UNAIDS | 20 November 2018

HPV, HIV & CERVICAL CANCER

Leveraging Synergies to save women's lives

PRESENTER NAME

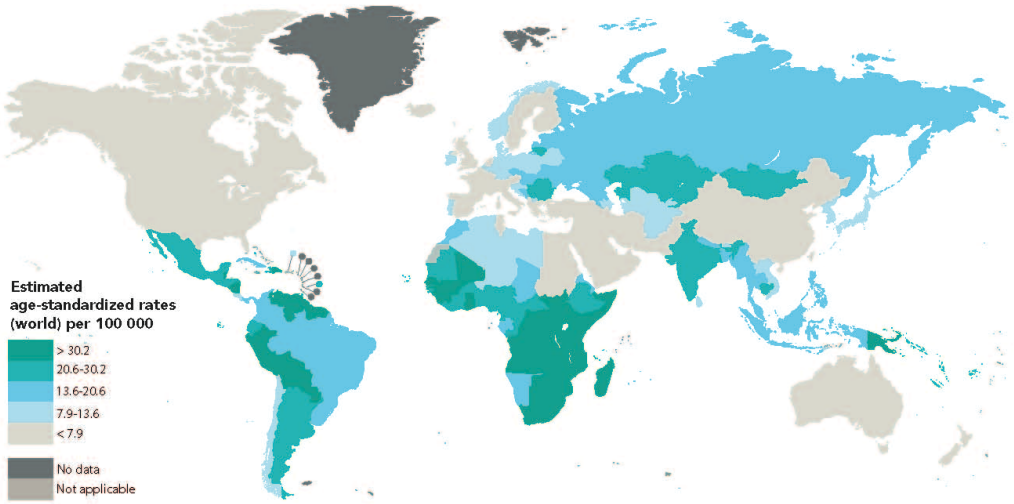
Cervical cancer: Data

- In 2018, approx. 570,000 women were diagnosed with cervical cancer and 266 000 women died of the disease.
- Nearly 90% of them in LMIC in Africa, parts of Asia, and Latin America and the Caribbean.

- Women living with HIV are at 4–5 >risk of developing cervical cancer, which is the second most common cancer in women living in LMIC:
  - women with compromised immune systems are far less likely to clear an HPV infection.
  - women living with HIV are more likely to develop pre-invasive lesions that can, if left untreated, quickly progress to invasive, life-threatening cervical cancer.
- Intersectionality: is an analytical tool that allows us to more accurately describe how human experience is shaped by multiple forms of social inequality that act in diverse and mutually reinforcing ways.
- A 2017 US study (data from 2000-2012)published found that Black women are dying from cervical cancer at a rate 77% higher than previously thought, and white women are dying at a rate 47% higher.
- Racial disparity seen in cervical cancer death rates for black and white women was underestimated by 44%.
- Inaction means that new cases of cervical cancer are expected to rise to 720 415 and deaths to 394 905 per year by 2025.

