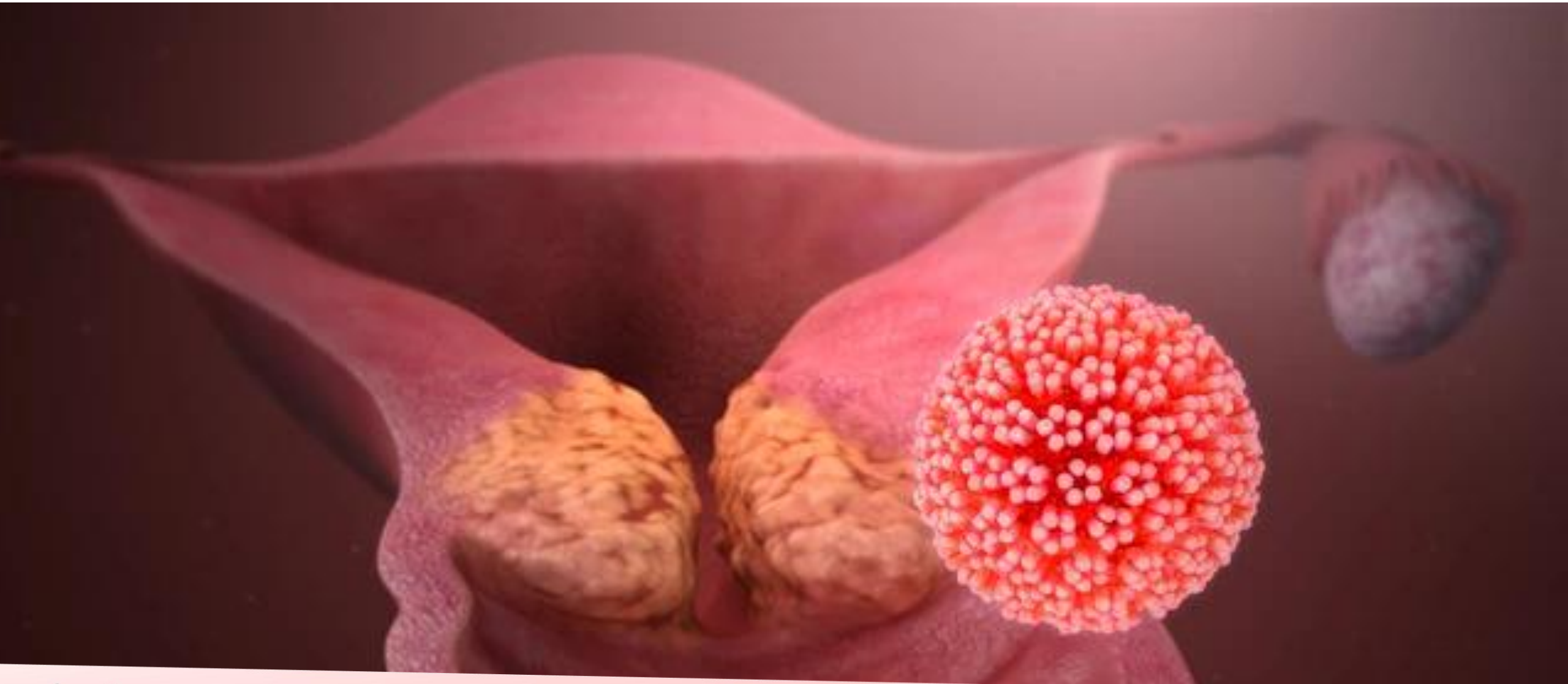


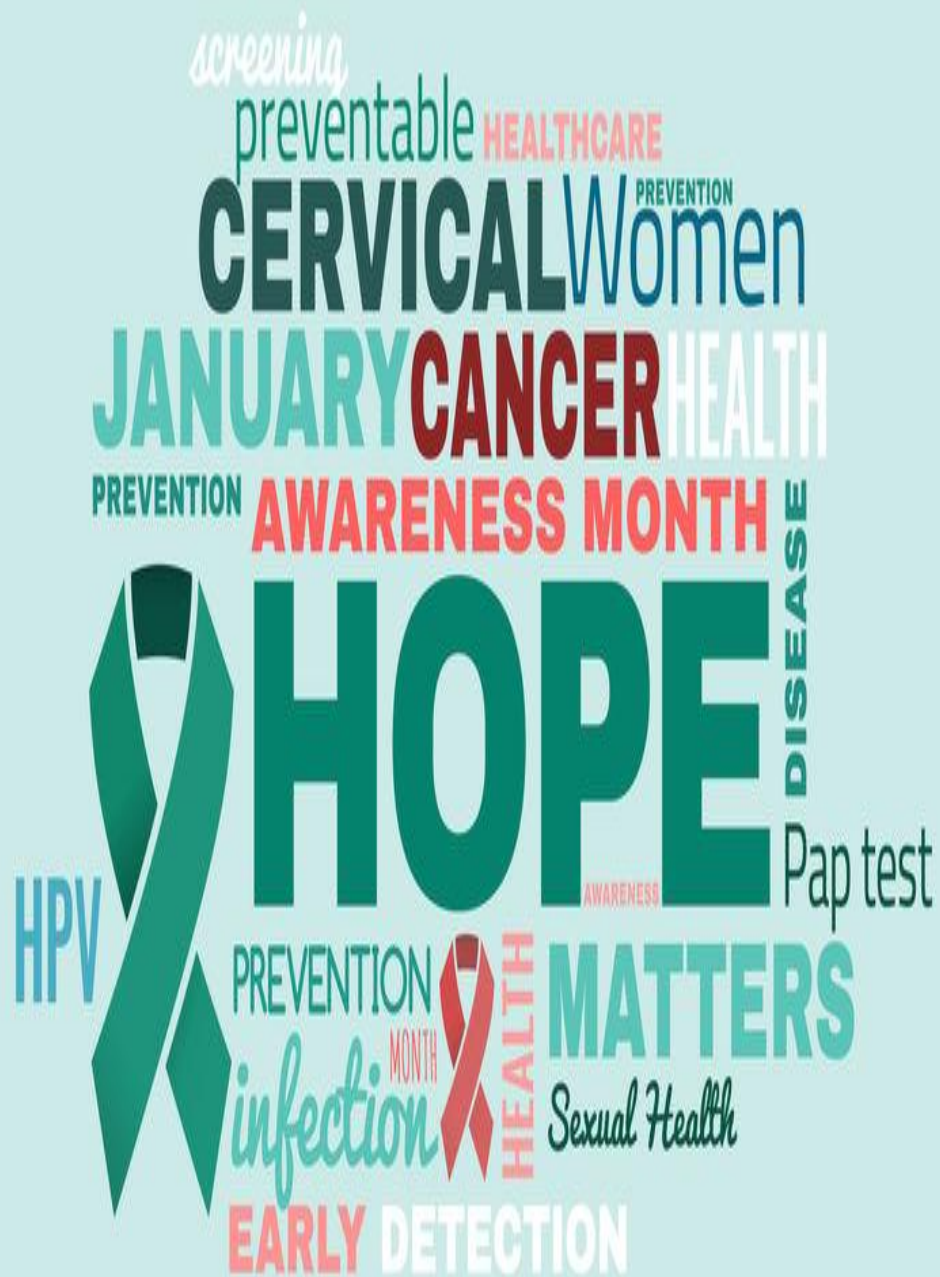


Cervical Cancer And Its Prevention: All You Need To Know

Dr. Tanzina Tamanna
Assistant Professor
Department of Community Medicine & Public Health



