

## WEEKLY EPIDEMIOLOGICAL REPORT

A publication of the Epidemiology Unit Ministry of Health, Nutrition & Indigenous Medicine

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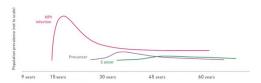
31st - 06th September 2019

## Elimination of Human Papilloma Virus and Cervical Cancer Part II

This is the second in a series of two articles on Elimination of Human papillomavirus (HPV) .

#### Cervical cancer elimination

A comprehensive approach to cervical cancer prevention and control is needed as suggested by WHO. The actions and interventions must be carried throughout the life course. It should be multidisciplinary. Components from community education, social



mobilization, vaccination, screening, treatment and palliative care must be included in it.

#### **Primary prevention**

Girls 9-14 years

- HPV vaccination
   Girls and boys, as appropriate
- Health information and warnings about tobacco use
- Sex education tailored to age and culture
- Condom promotion and provision for those engaged in sexual activity
- Male circumcision

#### **Secondary prevention**

Women 30 years old or older "Screen and treat" - single visit approach

- Point-of-care rapid HPV testing for high-risk HPV types
- Followed by immediate treatment
- On-site treatment

#### **Tertiary prevention**

All women as needed

Treatment of invasive cancer at any age and palliative care

- Surgery
- Radiotherapy
- Chemotherapy
- Palliative care

#### **Primary prevention**

Before girls are sexually active between ages 9-14 HPV vaccination for girls is to be done.

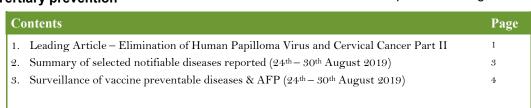
Also for boys and girls as appropriate, the following can be done.

- Education about safe sexual practices, including the delayed start of sexual activity.
- Promotion and provision of condoms for those already engaged in sexual activity.
- Warnings about tobacco use, as there is a tendency of starting during adolescence and as it is an important risk factor for cervical and other cancers.
- Male circumcision

### **HPV** vaccination

Currently, 3 vaccines are available for protection against both HPV 16 and 18. The third vaccine protects against three additional oncogenic HPV types, which cause a further 20% of cervical cancers. There could be some cross-protection against other less common HPV types which cause cervical cancer though vaccines are only protecting against HPV 16 and 18. Thus WHO considers the three vaccines equally protective against cervical cancer. Two of the vaccines also protect against HPV types 6 and 11, which cause anogenital warts.

Clinical trials and post-marketing surveil-





lance have shown that HPV vaccines are very safe and very effective in preventing HPV infections. As the vaccine works best if administered to girls between 9-14 years before sexually active and prior to HPV infection exposure. The vaccine cannot treat HPV infection or HPV associated diseases. It is recommended to vaccinate girls between 9-14 years as the most cost-effective public health measure.

Due to the vaccine preventing genital cancer in males some countries have started to vaccinate boys too.

In Sri Lanka, the HPV vaccine was introduced to the EPI schedule from July 2017. The vaccine is given to 10-11 year old girls (Grade 6) in two doses minimum 6 months apart.

In the treatment of pre-cancer lesions, it is recommended to use cryotherapy and Loop Electrosurgical Excision Procedure (LEEP). In cases with advanced lesions, women should be referred for further investigations and adequate management.

#### **Tertiary Prevention**

This must be done in all women if signs of cervical cancer are present. Treatment options for invasive cancer include surgery, radiotherapy and chemotherapy.

Types of HPV vaccine												
Bivalent	Quadrivalent	Ninevalent (new)										
<ul> <li>First licensed in 2007</li> </ul>	First licensed in 2006	<ul> <li>Approved to use in USA,</li> </ul>										
<ul> <li>HPV-VLP: genotype 16 &amp;</li> </ul>	• Schedule : 0-2-6	Canada :2014 December										
<ul> <li>schedule: 0-1-6 months</li> <li>No live biological products</li> </ul>	No live biological products or viral DNA	<ul> <li>females ages 9 - 26 and males ages 9 - 15</li> <li>to prevent</li> </ul>										
or viral DNA	Liquid vaccine	cervical pre-cancers and										
<ul> <li>Liquid form</li> </ul>	<ul> <li>intramuscular injections as</li> </ul>	cancers • vulvar and vaginal pre-										
<ul> <li>intramuscular injections as dose of 0.5 mL Sero conversion 99-100%</li> </ul>	dose of 0.5 mL • Sero conversion 99-100%	cancers and cancers  anogenital warts										

#### **Secondary Prevention**

Women who are sexually active should be screened for abnormal cervical cells and pre-cancerous lesions. Starting from 30 years of age this must be done routinely. In the treatment of pre-cancer, there is a need to excise abnormal cells or lesions.

#### Screening and treatment of pre-cancer lesions

Cervical cancer screening includes testing for precancer and cancer among women who have no symptoms. After screening pre-cancerous lesions can easily be treated which will help cancer to be avoided. The screening also detects cancer at an early stage which in turn has a high potential for a cure after treatment. Women living with HIV who are sexually active, screening should be done earlier, as soon as they know their HIV status. Screening has to be linked to the treatment and management of positive screening tests.

# Cervical cancer screening Pap test.

A sample of cells from the cervix or vagina is collected and sent for laboratory analysis. This reveals abnormalities which can lead to cancer.

#### **DNA** test.

Conducted on cells from the cervix. It recognizes the DNA of the high-risk varieties of HPV that is linked to genital cancers.

