



COALITION to STRENGTHEN
the HPV IMMUNIZATION
COMMUNITY



Overview of HPV related cancer incidence, mortality, social and economic impact in Nepal

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Overview of HPV-related disease incidence, mortality, social and economic impact in Nepal.

Country information on:

- Incidence and prevalence of HPV-related cancers
- Morbidity and mortality due to HPV-related cancers
- Disease burden: social and economic impact.

HPV related cancer incidence/Prevalence

Background

Among all NCDs, cervical cancer is the number one cause of premature death and disability of Nepalese women. HPV is the major cause of cervical cancer and HPV-related other cancers affecting both women and men.

Crude annual incidence rates of HPV-related cancers (per 100,000)

	Male	Female
Cervical cancer	-	14.2
Oral cavity	4.55	1.49
Laryngeal cancer	2.19	0.87
Vaginal	-	0.21
Penile cancer	0.39	-
Oropharyngeal cancer	0.34	0.09
Anal cancer	0.17	0.11
Vulva	-	0.15

Prevalence of HPV-related cancers in Nepal

Estimated annual number of HPV-related cancer cases in both sexes

HPV-related cancers	Male	Female	Death
Cervical cancer	-	2244	1493
Oral cancer	1365	447	NA
Laryngeal cancer	657	261	NA
Vaginal cancer	-	63	NA
Penile cancer	117	-	NA
Oropharyngeal cancer	102	27	NA
Anal cancer	51	33	NA
Vulva cancer	-	45	NA

Note: Estimates are based on the annual incidence rates (per million), and national population (30 million) as denominator.



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Cervical cancer burden

	Incidence	Mortality
Annual no. of new cases/death	2244	1493
Crude rate (per 100,000)	14.2	9.46
Age-standardized rate (per 100,000)	16.4	11.1
Cumulative risk 0-74 years (%)	1.81	1.22
Ranking of cervical cancer (all years)	1st	1st
Ranking of cervical cancer (15-44 years)	2nd	1st

Source: HPV-related disease report Nepal. ICO/IARC 2022

HPV prevalence estimates

Prevalence (%) of HPV 16 and/or 18 among women with:

	Number tested	Percentage
Normal cytology	1109	2.0
Cervical cancer	61	80.3

About 2.0% of women in general population harbor cervical HPV-16/18 and other subtype HPV viruses. 10 most common HPV types in women: 16, 58, 56, 18, 52, 39, 35, 51, 45 and 33.

Source: HPV and related disease report Nepal. ICO/IARC 2022

HPV-Associated Diseases in both sexes

TYPE	WOMEN	MEN
16, 18 (High Risk types)	-70% of cervical cancers. - 70% of anal/genital cancers	-70% of anal cancers - Transmission to women
6,11 (Low Risk Types)	-90% of genital warts. - 90% of recurrent resp. papillomatosis	-90% genital warts . -90% of recurrent resp. papillomatosis. - Transmission to women

Mortality data on HPV-related other cancers are limited. HPV is associated with head and neck squamous cell carcinoma (HNSCC) even in absence of tobacco and alcohol use. But H&N cancers are not tested for HPV in hospitals

Social and economic impact due to HPV-related cancers in Nepal

- Population: about **30 million** (>50% women). Women suffer most with cancers.
- At risk women population (15 years and older) about **11.4 million**.
- Men and women both harbor HPV, but its impacts has not been studies well.
- Social and economic impact of cervical and HPV-related cancers at personal and family level is huge (sex life, divorce, fear and anxiety, QOL)
- Loss of workforce due to HPV-related cancer has big impact on overall development of the country.
- Without any intervention, a total of 170,600 women in Nepal will die from cervical cancer by 2070 and 318,855 by 2120 (WHO).
- Achieving cervical cancer elimination will support several sustainable development goals (SDGs) and targets, including SDG 3 (good health and well-being), SDG 5 (gender equity) and SDG 10 (reducing inequalities). (WHO)

Challenges

- Lack of population-based incidence/epidemiological data
- Underestimation of the real burden of HPV-related cancer
- Contributing factors such as prevalence of HPV infection in general population (men and women) early age at marriage, pregnancy and illiteracy pose serious challenge
- Limited access to health care services (both physical and economical)
- HPV vaccine not included in the national immunization program.
- Cost and multiple doses of the vaccine

Recommendation

- Data on HPV and HPV-related disease collected from government and private hospitals and laboratories.
- Initiate more studies to generate population-based incidence and mortality rates.
- Head and Neck cancers are not tested for HPV in hospitals
- HPV prevalence and impact in men need to be studied.

Thank You