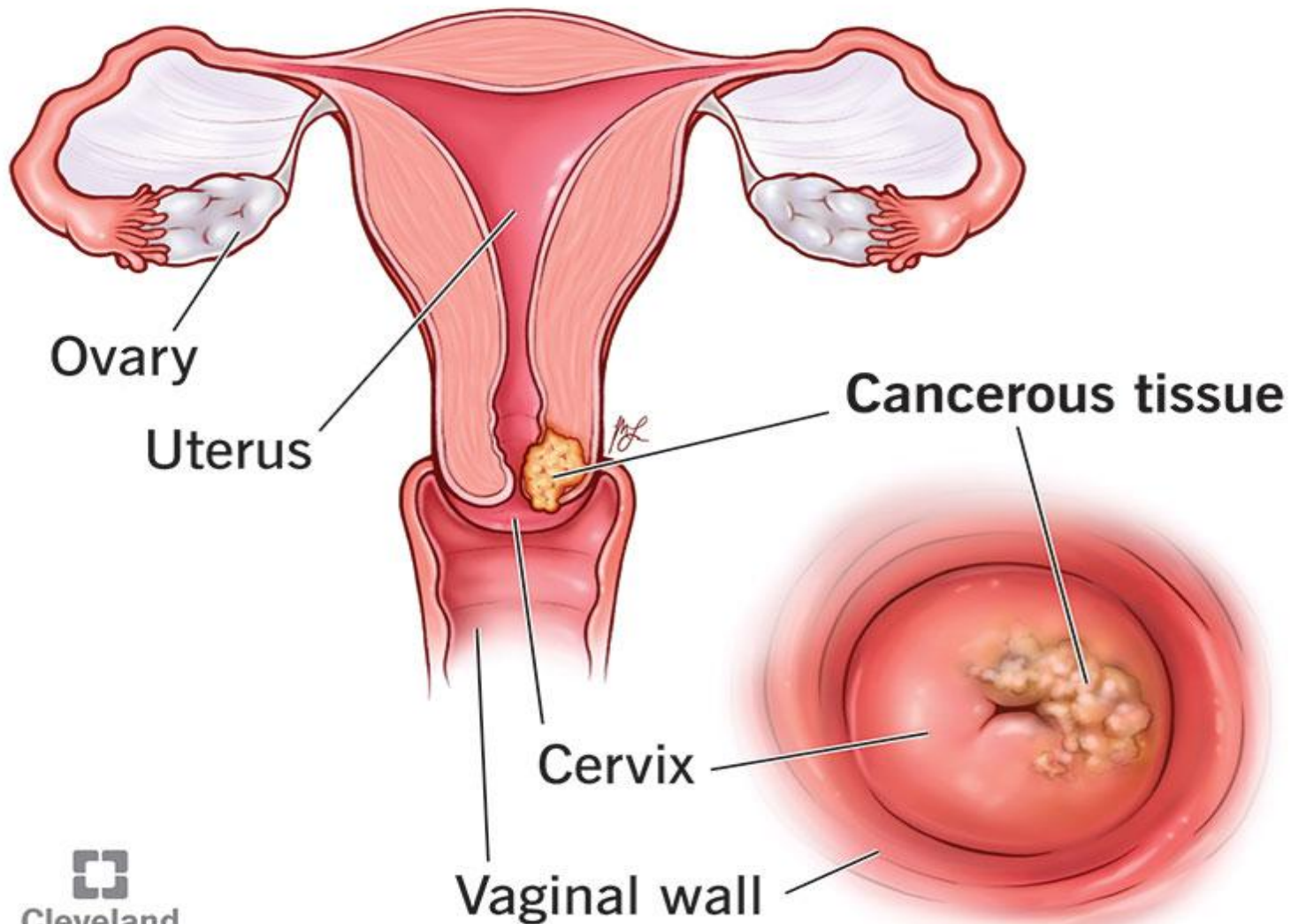
Cervical cancer is the second most common type of cancer and is mostly associated with a virus called human papillomavirus (HPV). This cancer occurs when cells change in a woman's cervix. It should be taken seriously as it can affect the deeper tissues of the cervix and can spread to the other parts of the body such as lungs, bladder, liver, rectum and vagina and get metastasized.



At the end of the session, the audience will be able to learn:

- ✓ *What is cervical cancer & Types*
- ✓ *Problem statement*
- ✓ *What are the symptoms of cervical cancer*
- ✓ *What causes cervical Cancer*
- ✓ *Who is at risk*
- ✓ *Cervical Cancer diagnosis*
- ✓ *How can cervical cancer be prevented*
- ✓ *When should a HPV vaccination be taken*
- ✓ *What is cervical screening*
- ✓ *Cervical cancer awareness .*

Cervical Cancer



What is Cervical Cancer ?

Cervical cancer is a type of cancer that occurs in the cells of the cervix- the lower part of the uterus that connects to the vagina.

A cancer that begins with an unusual change in the cells of the cervix. This is a slow growing cancer and can be detected in the early stages with regular screenings and can be treated on time before it causes more serious problems. Cervical cancer can be mainly of two types:

Majority of cervical cancers are Squamous cell carcinomas.

The remaining cervical cancers are Adenocarcinomas.

However, very rarely a mixed type of cancer is seen which has the features of both types

Histopathologic Types of Cervical Cancer

Squamous cell carcinoma
(71% of cervical cancers)

Keratinizing

Nonkeratinizing

Verrucous

Adenocarcinoma (25%)

Clear cell

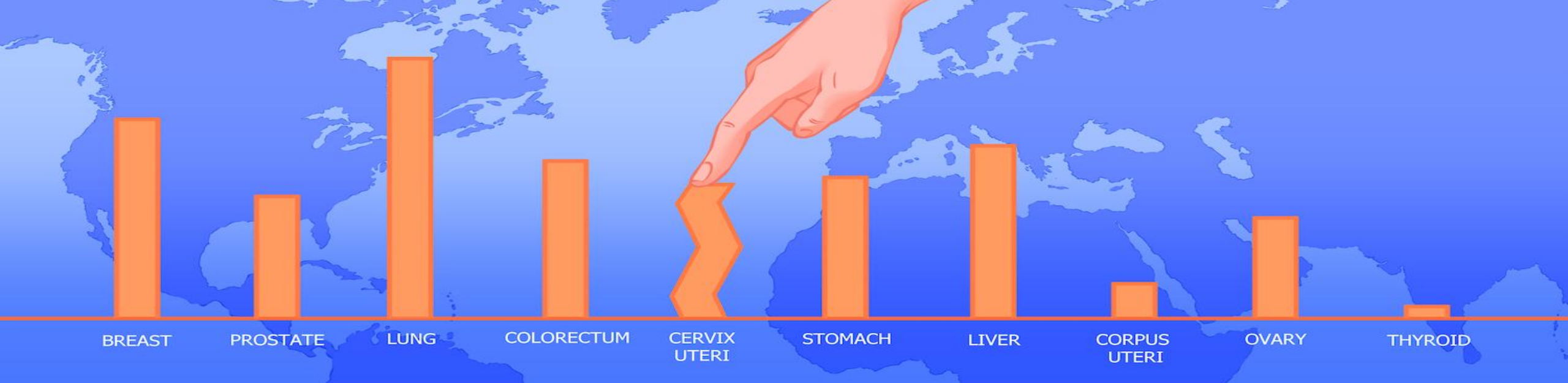
Endometrioid

Adenosquamous carcinoma (4%)

