Summary of Key Points

WHO Position Paper on Vaccines against Human Papillomavirus (HPV) October 2014

World Health Organization

Background

- Selected types of HPV cause cervical cancer, anogenital warts, and other anogenital and head and neck cancers
  - HPV types 16 and 18 cause about 70% of cervical cancers
  - HPV types 6 and 11 cause about 90% of anogenital warts
- 528,000 cases of cervical cancer and 266,000 women deaths each year
  - Most cases (>80%) in developing countries
  - Most in females not screened or who do not receive early treatment

Vaccines

- Two prophylactic, highly efficacious vaccines now available
  - Cervarix®
    - Non-infectious protein antigens for HPV 16 and 18
    - Prevents precancerous lesions and cancers arising from these types
  - Gardasil®/Silgard®
    - Non-infectious protein antigens for HPV 6, 11, 16, and 18
    - Prevents precancerous lesions, cancer, and anogenital warts arising from these four types
- Neither vaccine will treat women with current HPV infection or related disease: HPV vaccines most efficacious in HPV naive individuals

WHO Position

- Recognizing the importance of cervical cancer and other HPV-related diseases as global health problems, WHO recommends that routine HPV vaccination should be included in national immunization programmes provided that:
  - Prevention of cervical cancer and other HPV-related diseases is a public health priority
  - Vaccine introduction is programmatically feasible
  - Sustainable financing can be secured
  - The cost-effectiveness of vaccination strategies in the country or region is considered
- Primary target population is girls prior to onset of sexual activity, in age range of 9-13 years

WHO Position

- HPV vaccines should be introduced as part of a coordinated cervical cancer and other HPV-related diseases prevention strategy, including
  - Education on risk reducing behaviours and importance of screening
  - Diagnosis and treatment of precancerous lesions and cancer, including training of health care workers
- HPV vaccine introduction
  - Should not undermine or divert funding from effective cervical cancer screening programmes
  - Should not replace cervical cancer screening (30% of cervical cancer caused by HPV types other than 16 and 18)
- Programmes to introduce HPV vaccines should seek opportunities to link with other adolescent health services
- HPV vaccination should not be deferred in countries because one or more of these interventions cannot be implemented at the time when vaccination could be introduced

WHO Position

- Vaccination of secondary target populations of older adolescent females or young women only recommended if:
  - Feasible
  - Affordable
  - Cost-effective
  - Does not divert resources from vaccinating primary target population
  - Does not divert resources from effective cervical cancer screening programmes
- Vaccination of males is not recommended as a priority, especially in resource-constrained settings
  - The available evidence indicates that the first priority should be for cervical cancer reduction by timely vaccination of young females and high coverage with each dose.

Schedule for both bivalent and quadrivalent vaccines

- Females <15 years, including females 15 years or older at the time of the second dose
  - 2-dose schedule with a 6-month interval between doses
  - No maximum recommended interval between doses but no greater than 12–15 months suggested in order to complete the schedule promptly and before becoming sexually active
  - If the interval between doses is shorter than 5 months, a third dose should be given at least 6 months after the first dose
- Females >= 15 years and older
  - 3-dose schedule (0, 1–2, 6 months)
- Females known to be immunocompromised and/or HIV-infected (regardless of whether they are receiving ART).
  - 3-dose schedule (0, 1–2, 6 months)

WHO Position

- Need for booster doses not established.
- No HPV or HIV testing as prerequisite
- Pregnant women
  - HPV vaccination of pregnant women should be avoided
  - Safety data are limited
  - No adverse effects in mother or offspring have been observed
- Lactating women
  - Breastfeeding is not a contraindication for HPV vaccination

WHO position

- Co-administration
  - can be co-administered with other non-live and live vaccines using separate syringes and different injection sites
- Interchangeability
  - Limited data available
  - In settings where both may be in use, every effort should be made to administer the same vaccine for all doses
  - However, if the vaccine used for prior dose(s) is unknown or unavailable, either of the HPV vaccines can be administered to complete the recommended schedule

WHO Position

- Choice of HPV vaccine
  - Both vaccines have excellent safety and efficacy profiles
  - The choice of HPV vaccine should be based on:
    - assessment of locally relevant data
    - the scale of the prevailing HPV-associated public health problem (cervical cancer, other anogenital cancers, or anogenital warts)
    - the population for which the vaccine has been approved
    - unique product characteristics, such as price, supply, and programmatic considerations

For more information on the WHO HPV position paper, please visit the WHO website:

www.who.int/immunization/documents/positionpapers

World Health Organization