WHO Global Strategies in Cervical Cancer Prevention and Control

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Cervical Cancer burden

528 000 cases 266 000 deaths

SOURCE: GLOBOCAN 2012, IARC
Cervical Cancer burden

- HPV = Infectious cause of cancers - Total attributable: 0.56 million cases/year
- Bridging the gap: WHO’s comprehensive approach / life course
- WHO Guidelines and Policies: making choices
- The way forward: health system building for CxCa control
WHO Guidelines for Cervical Cancer Prevention and Control

- The first comprehensive clinical guide from WHO on CxCa control – 2006 -Translated into the six official WHO languages

- Content
  - WHO Recommendations
  - Background
  - Anatomy & CxCa natural history
  - HPR
  - Screening for CxCa
  - Diagnosis & management of precancers
  - Management of invasive CxCa
  - Palliative care
Regional Conference on New Opportunities and Innovations in Cervical Cancer prevention

Comprehensive Cervical Cancer Prevention & Control

INTEGRATION

Population prevalence (not to scale)

HPV infection

Precancer

Cancer

9 years 15 years 30 years 45 years 60 years

PRIMARY PREVENTION
Girls 9-13 years
- HPV vaccination

Girls and boys, as appropriate
- Health information and warnings about tobacco use*
- Sexuality education tailored to age & culture
- Condom promotion/provision for those engaged in sexual activity
- Male circumcision

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

* Tobacco use is an additional risk factor for cervical cancer.
Building Blocks for Cervical Cancer Control

- Information
- Leadership
- Financing
- Medical products, vaccines & technology
- Services
- Health Workforce
Guideline introduction

Introduction and orientation (sub-regional level)

- National policies
- Practices
- Epidemiological data
- Resources

Situation Analysis

Introduction and Adaptation (country level)

- Stakeholders and trainers

Implementation plan

- Key interventions
- Monitoring and evaluation

Scaling-up

Partners

Advocacy and Adoption
So, 2014: the new C4-GEP

- Chapter 1: Epi, Nat Hist, AnaPath
- Chapter 2*: Programmatic issues
- Chapter 3: Heath Education
- Chapter 4*: HPV Vaccination
- Chapter 5*: Screen and TTT strategies of pre-cancer
- Chapter 6: Diagnosis and TTT
- Chapter 7: Palliative care
WHO Position Paper on HPV Vaccine (2009)

- HPV vaccination should be introduced into national immunization programmes
  - where prevention of cervical cancer and other HPV-related diseases is a public health priority and
  - where vaccine introduction is programmatically feasible and financially sustainable.

- Countries should prioritize achieving high coverage in the primary target population of 9 to 13 year old girls.
WHO Position Paper on HPV Vaccine (2009)

Other considerations for HPV vaccination:

- Introduce as part of a coordinated strategy to prevent CxCa and other HPV-related disease.
- Prioritize populations who are likely to have less access to CxCa screening later in life.
- Seek opportunities to link vaccine delivery to other health services and programmes targeting young people.
- Do not divert resources from effective CxCa screening programmes.
HPV vaccination: strengthening health system

- HPV vaccination raise issues of cost and financing and programme delivery to adolescents

- But it may strengthen or support adolescent immunization programmes, through schools or other delivery systems, according to country-specific needs and socio-cultural context

- It may also link immunization with other public health interventions for adolescent (sexual health and other health interventions)

- It could increase screening rate among mothers
Consensus on HPV vaccine coverage and impact monitoring - November 2009 meeting

- HPV vaccine **coverage** monitoring by dose and by year of age is necessary

- HPV vaccine **impact** monitoring is complex and is not a precondition for HPV vaccine introduction
  - Establishing or improving CxCa reporting to **cancer registries** is advisable for all countries to monitor impact of vaccine **and** CxCa screening programs

Article on meeting highlights available at [http://www.who.int/wer/2010/wer8525.pdf](http://www.who.int/wer/2010/wer8525.pdf)
Complete meeting report available at [http://whqlibdoc.who.int/hq/2010/WHO_IVB_10.05_eng.pdf](http://whqlibdoc.who.int/hq/2010/WHO_IVB_10.05_eng.pdf)
Optimizing HPV vaccine schedules

Department of Immunization Vaccines and Biologicals

World Health Organization

May 14, 2014
SAGE recommendations on HPV schedules

April 2014 (excerpts)

SAGE stated that immunological evidence was sufficient to conclude that a 2-dose schedule (prime-boost) given with a minimal interval of 6 months was non-inferior in girls to a 3-dose schedule (prime-prime-boost: 0, 1-2, 6 months) in the same age group and in women in whom clinical efficacy was demonstrated.

