# Clearing myths and misconceptions about HPV

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### Cervical cancer is an inherited (familial) disease

- Fact
- 1. This is not an inherited disease or cancer.
- 2. It is not spread from person to person
- 3. It is causes by a DNA virus called the Human Papilloma
  Virus (HPV)

### Once I get HPV, I will get cervical cancer

- MYTH!
- Fact
- 1. Not all who get HPV infection get cervical cancer
  - HPV is necessary (>95% of cervical cancers caused by HPV) but no sufficient
  - There must be another catalyst (other risk factor) for HPV infected cells to transform into cancerous cells
- 2. HPV has over 120 strains/types
  - Low Risk HPV (LR-HPV) vs High Risk HPV (HR-HPV) strains
  - HR-HPV is responsible for causing cervical cancer

o There are over 40 HR-HPV strains

LR-HPV cause warts

### HPV infection is acquired Sexually

#### • FACT!

- 1. Vaginal, Oral and Anal Sex with a HPV infected person
- 2. Close skin-to-skin touching during sex e.g. if your penis, vulva touches the genital organs of an infected person

#### HPV infection is for only people with Multiple sexual partners

- MYTH!
- Fact
  - HPV is so common that more than 80% of men and women acquire it over their life time
  - Doesn't matter whether you are monogamous or have (had) multiple sexual partners

#### Virgins can not get HPV infection

- Tay SK, et al. Is genital human papillomavirus infection always sexually transmitted? Aust N Z J Obstet Gynaecol. 1990
  - 43 virginal and 162 sexually active women
  - HPV infection was 51.1% in the virginal and 69.1% in the sexually active/experienced women
- Liu Z et al. Human Papillomavirus Prevalence Among 88 Male Virgins Residing in Brazil, Mexico, and the United States. J Infect Dis. 2016
  - The prevalence of any and high-risk HPV types among 88 male virgins was 25.0% and 18.2%

### HPV can be spread from mother to baby (Fact)

- 1. Lee SM et al, Risk of vertical transmission of human papillomavirus throughout pregnancy: a prospective study. PLoS One. 2013
  - Examined the risk of vertical transmission of maternal HPV in each trimester of pregnancy
  - 153 women followed up during pregnancy
  - 24%(37/153) were positive for HPV DNA on at least one occasion in pregnancy.
  - At birth, 5.2%(8/153) of neonates were HPV DNA positive
- 2. Park, H. et al,. Rate of vertical transmission of human papillomavirus from mothers to infants: Relationship between infection rate and mode of delivery. Virol J 9, 80 (2012)
  - 291 pregnant women over 36weeks of gestation
  - Exfoliative cells were collected from maternal cervix and neonatal buccal mucosa
  - HPV DNA was detected in 18.9% (55/291) of pregnant women and 3.4% (10/291) of neonates
  - The rate of vertical transmission was estimated at 18.2% (10/55)

### HPV infection always causes symptoms

#### • MYTH!

- HPV infections usually do not cause any symptoms
- Early Cervical caners also don't cause symptoms
- Advanced cervical cancers are usually symptomatic

1.Bleeding after sex

- 2.Bleeding not related to menstruation
- 3.Abnormal and persistent vaginal discharge despite several visits to Health workers

4.Pain during sex

### Cervical cancer is not preventable

- HPV Vaccination
  - 1. All pre-teens | both boys and girls | start at 9 years
    of age | usually before sexual debut
  - 2.Even vaccinated individuals still require cervical cancer screening
    - Vaccine contain only 2 HR-HPV types out of the more than 40 HR-HPV so still at risk
    - 70% reduction in risk of cervical cancer if given in this age group
    - Evidence suggest 50% reduction in risk if given before **26 years of age**

### Cervical cancer is not preventable after acquiring HPV

- Cervical cancer screening
  - 1.21 to 65 years
  - 2. Ask your doctor or midwife to refer you for cervical cancer screening

## Condoms completely prevent HPV infection

- Condoms if used the right way partially lower the risk of getting HPV
  - Remember HPV can infect areas the condom does not cover

# Policy implications

- 1. Awareness
  - Population level
  - Policy level
  - Healthcare worker level
- 2. Vaccination
  - Include boys in the vaccination program
  - Increase age of vaccine to 26 years

# Questions