Figure 1

Estimated cervical cancer incidence worldwide in 2012

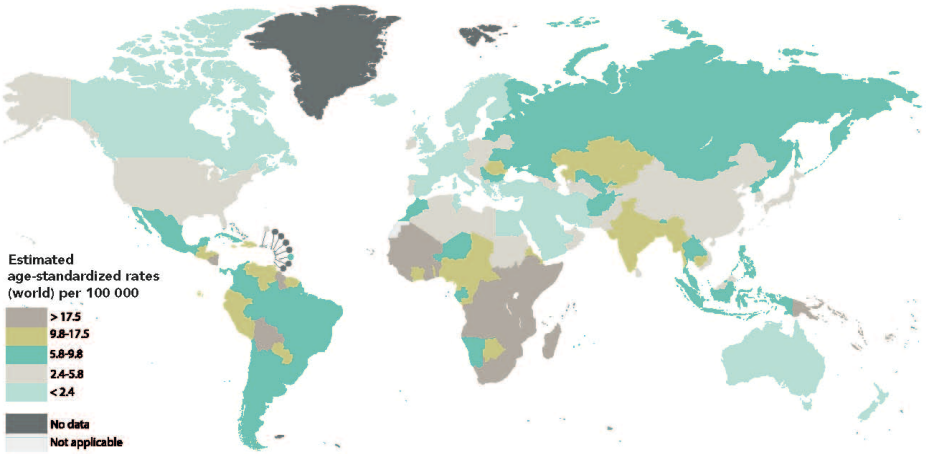


Data source: GLOBOCAN 2012
Map production: IARC
World Health Organization

Source: Ferlay J, Soerjomataram I, Ervik M, Dikshit R, Eser S, Mathers C, et al. GLOBOCAN 2012 v1.1, cancer incidence and mortality worldwide: IARC CancerBase No. 11 [Internet]. Lyon, France: International Agency for Research on Cancer; 2013 (http://globocan.iarc.fr, accessed 15 September 2015).

Figure 2

Estimated cervical cancer mortality worldwide in 2012



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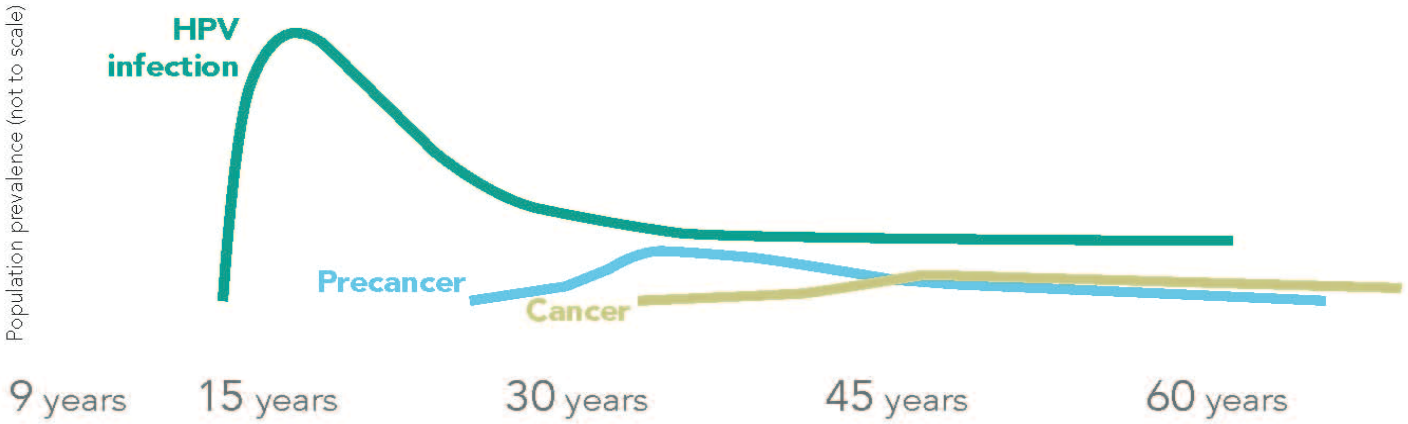
HPV AND CERVICAL CANCER

- HPV - one of the most common STIs worldwide.
- Transmitted via skin-to-skin and sexual contact (including vaginal, anal and oral penetrative and non-penetrative sex)
- Approx. ½ of all sexually active men and women will be infected with a type of HPV at some point during their lives.
- HPV prevalence varies widely between regions - SSA (24%), eastern Europe (21%) and Latin America (16%) have the highest rates of HPV. A systematic review and analysis in 2012 showed that the overall risk of HIV acquisition in women doubled when they had a prevalent HPV infection with any genotype.
- Among women living with HIV, HPV prevalence rates are higher, reaching levels as high as 80% in Zambia and 90–100% in Uganda.
- 15 types of HPV are recognized as high-risk or cancer-causing genital HPVs: HPV 16 is the most prevalent type detected in HPV-associated cancers, followed by HPV 18.
- Together, HPV 16 and 18 cause about 70% of cervical cancers worldwide.