SAGE reiterated the importance of targeting 9-13 years old girls prior to initiation of sexual activity for HPV vaccination:

- A 2-dose schedule with an interval of at least 6 months between doses is recommended for girls under 15 years of age (even if the girl is 15 years or older at the time of the 2nd dose).
- If for any reason the interval between doses is shorter than 6 months, then a third dose should be given at least 6 months after the first dose.
- The 3-dose schedule (0, 1-2, 6 months) remains recommended for girls who have not received the first dose by 15 years of age and for immune compromised individuals, including those known to be HIV infected.

These schedule recommendations apply to both the bivalent and quadrivalent vaccines. SAGE identified gaps in knowledge that require further research but considered that availability of this should not delay the implementation of these recommendations.

Weekly Epidemiological Record, May, 2014
WHO Guidance on Comprehensive Cervical Cancer Control

In 2012 WHO Guidance Note on Comprehensive approach to CxCa prevention and control

Interdisciplinary stakeholders and solid in-country coordination needed by MoH

Ministry of health: Immunization, sexual and reproductive health, adolescent health, cancer control, and HIV prevention partners

Ministry of education: school health

Women's groups, Community based group to reach girl out of school

External partners
Comprehensive approach: Programmatic interventions over the life course to prevent HPV infection and cervical cancer

**PRIMARY PREVENTION**
- Girls 9-13 years
  - HPV vaccination
    - From 10 years old and onward
  - Health education and services, for example:
    - Sexual health education tailored to the age group
    - Providing contraceptive counseling and services including condoms
    - Prevent tobacco use and support cessation*

**SECONDARY PREVENTION**
- Women > 30 years of age
  - Screening and treatment
    - “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

- UN Political Declaration on NCDs 2011 - result of a promising debate

- Problem: NCD burden and its determinants (social, risk factors, weak health systems)

- Solutions:
  - Guiding principles: whole of government approach, multiple stakeholders, cost-effectiveness of interventions.
  - Risk reduction strategies: Screening and Vaccination

- Health system strengthening
WHO's global NCD control Framework

- **Surveillance**: Mapping the epidemic of NCDs
- **Prevention**: Reducing the level of exposure to risk factors
- **Management**: Strengthen health care for people with NCDs
World Health Assembly 2013: NCD Resolution

Set of 9 voluntary global NCD targets for 2025:
- Harmful use of alcohol: 10% reduction
- Physical inactivity: 10% reduction
- Salt/sodium intake: 30% reduction
- Tobacco use: 30% reduction
- Raised blood pressure: 25% reduction
- Diabetes/obesity: 0% increase
- Premature mortality from NCDs: 25% reduction
- Essential NCD medicines and technologies: 80% coverage
- Drug therapy and counseling: 50% coverage

Global Monitoring Framework:

Mortality & Morbidity:
- Unconditional probability of dying between ages 30 and 70 years from cardiovascular diseases, cancer, diabetes or chronic respiratory diseases
- Cancer incidence by type of cancer

Risk Factors:
- Harmful use of alcohol (1)
- Low fruit and vegetable intake
- Physical inactivity (2)
- Salt intake
- Saturated fat intake
- Tobacco use (2)
- Raised blood glucose/diabetes
- Raised blood pressure
- Overweight and obesity (2)
- Raised total cholesterol

National Systems Response:
- Cervical cancer screening
- Drug therapy and counselling
- Essential NCD medicines & technologies
- Hepatitis B vaccine
- Human Papilloma Virus vaccine
- Marketing to children
- Access to palliative care
- Policies to limit saturated fats and virtually eliminate trans fats

25 Indicators
Cervical cancer indicators

Performance indicators

*Screening rate of the target population* (women aged 30–49 years): Percentage of women aged 30–49 years who have been screened for the first time with VIA in the previous 12-month period.

*Positivity rate*: Percentage of screened women aged 30–49 years with a positive VIA test result in the previous 12-month period.

*Treatment rate*: Percentage of VIA-positive women receiving treatment in the previous 12-month period.

Result indicator

*Coverage rate indicator*: Percentage of women aged 30–49 years who have been screened with VIA or another screening test at least once between the ages of 30 and 49 years.

Impact indicator
Cervical cancer age-specific incidence.
One WHO Work Plan 2014-2015
What is it?