Adenoid cystic

Small cell

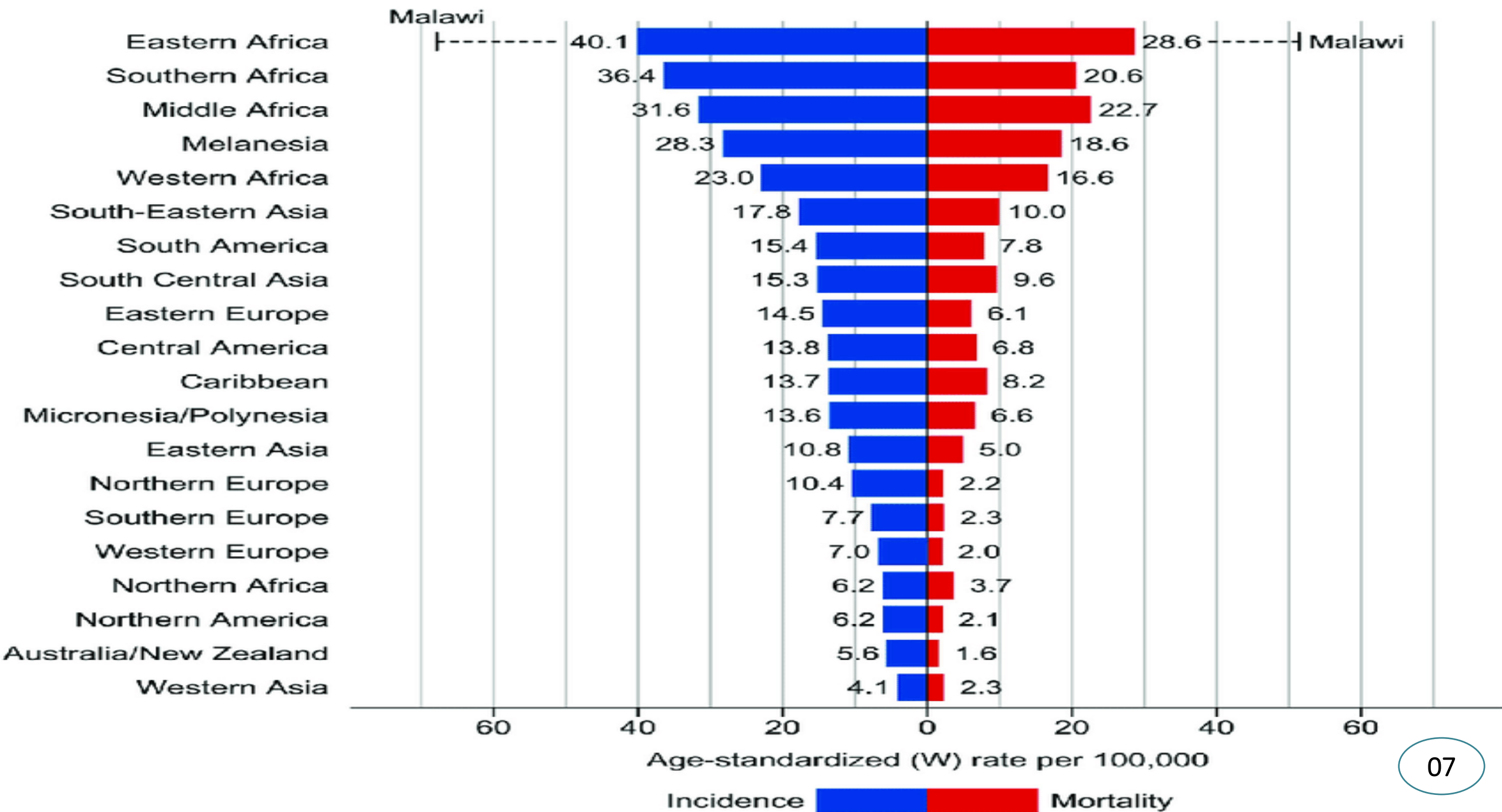
Undifferentiated



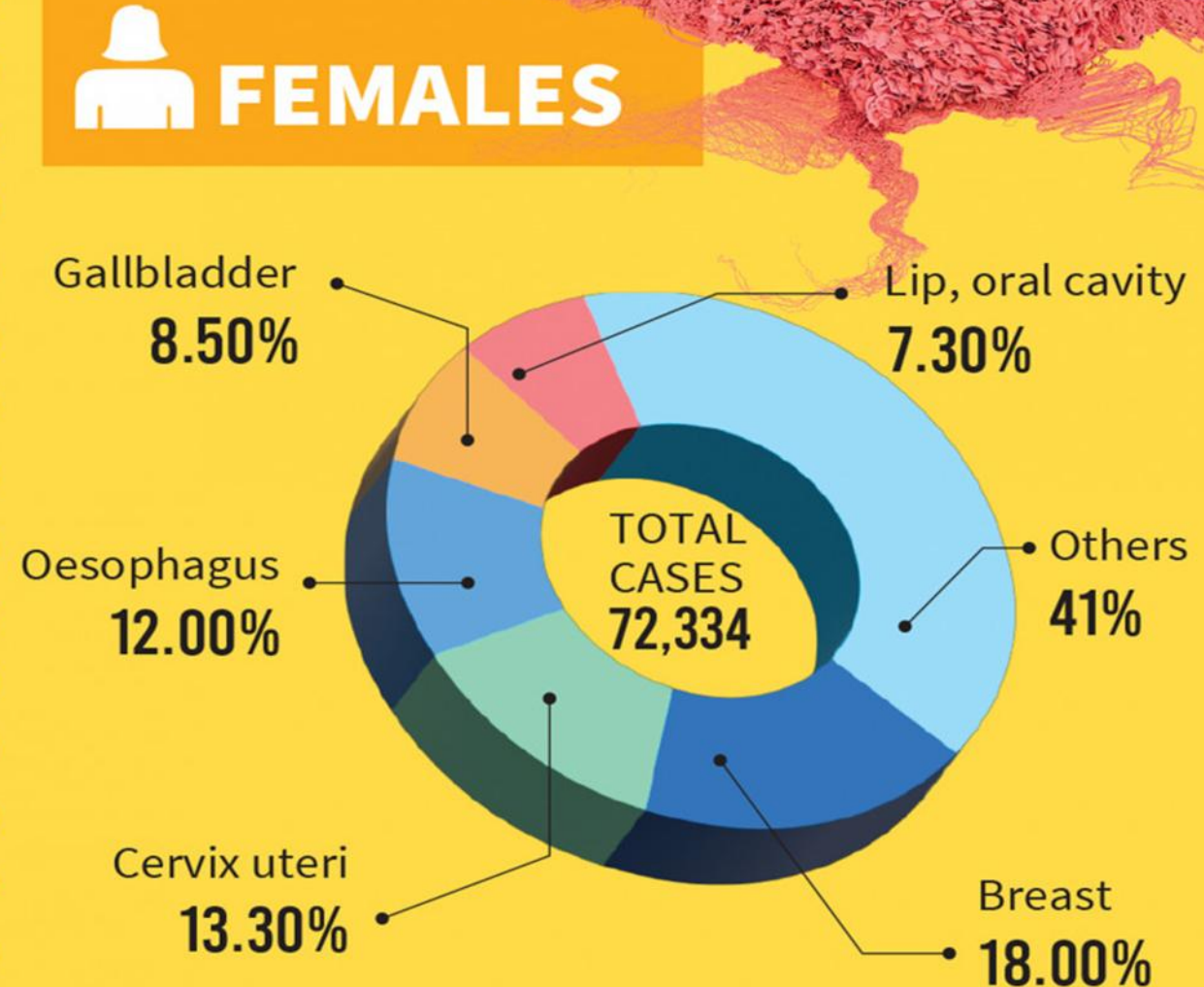
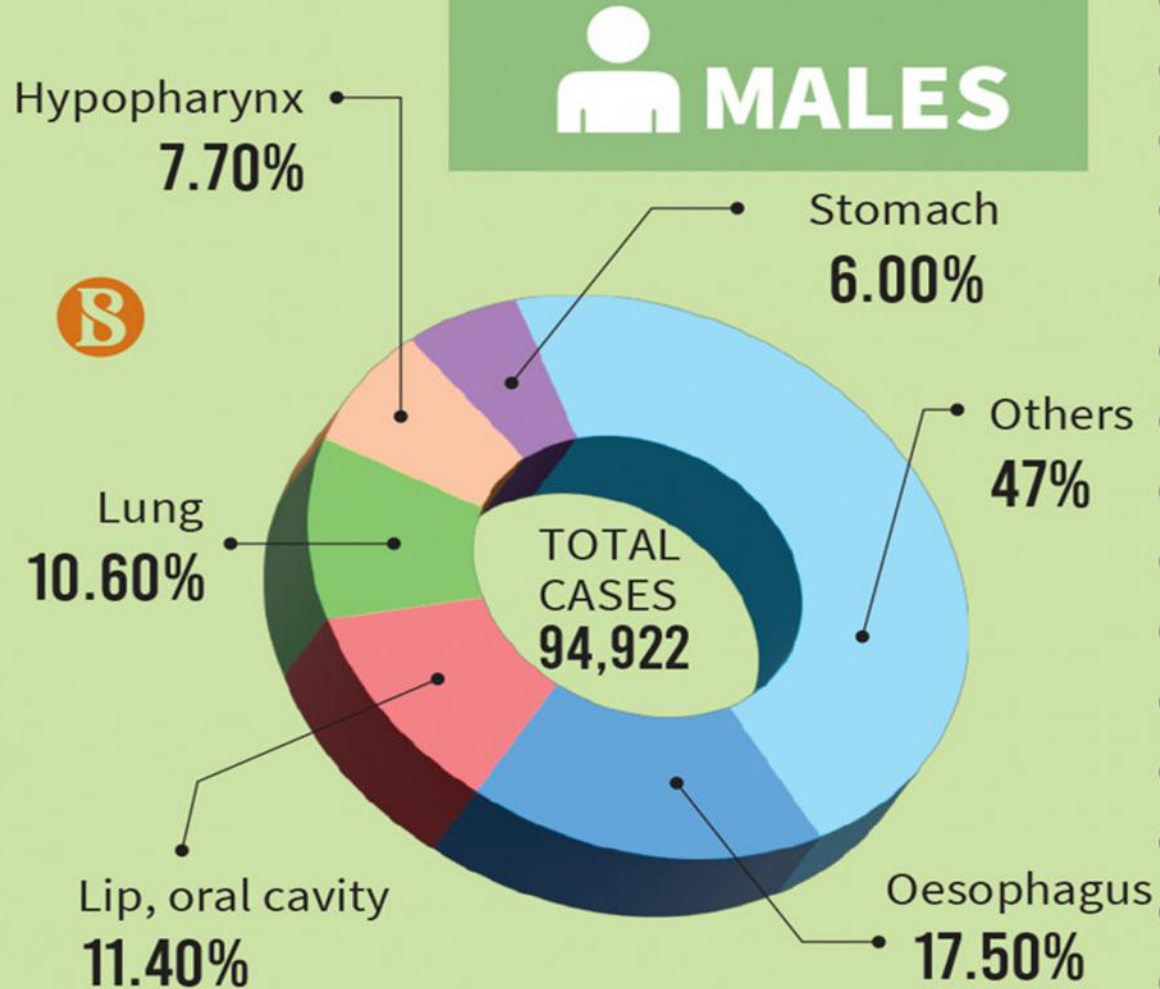
Problem Statement:

- Cervical cancer is the 4th most common cancer among women worldwide, with approximately 660,000 new cases & 350,000 deaths in 2022, 90% of which occur in low & middle –income countries.
- In Bangladesh, it is the 2nd most common cancer among women.
- 100% preventable with vaccination, screening and early detection.

