

# New study on HPV vaccine

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**In news-** Recently, a new study has found that the HPV vaccine has reduced the risk of developing cervical cancer by 62 per cent in women between the ages of 14 and 16.

## **A note on the new study-**

- The study was **funded by Cancer Research UK.**
- The **study looked at all cervical cancers diagnosed in England in women aged between 20 and 64 years,** between January 2006 and June 2019.
- The study shows that the **HPV vaccination in combination with cervical cancer screening reduces the cancer** to a point where almost no one develops it.
- It also shows that over a period of 11 years (since 2006), the vaccine prevented around 450 cervical cancers and around 17,200 cases of precancerous conditions.

## **The human papillomavirus (HPV) vaccine-**

- **There are various types of HPV vaccines, including the quadrivalent vaccine (Gardasil),** which protects against four types of HPV (HPV 16, 18, 6 and 11).
- All HPV vaccines **protect against at least HPV types 16 and 18, which cause the greatest risk of cervical cancer.**
- The latter two strains cause genital warts.
- The **other kind of vaccine is the bivalent vaccine (Cervarix),** which protects against HPV 16 and 18 only.
- The third type is a **non valent vaccine** (Gardasil 9), which protects against nine strains of HPV.
- **These vaccines prevent cervical cancer in women and girls** who have not yet been exposed to the virus.
- Ideally, the vaccine should be administered before the individual makes their first sexual contact.
- While for teenagers, the vaccine is administered in a

two-dose regimen, for those between the ages 15-26, a three-dose regimen is used in the US.

## **HPV vaccination in India**

- India is home to 27 percent of total cervical cancer cases globally.
- In India, **bivalent and quadrivalent HPV vaccines were licensed in 2008** and a **non valent vaccine was licensed in 2018**.
- The Indian Academy of Pediatrics Committee on Immunization (IAPCOI) recommends that HPV vaccines be **given as a two-dose regimen**, six months apart for girls below the age of 14 years.
- **For those who are 15 and older**, the vaccine is given in a **three-dose regimen**.
- There is no recommendation for HPV vaccines for boys and males in India yet.

## ***What is human papillomavirus (HPV)?***

- HPV is the most common viral infection of the reproductive tract and there are more than 100 types.
- It is **mainly transmitted through sexual contact** and most people are infected with HPV shortly after the onset of sexual activity.
- It is sexually transmitted, but **penetrative sex is not required for transmission**.
- **Skin-to-skin genital contact is a well-recognized mode of transmission**.
- More than 40 types of HPV are spread through direct sexual contact.
- **Almost all cervical cancers are caused by HPV** and the vaccine protects against two of the cancer-causing strains, which are HPV 16 and 18.
- **Once infected, most people do not develop any symptoms**, thereby are not aware that they have the virus.
- In most cases, the body's immune system will be able to

clear the virus out, which means it won't do any harm to the individual.

- The infection with certain HPV types also causes a proportion of cancers of the anus, vulva, vagina, penis and oropharynx.