#### Colposcopy and Biopsy

In situations with abnormal HPV or Pap test, a colposcopy will be done by a gynecologist. By the use of the colposcopy magnified view of the cervix (colposcope) will be seen samples (biopsy) will be done on suspected areas. The histology of the cells will be assessed thereafter.

#### Management of invasive cervical cancer

Women with symptoms of suspicion for cervical cancer must be referred to an appropriate facility for further evaluation, diagnosis and treatment.

Symptoms of early-stage cervical cancer

- Irregular blood spotting or light bleeding between periods in women of reproductive age.
- Postmenopausal spotting or bleeding.
- Bleeding after sexual intercourse.
- Increased vaginal discharge, sometimes foulsmelling.
- Advanced cervical cancer symptoms
- Persistent back, leg and/or pelvic pain
- Weight loss
- Fatigue and loss of appetite
- Foul-smell discharge and vaginal discomfort
- Swelling of a leg or both lower extremities.

Depending on organs involved with cancer spread other severe symptoms may arise.

Diagnosis of cervical cancer is made by histopathologic examination. Staging is done based on tumour size and spread of the disease within the pelvis and to distant organs.

Treatment depends on the stage of the disease. Surgery, radiotherapy and chemotherapy can be used. Palliative care is also an essential element of cancer management. Reliving unnecessary pain, upsetting symptoms and suffering due to the disease is done. Also, the psychological, social, and spiritual aspects of

care are looked into. This also offers a support system

to help family members cope during the sick person's illness and in their grief and mourning.

#### Compiled By:

Dr.T.D.Haputhanthri, Medical officer- Epidemiology Unit, Ministry of Health.

Table 1: Selected notifiable diseases reported by Medical Officers of Health 24th - 30th Aug 2019 (35th Week)

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Source: Weekly Returns of Communicable Diseases (WRCD).

-Timeliness refers to returns received on or before 30th August, 2019 Total number of reporting units 353 Number of reporting units data provided for the current week; 330 C\*\*-Completeness A = Cases reported during the current week. B = Cumulative cases for the year.

## Table 2: Vaccine-Preventable Diseases & AFP

## 24th - 30th Aug 2019 (35th Week)

Disease	No. of	Cases b	y Province	e					Number of cases during current	Number of cases during same	Total number of cases to	Total number of cases to date in	Difference between the number of		
	W	С	S	N	Е	NW	NC	U	Sab	week in 2019	week in 2018	date in 2019	2018	cases to date in 2019 & 2018	
AFP*	00	00	00	00	01	00	00	00	00	01	02	54	43	25.5 %	
Diphtheria	00	00	00	00	00	00	00	00	00	00	00	00	00	0 %	
Mumps	00	00	00	01	01	00	00	00	00	02	06	240	243	- 1.2 %	
Measles	01	03	00	00	00	02	00	00	00	06	01	237	87	172.4 %	
Rubella	00	00	00	00	00	00	00	00	00	00	00	00	04	0 %	
CRS**	00	00	00	00	00	00	00	00	00	00	00	00	00	0 %	
Tetanus	00	01	00	00	00	00	00	00	00	01	00	15	15	0 %	
Neonatal Tetanus	00	00	00	00	00	00	00	00	00	00	00	00	00	0 %	
Japanese Encephalitis	00	00	00	00	00	00	00	00	00	00	01	09	23	- 60.8 %	
Whooping Cough	00	00	00	00	00	00	00	00	00	00	01	36	36	0 %	
Tuberculosis	48	12	30	04	03	13	18	05	07	140	298	5674	5768	-1.6 %	

## Key to Table 1 & 2

Provinces: W: Western, C: Central, S: Southern, N: North, E: East, NC: North Central, NW: North Western, U: Uva, Sab: Sabaragamuwa.

RDHS Divisions: CB: Colombo, GM: Gampaha, KL: Kalutara, KD: Kandy, ML: Matale, NE: Nuwara Eliya, GL: Galle, HB: Hambantota, MT: Matara, JF: Jaffna,

KN: Killinochchi, MN: Mannar, VA: Vavuniya, MU: Mullaitivu, BT: Batticaloa, AM: Ampara, TR: Trincomalee, KM: Kalmunai, KR: Kurunegala, PU: Puttalam,

AP: Anuradhapura, PO: Polonnaruwa, BD: Badulla, MO: Moneragala, RP: Ratnapura, KG: Kegalle.

Data Sources:

Weekly Return of Communicable Diseases: Diphtheria, Measles, Tetanus, Neonatal Tetanus, Whooping Cough, Chickenpox, Meningitis, Mumps., Rubella, CRS,

Special Surveillance: AFP\* (Acute Flaccid Paralysis ), Japanese Encephalitis

CRS\*\* =Congenital Rubella Syndrome

NA = Not Available

## **Dengue Prevention and Control Health Messages**

Look for plants such as bamboo, bohemia, rampe and banana in your surroundings and maintain them free of water collection.

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Comments and contributions for publication in the WER Sri Lanka are welcome. However, the editor reserves the right to accept or reject items for publication. All correspondence should be mailed to The Editor, WER Sri Lanka, Epidemiological Unit, P.O. Box 1567, Colombo or sent by E-mail to chepid@sltnet.lk. Prior approval should be obtained from the Epidemiology Unit before publishing data in this publication

#### ON STATE SERVICE

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