Cervix uteri



MOST COMMON CANCERS IN BANGLADESH IN 2022



Deaths from cancer in
Bangladesh in 2022

Total
116,598



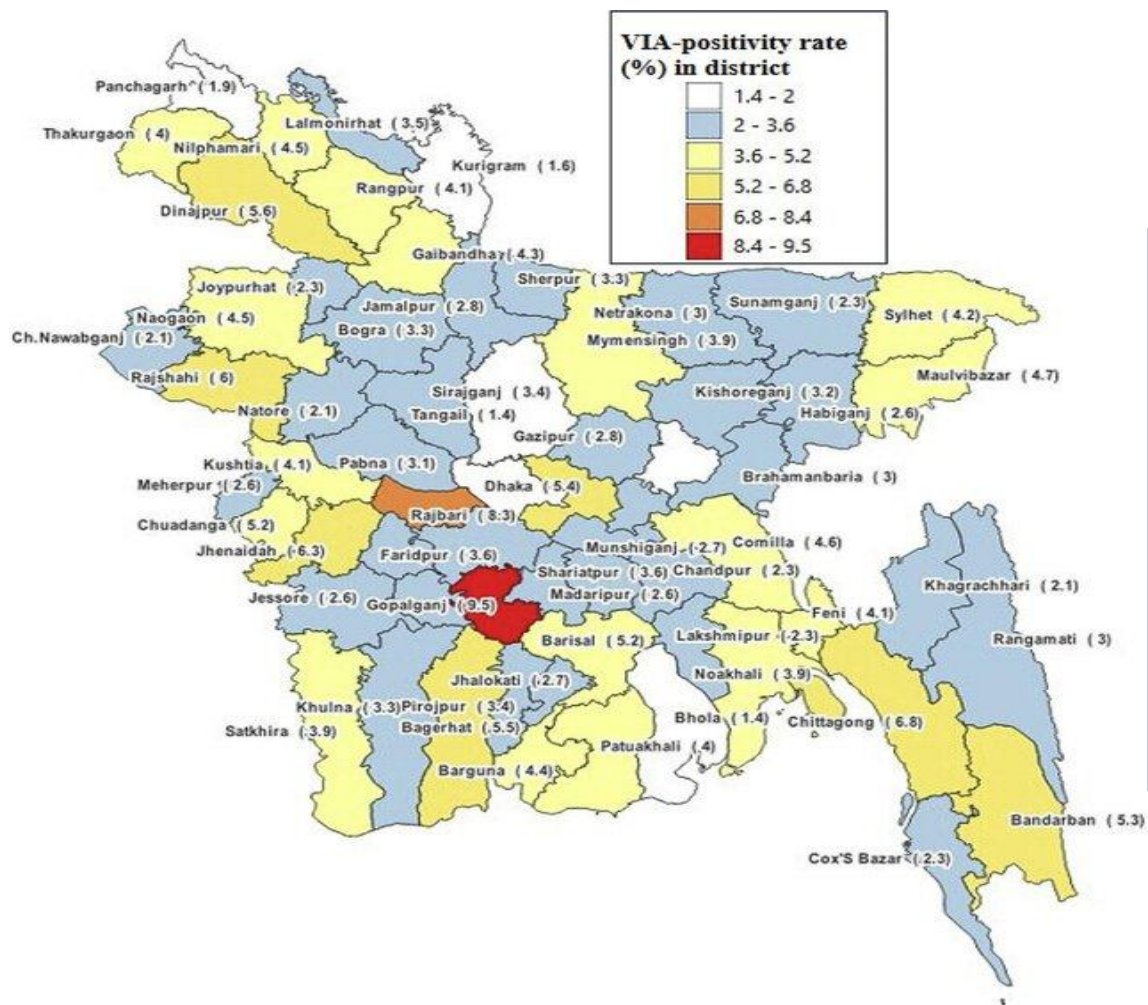
Male
68,591



Female
48,007

Source
International
for Research of
08

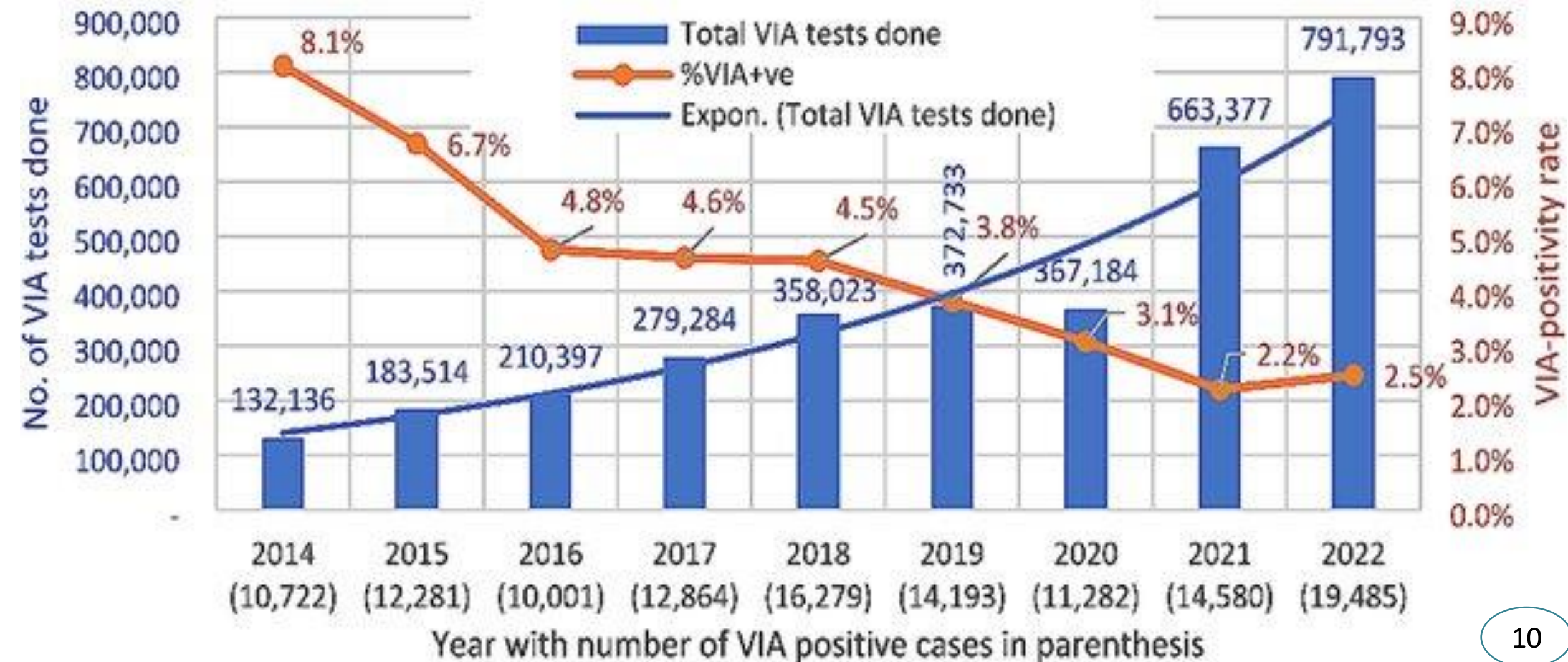
Summary statistics: 2024 (Cervical Cancer)