Method of work for WHO to implement the actions for the WHO Secretariat included in the WHO Global NCD Action Plan 2013-2020 in a coordinated manner, including:

- Across the three levels of WHO (Country Offices, Regional Offices, Headquarters)
- Across the WHO Categories included in the WHO Programme Budget 2014-2015 (e.g. communicable diseases, maternal health, emergencies)
UN Interagency Taskforce on NCDs

TORs

• Enhance and coordinate technical support
• Facilitate information exchange about plans, strategies, programmes and activities
• Facilitate information exchange about available resources to support national efforts
• Strengthen advocacy
• Ensure that key interventions are jointly addressed
• Strengthen international cooperation
UN Interagency Taskforce on NCDs
Reducing cervical cancer mortality
Increase Cervical cancer screening coverage

Develop national plans

Reduce exposure to risk factors: HPV

Enable health systems to respond: PHC > secondary > tertiary (radiotherapy surgery)

Measure results: cancer registries
Companion guidelines to implement recommendations
Scaling-up services for cervical cancer prevention and control in low income countries is achievable

23 August 2012 - A demonstration project led by WHO in six African countries in collaboration with the Ministries of Health and the International Agency for Research on Cancer showed the feasibility of integrating visual inspection with acetic acid followed by cryotherapy as a "see and treat" approach to prevent and control cervical cancer in primary health care and reproductive health services. As a result each country involved has presented and started to implement a budgeted plan to scale-up these services nationwide.

- A demonstration project in six African countries: Malawi, Madagascar, Nigeria, Uganda, the United Republic of Tanzania, and Zambia

Scaling-up services for cervical cancer prevention and control in low income countries is

WHO renews commitment to family planning at groundbreaking summit

WHO issues new guidance on safe abortion care

Maternal mortality dropping but still unacceptably high - new estimates
Strengthening Cervical Cancer Prevention Programme – Operational framework

- **Community level**
  - VIA and cryotherapy
  - Treatment

- **Awareness, Communication**

- **PHC level**
  - VIA

- **Secondary level**
  - VIA
  - VIA
  - VIA

- **Tertiary level**
  - VIA

- **Palliative Care**

- **Monitoring and evaluation**

- **Training**
Strengthening Cervical Cancer Prevention Programme – New algorithms

PHC level
- HPV

Secondary level
- Cyto/Colpo and biopsies or VIA and cryotherapy

Tertiary level
- Treatment

Community level
- Training

Monitoring and evaluation

Awareness, Communication

Palliative care
WHO guidelines: Use of cryotherapy for cervical intraepithelial neoplasia

Available 2011

Recommendations
- Use of cryotherapy for prevention of CIN
- Lesion size
- Lesions extending into the endocervical canal
- Cryotherapy technique and procedure
- Providers
- Use of cryotherapy during pregnancy
- Retreatment of CIN lesions with cryotherapy
- Education
Technical specifications for cryotherapy equipment

Available March 2012

This manual addresses key issues that will ensure the procurement and effective use of quality assured cryotherapy equipment to support the early management of precancerous cervical lesions as part of a comprehensive cervical cancer prevention programme.

Contents:

- Technical Basis Paper. Cryotherapy equipment for the treatment of pre-cancerous cervical lesions
- Generic Specification. Cryotherapy equipment for the treatment of pre-cancerous cervical lesions
- Advice and guidance. gas supplies for cryotherapy treatment of precancerous cervical lesions
- Recommendations for handling gas cylinders
- Procurement guidance.
QA/QC for VIA-cryotherapy based programmes

Companion guides to (C4GEP)

Quality control and quality assurance for visual inspection with acetic acid (VIA) and for cryotherapy for cervical cancer prevention and control

Available March 2012

Intended primarily for programme managers and other stakeholders working in public health programmes for cervical cancer prevention and control.

Purpose

This guide focuses on quality control and quality assurance for VIA and cryotherapy, given that both have been extensively evaluated through cross-sectional studies, prospective randomized trials and demonstration programmes.

The recommendations provided in this document need to be adapted to national policies, health systems, needs, language and culture.
WHO Cervical Cancer Prevention and Control Costing Tool

- Help plan and select affordable strategies, the C4P Tool allows a country to cost
  - HPV vaccine introduction under different scenarios
  - scaling up of CxCa screening services.

- Developed to assist Tanzania's national planning ➔ developed into a generic tool. Outputs used for cost-effectiveness analysis, budgeting, and resource mobilization

- C4P Tool being incorporated into the UN One Health costing tool to allow cross-health sector planning.

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Tool including user guide soon available on WHO NUVI HPV website
Conclusion

By developing and supporting implementation of guidance documents, WHO intends to overcoming the transfer and application of knowledge gap

To take evidence into practice at all levels