Avoidable tragedy: Cxca highly preventable and curable

Figure 3

Overview of programmes throughout the life of individuals in order to prevent HPV infection and cervical cancer



PRIMARY PREVENTION

Girls 9-13 years

- HPV vaccination

Girls and boys, as appropriate

- Health information and warning about tobacco use*
- Sexuality information tailored to age and culture
- Condom promotion/ provision for those engaged in sexual activity
- Voluntary medical male circumcision

* Tobacco use is an additional risk factor for cervical cancer.

SECONDARY PREVENTION

Women >30 years of age

Screening and treatment as needed

- "Screen and treat" with low cost technology VIA followed by cryotherapy
- HPV testing for high risk HPV types (e.g. types 16, 18 and others)

TERTIARY PREVENTION

All women as needed

Treatment of invasive cancer at any age

- Ablative surgery
- Radiotherapy
- Chemotherapy

Source: World Health Organization. Comprehensive Cervical Cancer Control A guide to essential practice Second edition a, Switzerland: World Health Organization; 2014.

Multipronged approach: Prevention, screening, diagnosis & care

THE HPV VACCINE

- Three HPV vaccines now being marketed - **bivalent, quadrivalent, & nonavalent vaccine**.
- All three vaccines highly efficacious in preventing infection with virus types 16 and 18, and preventing precancerous cervical lesions
- Primary target group in most of the countries recommending HPV vaccination is young **adolescent girls, aged 9-14**.
- **The vaccination schedule depends on the age of the vaccine recipient**:
  - Females <15 years="" at="" the="" time="" of="" first="">> a 2-dose schedule (0, 6 months) is recommended.
  - If the interval between doses is shorter than 5 months, then a third dose should be given at least 6 months after the first dose.
  - Females ≥15 years at the time of first dose: a 3-dose schedule (0, 2, 6 months) is recommended.

NB: A 3-dose schedule remains necessary for those known to be immunocompromised and/or living with HIV.

Early diagnosis - screening and treatment

SCREENING:

- 3 safe and cost-effective tests available: Pap test and/or liquid-based cytology (LBC), VIA; and HPV nucleic acid detection (DNA and RNA tests).
- Screening should be performed at least once for every woman (30-49 years) when it is most beneficial;

TREATMENT: Screen and treat—or a screen, diagnose and treat—approach

- Detection of precancerous changes during screening, requires immediate treatment or further tissue evaluation (colposcopy and biopsy) and then be treated.
- size, location and stage of precancerous/cancerous lesion determines choice of treatment.
- cryotherapy - freezes precancerous lesions on the cervix and effective and appropriate treatment. Generally 15 minute procedure by a physician, nurse or midwife at a health centre
- Loop electrosurgical excision procedures (LEEP) - used to remove large lesions by physicians in hospital settings
- Early invasive cervical cancer - treated by radiotherapy; or by a radical hysterectomy (with or without pre-operative chemotherapy) - curative in most cases;
- locally advanced cervical cancer - combination of radiotherapy and cisplatin-based chemotherapy with an overall five-year survival of less than 50%
- Stage IV metastatic cervical cancer, palliative care can be provided. Not only end-of-life care but also includes care to reduce pain and improve the quality of life for cancer patients.

Resources & Data

http://www.unaids.org/en/resources/documents/2016/HPV-HIV-cervical-cancer

UNAIDS 2017 | GUIDANCE

Global AIDS Monitoring 2018

Indicators for monitoring the 2016 United Nations Political Declaration on Ending AIDS

10.10 Cervical cancer screening among women living with HIV – Available on page 119

http://www.hpvcentre.net/datastatistics.php

ICO/IARC Information Centre on HPV and Cancer

South Africa

Human Papillomavirus and Related Cancers, Fact Sheet 2017 (2017-07-27)

II. Complementary data on cervical cancer prevention

Table 4. Factors contributing to cervical cancer (co-factors)