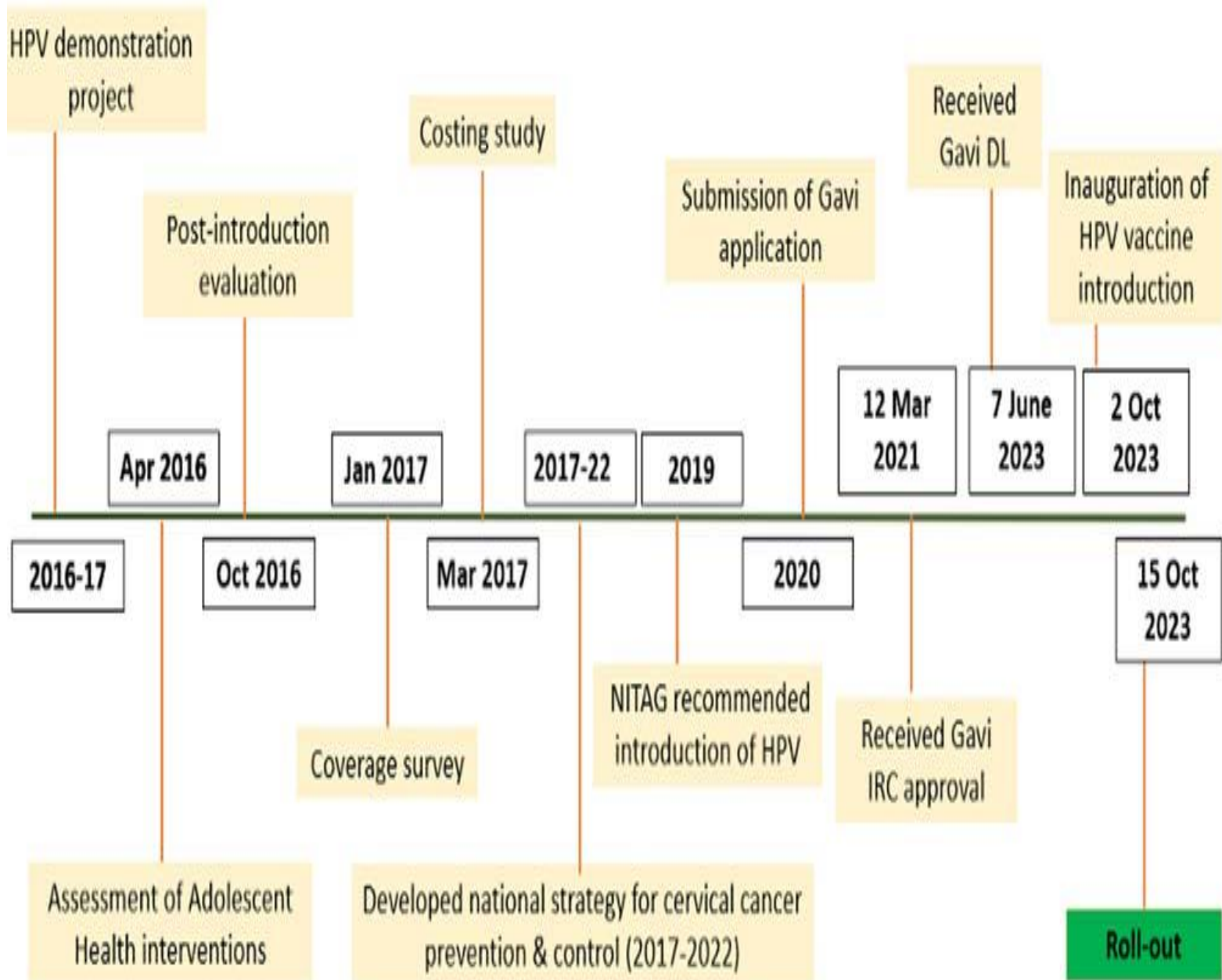


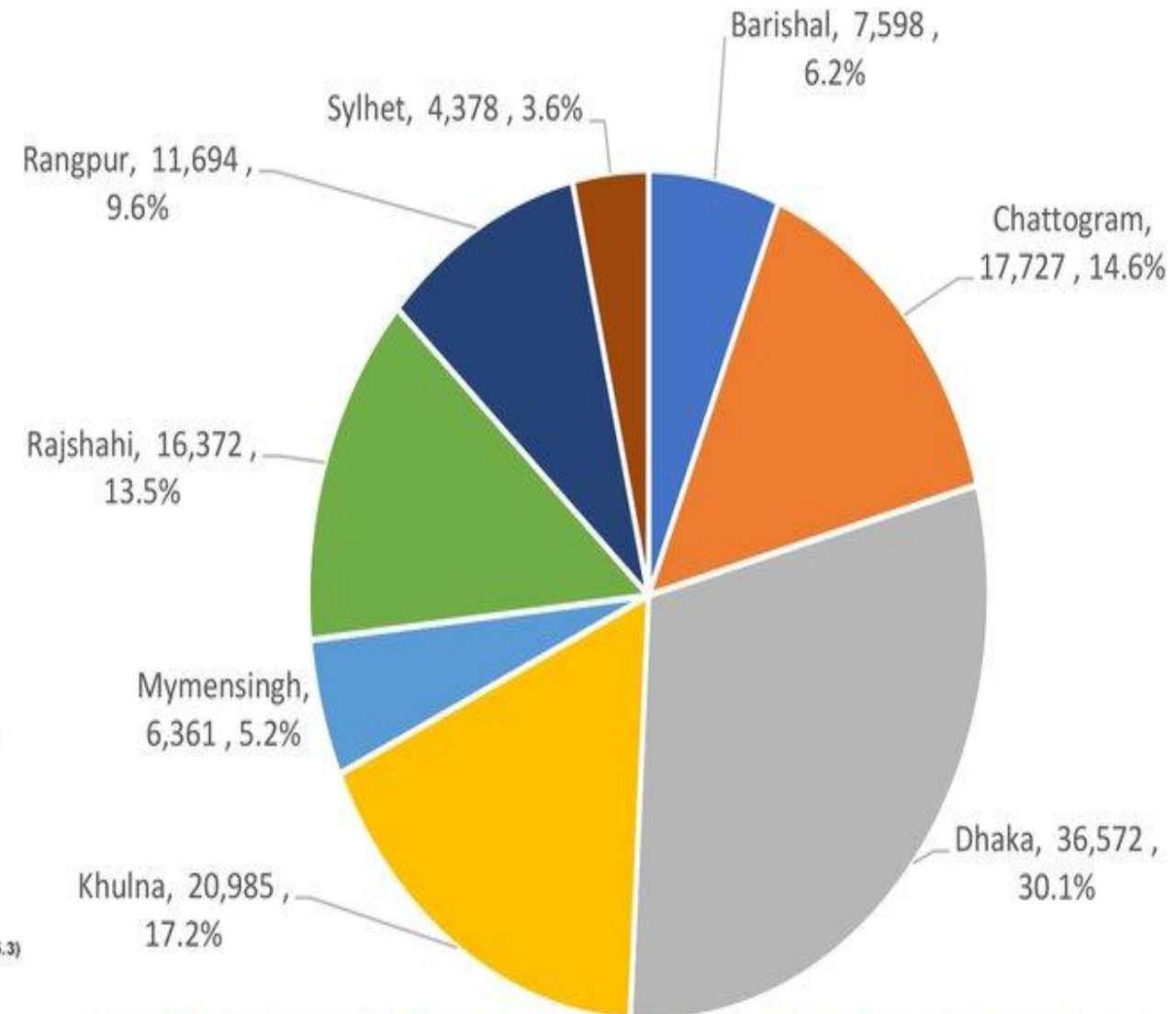
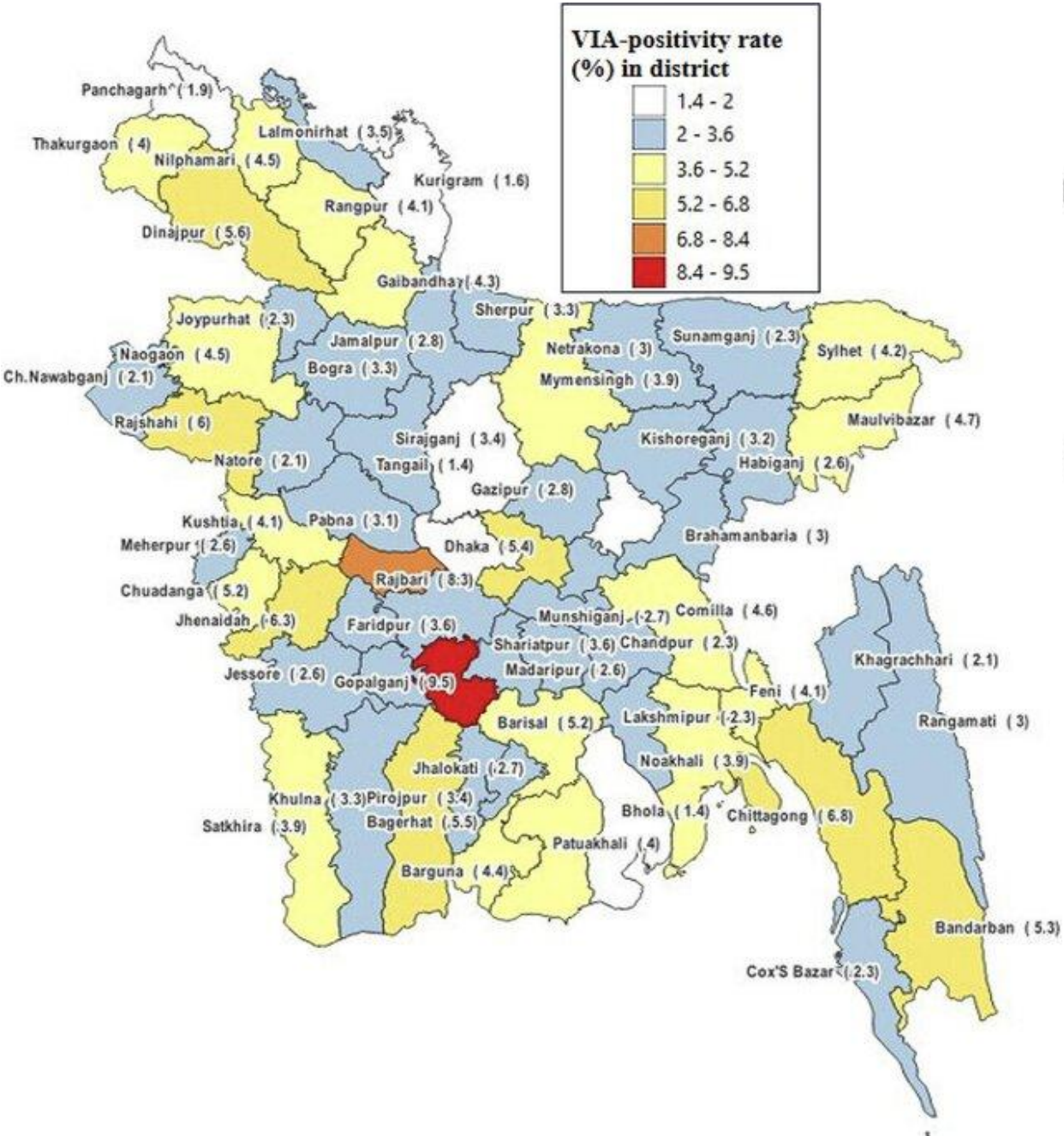
According to the GLOBOCAN 2020 database,

The crude incidence and mortality rate estimates for cervical cancer in Bangladesh are 10.2 and 6.1 per 100 000, respectively.

