endo-cervical forceps
- Cotton tipped swabs
- Examination gloves
- 5% freshly prepared acetic acid
- Lugol’s Iodine
- Monsel Paste/Silver nitrate solution
- Cryotherapy equipment
- NO₂/CO₂ gas for freezing
- Cold coagulation equipment
- Set up for sterilization techniques.
- Record keeping forms for registration, VIA/colposcopy, cryotherapy, cold coagulation and LEEP
REFERENCES


17. Annual Report, BPKMCH 2009