Smoking prevalence (%), women	7.0 [5.5-9.1]
Total fertility rate (live births per women)	2.5
Hormonal contraception use (%) (pill, injectable or implant), among women	39.3
HIV prevalence (%), adults (15-49 years)	19.2 [18.4 - 20.0]

Table 5. Sexual behaviour

MEN	
Percentage of 15-year-old who have had sexual intercourse	-
Range of median age at first sexual intercourse	-
WOMEN	
Percentage of 15-year-old who have had sexual intercourse	-
Range of median age at first sexual intercourse	18.2-19.2

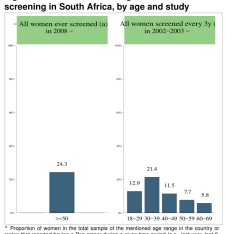
Table 6. HPV vaccine introduction

HPV vaccination programme	National program
Date of HPV vaccination routine immunization programme start	2014

Table 7. Cervical screening practices and recommendations

Cervical cancer screening coverage, % (age and screening interval, reference)	19.3% (All women aged 25-64 screened every 3y, WHS 2003 South Africa)
Screening ages (years)	Above 30
Screening interval (years) or frequency of screens	10 years

Figure 2. Estimated coverage of cervical cancer screening in South Africa, by age and study



* Proportion of women in the total sample of the mentioned age range in the country or region that reported having a Pap smear during a given time period (e.g., last year, last 2, 3, 5 years or ever).

Contact information:

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on in cancer sites other than the cervix, please refer to the specific country full report.

ICO/IARC Information Centre on HPV and Cancer

South Africa

Human Papillomavirus and Related Cancers, Fact Sheet 2017 (2017-07-27)

I. Key data on HPV and HPV-related cancers

South Africa has a population of 19.81 millions women ages 15 years and older who are at risk of developing cervical cancer. Current estimates indicate that every year 7735 women are diagnosed with cervical cancer and 4248 die from the disease. Cervical cancer ranks as the 2nd most frequent cancer among women in South Africa and the 1st most frequent cancer among women between 15 and 44 years of age. About 3.2% of women in the general population are estimated to harbour cervical HPV-16/18 infection at a given time, and 64.2% of invasive cervical cancers are attributed to HPVs 16 or 18.

Figure 1. Comparison of the ten most frequent HPV oncogenic types in South Africa among women with and without cervical lesions

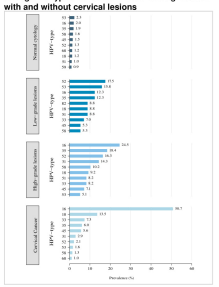

Table 1. Crude incidence rates of HPV-related cancers

	Male	Female
Cervical cancer	-	30.2
Anal cancer	0.4	0.1
Vulva cancer	-	0.3
Vaginal cancer	-	0.3
Penile cancer	0.5	-
Pharynx (excluding nasopharynx)	2.9	1.5

Table 2. Burden of cervical cancer

	Incidence	Mortality
Annual number of new cases/deaths	7735	4248
Crude rate	30.2	16.6
Age-standarized rate	31.7	18.0
Cumulative risk 0-74 years (%)	3.1	1.9
Ranking of cervical cancer (all years)	2nd	1st
Ranking of cervical cancer (15-44 years)	1st	1st

Table 3. Burden of cervical HPV infection South Africa

	No. Tested	% (95% CI)
HPV prevalence in women with normal cytology	10054	17.9 (17.2-18.7)
HPV 16/18 prevalence:		
Normal cytology	8661	3.2 (2.8-3.6)
Low-grade cervical lesions	57	21.1 (12.5-33.3)
High-grade cervical lesions	98	33.7 (25.1-43.5)
Cervical cancer	674	64.2 (60.6-67.8)

For data sources and further data on HPV infection in cancer sites other than the cervix, please refer to the specific country full report.