(Average VIA-positivity rate per year was 3.6%)

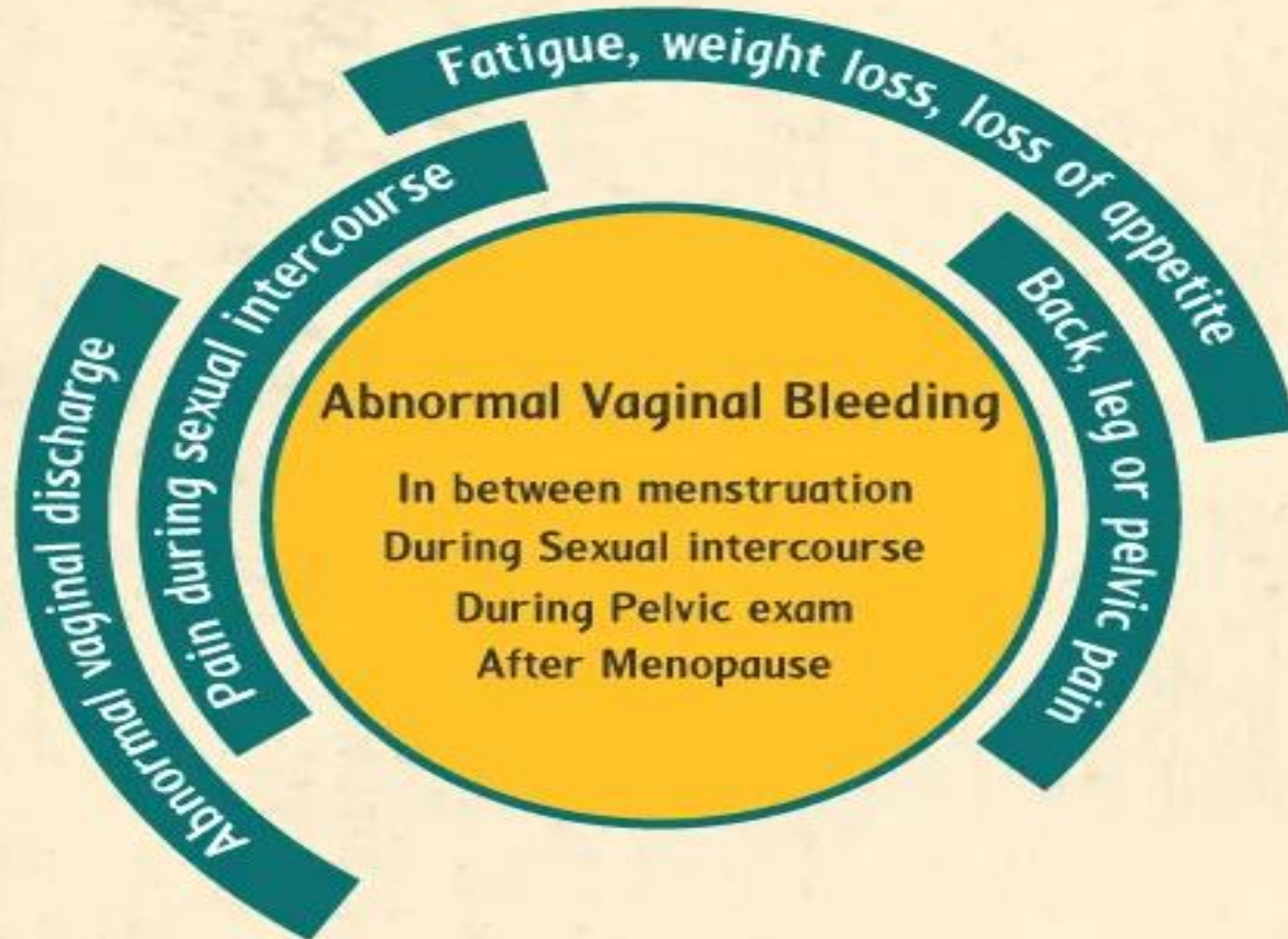






A total of 121,687 VIA-positive cases were found in all 8 divisions from 2014 to 2022

Cervical Cancer SYMPTOMS





Vaginal bleedings



Painful intercourse



Problems with urinating



Swollen legs

Cervical cancer does not show any symptoms till a woman is in the advanced stages or even if it does it is mistaken as menstrual periods or urinary tract infections (UTIs). Some of the typical cervical cancer symptoms are as follows:

- Abnormal or unusual bleeding between periods , after intercourse or after menopause.
- Vaginal discharge with an odor that smells different than usual.
- Pelvic pain
- Frequent urination along with pain while urinating.

When a cervical cancer is in its advanced stages some of the symptoms can be:

- Difficulty while urination along with blood
- Swollen legs
- Pain or Bleeding from rectum while defecating.

(CERVICAL CANCER RISK FACTORS)



HPV
Infection



Multiple sex
partners



Tobacco
use



Having given
birth to 3+
children



Weakened
immune
system



Prolonged use
of birth control
pills



Diet low in
fruits and
vegetables



Family
history

Human Papillomavirus

5 FACTS ABOUT HPV



Over 100 types of HPV; at least 14 types linked to cancer



630,000 cancer cases per year linked to HPV



HPV types 16 and 18 cause 70% of cervical cancers



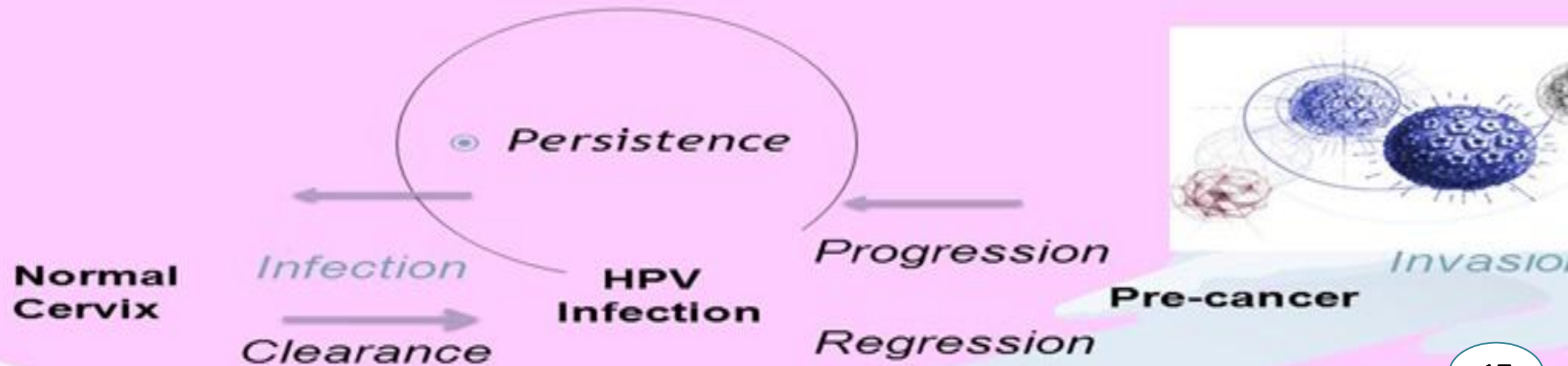
HPV can infect both males and females



HPV vaccination can prevent cancer



Natural History of HPV & Cervical Cancer



Diagnosis

- ☐ History
- ☐ Physical examination
- ☐ Pap smear
- ☐ DNA test
- ☐ Biopsy
- ☐ Radiological examination

Pap smear:
cells are scraped from the cervix
and examined under a microscope
to check for
disease or other
problems



Cervix viewed
through speculum
with patient in
lithotomy position

ADAM

A smear test
lasts **5** minutes.

The impact of cervical cancer
lasts a lifetime.



IMPORTANCE OF CORRECT & TIMELY DIAGNOSIS



Exact estimation
of which stage
the cancer is in,
is critical for the
right treatment.



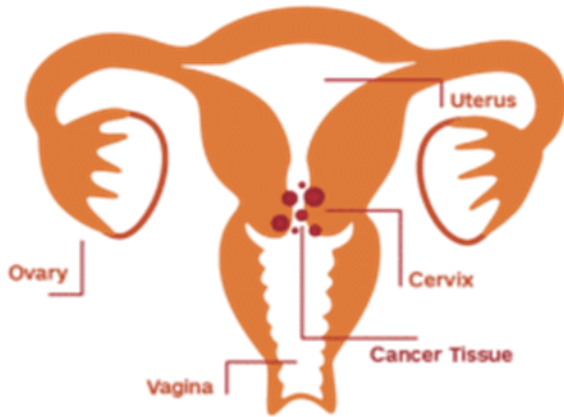
Right treatment
at the right time
may deliver more
positive outcomes.



If diagnosed at a
later stage, symptoms
might be difficult to
manage with usual
treatment & palliative
care.

Cervical Cancer

Stage 1



Cancer is found only in the cervix.

Stage 2



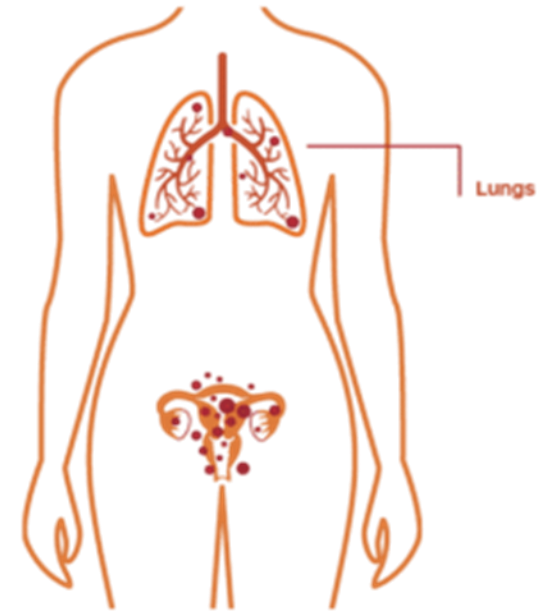
Cancerous cells have spread to the upper part of the vagina or the tissue around the uterus.

Stage 3



Cancer has spread to the lower part of the vagina or the pelvic sidewall. Cancerous cells may have also spread to the lymph nodes in the pelvis.

Stage 4



Cancer has spread beyond the pelvis to the bladder, rectum, abdomen, liver, or lungs.

Different Stages & Treatment of Cervical Cancer

STAGE 1

- Cancer is only in the neck of the womb (cervix).
- Surgery or a regimen of chemotherapy & radiotherapy (chemoradiotherapy) is prescribed.

STAGE 2

- Cancer has gone further and beyond the cervix.
- A combination of chemotherapy and radiotherapy or surgery is prescribed.

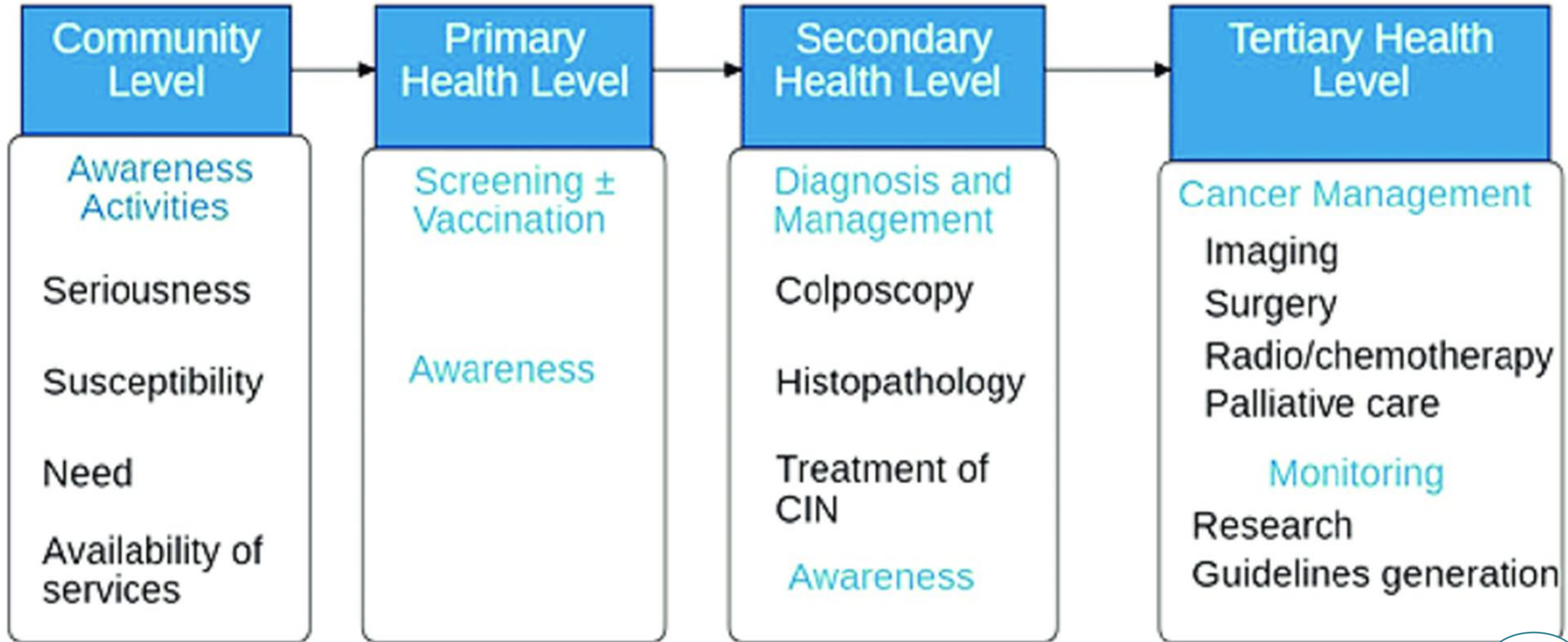
STAGE 3

- Cancer advances into the pelvic area & vaginal canal.
- Chemoradiotherapy is commonly prescribed as treatment.

STAGE 4

- Cancer has spread to the bladder and the rectum.
- Treatment options are surgery, radiotherapy, chemotherapy & cancer drugs.