UNAIDS 2016 | REFERENCE

HPV, HIV and cervical cancer

Leveraging synergies to save women's lives

http://www.unaids.org/sites/default/files/media_asset/JC2851_HPV-HIV-cervicalcancer_en.pdf

2030 | Ending the AIDS epidemic

UNAIDS

Elimination of cervical cancer as a global health problem

- **May 2018**, Dr Tedros, WHO DG made a global call for action towards the elimination of cervical cancer as a public health problem;

- Aims to develop a global strategy and supporting approaches that can achieve this ambitious goal in every country within the 21st century.

- **Seven Working Groups** formed under WHO-led Secretariat: (1) Strategic Documents and Action Plan; (2) Advocacy Communications, and Civil Society Mobilization and Engagement; (3) Recommendations; (4) Impact Modeling, Costing and Financing; (5) Increasing Access to Interventions; (6) Monitoring and Surveillance; and (7) Research.

- UNAIDS – co-chairing WG 2 with UICC and engaged in with all WGs

- **Update:** A review meeting scheduled for early December – review incremental and long-term elimination targets.

UNAIDS

Key Alliances and partnerships: Key Civil Society at the Centre

- **The Joint UN Programme on Cervical Cancer Prevention and Control**: 7 UN agencies (WHO, IAEA, IARC, UNAIDS, UNFPA, UNICEF and UNWomen);
- **Gavi - the Vaccine Alliance**
  - A public–private partnership that has brought about significant reductions in the cost of HPV vaccines, which are now available in developing countries for about US$ 4.50 per dose (US$ 100 in developed countries).
  - BY 2017, Gavi had helped 30 countries to conduct HPV vaccine demonstration programmes.
- **PEPFAR, the George W. Bush Institute and UNAIDS**: Renewed Partnership to Help End AIDS and Cervical Cancer in Africa: Launched in May 2018 and building on earlier successes of Pink Ribbon Red Ribbon (PRRR - refocusing resources and advocacy efforts for greater impact in eight sub-Saharan African countries to prevent cervical cancer progression and mortality among women living with HIV.
- **PRRR** – launched in 2011 by President George Bush, Secretary Hillary Clinton, the Komen Foundation, UNAIDS and Merck to bring together public, private and multisectoral actors to address HPV and HIV. Donors and artners include Becton, Dickinson, and company, the Bill & Melinda Gates Foundation, the Bristol-Myers Squibb Foundation, the Caris Foundation, GlaxoSmithKline, IBM, Merck, QIAGEN, the National Breast Cancer Foundation, the LiveStrong Foundation, GE Healthcare and the American Cancer Society.
- **UNITAID**- May 2018 call for proposals to accelerate access and scale use of optimal tools for cervical cancer secondary prevention in LMIC. Objective to identify projects that can address access barriers, catalyse the market for, and support adoption of improved tools for managing the disease at the pre-cancer stage.
- **GFATM** – Windhoek - April 2017 GFATM and PRRR signed an agreement to collaborate on programming to prevent cervical cancer.

Most crucial partnership: Women Living with HIV & Women's Movement

- Integration of services: A number of health care programmes have been identified as being suitable for joint delivery with HPV vaccination and addressing cervical cancer, including service integration and health system strengthening to address both HIV and cervical cancer.
  - Delivering multiple programmes along with the HPV vaccine is an opportunity to increase access to health care and services among adolescents.
  - Existing sexual and reproductive health programmes—particularly family planning services— also could be used to integrate primary and secondary cervical cancer prevention services, especially for young girls who are out of school
- Building on lessons learned from the HIV movement – AIDS Activism and Advocacy – demand creation.
  - Governments, civil society and the international community can dramatically reduce the burden of diseases by prioritizing SRHR s for young women;
  - Improve education and communication about HPV and cervical cancer, including through synergies with HIV infrastructure

- Collaboration between multiple sectors is necessary for cervical cancer prevention to be a success.

(Departments of health and education; School health teams; Primary health-care nurses; Hospital doctors and nurses; Private practitioners, Teachers, community and traditional leaders, parents, youth clubs and movements.

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Thank you