Prevention of Cervical Cancer



Screening for Cervix Cancer

Commonly used

Gold Standard

Visual Assessment
PAP Smear

Not very sensitive or specific

Cheap - < Rs. 500 every 3 yrs

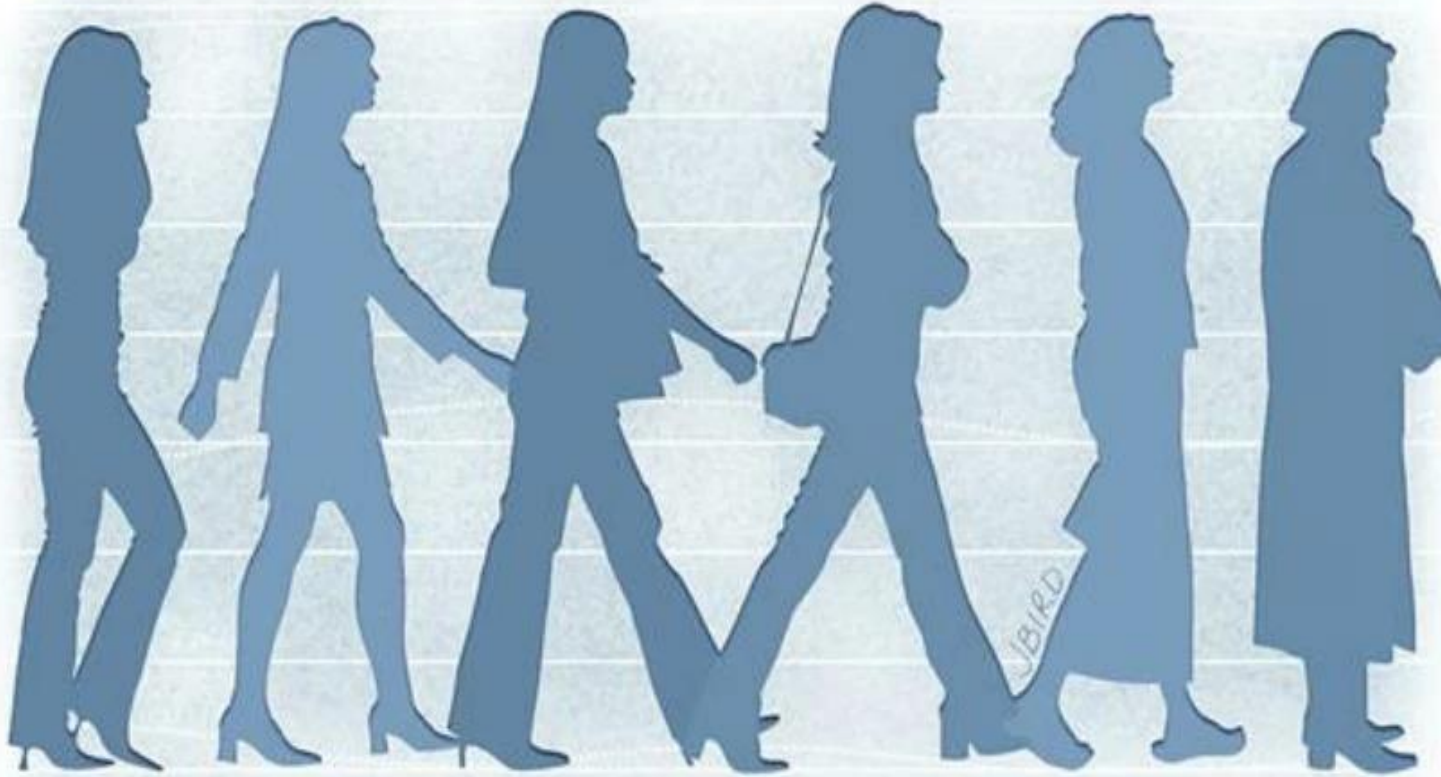
HPV DNA

Better sensitivity and specificity

Expensive - Rs. 2000-Rs. 4000
every 5 years

HPV DNA
Once every 5 years
in All Women
Between 30-65 Years of Age

When to Screen for Cervical Cancer



Age 21 y

Begin screening
for cervical
cancer

Age 21-30 y

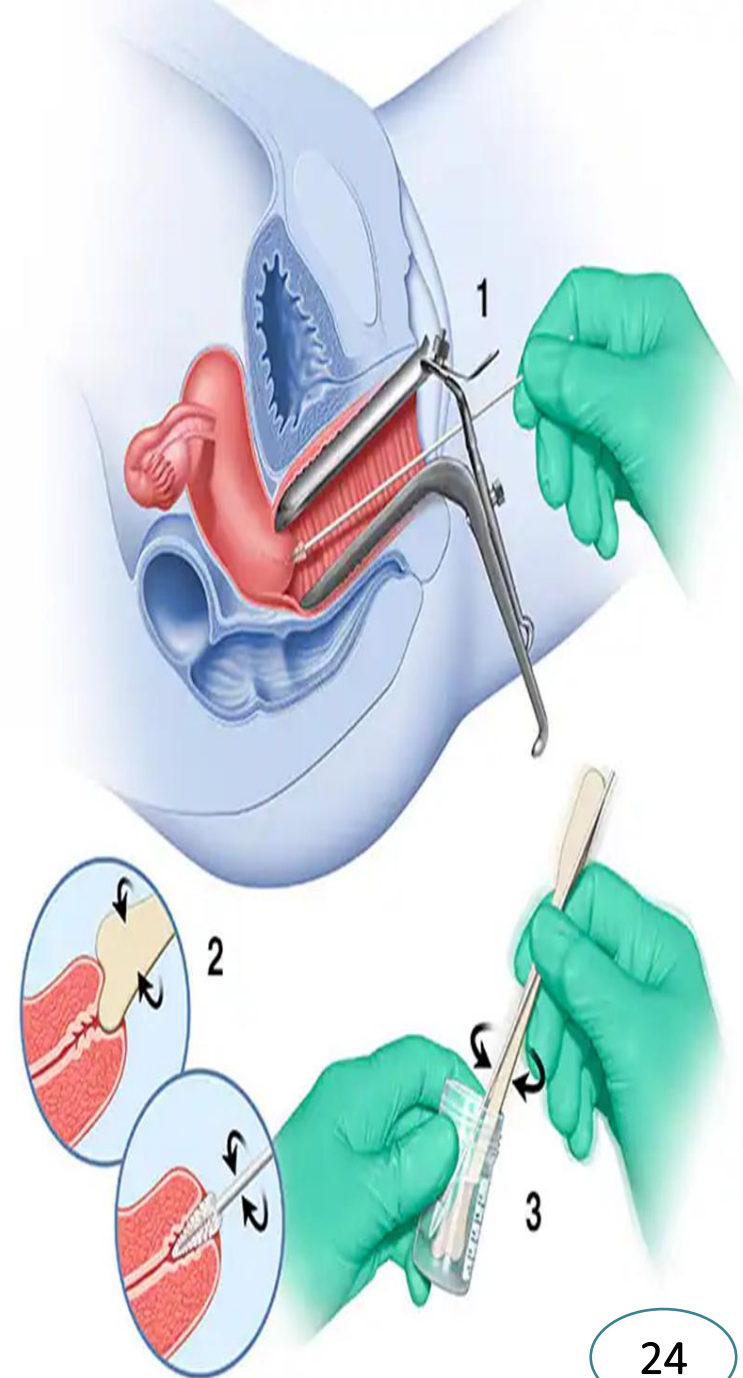
Pap test every
3 years if
results normal

Age 31-64 y

Pap test every
3 years or
Pap test + HPV test
every 5 years

Age 65 y and older

Stop routine screening
if results normal for
the previous 10 years



DID YOU KNOW?

that more than 9 in 10 cervical cancers are linked to HPV infections

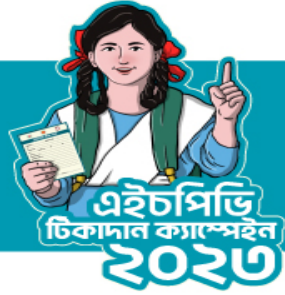


GET VACCINATED
AGAINST HPV

Types of HPV Vaccination

	Bivalent 2vHPV (Cervarix)	Quadrivalent 4vHPV (Gardasil)	9-Valent 9vHPV (Gardasil 9)
Manufacturer	GlaxoSmithKline	Merck	Merck
Year licensed and for whom	October 2009, females	June 2006, females; October 2009, males	December 2014, females and males
HPV types included	16, 18	6, 11, 16, 18	6, 11, 16, 18, 31, 33, 45, 52, 58
Contraindications	Hypersensitivity to latex*	Hypersensitivity to yeast	Hypersensitivity to yeast
Dosing schedule	3-dose series: 0, 1, 6 months	3-dose series: 0, 2, 6 months	3-dose series: 0, 2, 6 months

*Only contained in pre-filled syringes, not single-dose vials.



এইচপিভি টিকার তথ্য



১ বাংলাদেশে নারীদের ক্যান্সারজনিত মৃত্যুর মধ্যে জরায়ুমুখ ক্যান্সার দ্বিতীয় সর্বোচ্চ



২ এইচপিভি টিকা জরায়ুমুখ ক্যান্সার প্রতিরোধ করে



৩ ৫ম থেকে ৯ম শ্রেণিতে অধ্যয়নরত ছাত্রী অথবা ১০ থেকে ১৪ বছর বয়সী শিক্ষা প্রতিষ্ঠান বহির্ভূত কিশোরীদের জন্য এই টিকা অধিকতর কার্যকর



৪ জরায়ুমুখ ক্যান্সার প্রতিরোধে এইচপিভি টিকার একটি ডোজই যথেষ্ট



৫ এইচপিভি টিকা বিশ্বব্যাপী পরীক্ষিত, নিরাপদ ও কার্যকর



৬ গণপ্রজাতন্ত্রী বাংলাদেশ সরকারের উদ্যোগে এই টিকা বিনামূল্যে প্রদান করা হবে



এক ডোজ এইচপিভি টিকা নিন জরায়ুমুখ ক্যান্সার রুখে দিন

সম্প্রসারিত টিকাদান কর্মসূচি (ইপিআই)
স্বাস্থ্য অধিদপ্তর
স্বাস্থ্য সেবা বিভাগ, স্বাস্থ্য ও পরিবার কল্যাণ মন্ত্রণালয়

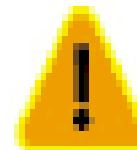
সহযোগিতায়






Are there contraindications to HPV vaccination?

- HPV vaccine is not recommended for:



A minor infection such as a cold is not a contraindication



CERVICAL CANCER AWARENESS

Cervical Cancer: Be Aware, Don't Fear!

- ▶ Cervical Cancer Awareness Month is celebrated every January around the world
- ▶ Stresses on prevention of cervical cancer through screening and vaccination
- ▶ Aims to reduce the global burden of cervical cancer



The World Health Organization (WHO) launched the Cervical Cancer Elimination Initiative in November 2020, with the goal of eliminating cervical cancer as a public health problem by 2100.

Achieving elimination:

To eliminate cervical cancer, all countries must reach and maintain an incidence rate of below 4 per 100 000 women. Achieving that goal rests on three key pillars and their corresponding targets: *Each country should meet the 90–70–90 targets by 2030 to get on the path to eliminate cervical cancer within the next century.*

Vision: A world where cervical cancer is eliminated as a public health problem

Goal: below 4 cases of cervical cancer per 100,000 woman-years

2030 Targets

90%

of girls fully
vaccinated with
HPV vaccine by
15 years of age

70%

of women are screened with
a high-performance test
by 35 years of age and again
by 45 years of age

90%

of women identified
with cervical disease
receive treatment
(precancer treated and
invasive cancer managed)

30% reduction in mortality from cervical cancer

Sustainable Development Goal 2030 Target 3.4:

30% reduction in mortality from non-communicable diseases



January is Cervical Cancer Awareness Month

cervical cancer
can be prevented,
treated and cured.

Get Informed.
Get Screened.
Get Vaccinated.



Theme 2025

Cervical Cancer Awareness Month in January 2025 focuses on empowering prevention and early detection, highlighting the importance of the HPV vaccine and cervical screening

HPV CAMPAIGN



The Interim Government of Bangladesh completed the final phase of the Human Papillomavirus (HPV) vaccination with the support of Gavi, the Vaccine Alliance (Gavi), UNICEF and WHO from October 24 to November 28, 2024. The campaign, which ensured HPV vaccination reached 5.6 million adolescent girls (93 per cent of those aged 10-14), including those from the most marginalized communities, is an essential step in reducing the incidence of cervical cancer among women.



Government of Bangladesh (GoB) in collaboration with the World Health Organization (WHO), UNICEF, UNHCR, and other health partners, launched a Human Papillomavirus (HPV) vaccination campaign in the Rohingya camps.

The HPV campaign in the Rohingya camps ran from December 3 to 11, 2024, targeting a population of 63,637 girls across 33 camps and Bhasan Char. “This is the first-ever HPV vaccination campaign conducted in a refugee camp setting globally. Its success is a valuable contribution to both Bangladesh and the international community.

Cervical cancer is preventable, treatable, and curable when detected early. By prioritizing regular screenings, vaccination, and healthy lifestyle choices, women can significantly reduce their risk. Let Cervical Cancer Awareness Month be a call to action—get screened, stay informed, and help spread the message about prevention and early detection. Together, we can make a difference.





THANK YOU



TOGETHER,
WE CAN
ELIMINATE
CERVICAL
CANCER

