The newsletter on Human Papillomavirus because we can envisage cervical cancer elimination

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PVWorld

WESTERN AFRICA

Human Papillomavirus and Related Cancers, Fact Sheet 2022

COMMENT:

Cervical cancer incidence and mortality remain high in Western Africa in spite of the fact that this is a highly preventable disease. The incidence in the subregion is estimated to be 13.9 per 100,000 persons with a mortality of 9.4 per 100,000 persons. It is the second most common cancer among women and the second most frequent cause of cancer deaths. Women present late with the disease giving them few options of management due to limited resources¹.

Primary prevention (lifestyle modification especially sexual lifestyle, and vaccination) has been shown to be the best arsenal in the fight against cervical cancer². Unfortunately only 4 out of the 16 countries in Western Africa have any form of a national HPV vaccination programme. Even if all countries start immunisation programmes immediately, it will take many years for the benefits to be seen. This is the basis for the WHO's elimination strategy of 90-70-90³. Targeting the large number of women who have never been vaccinated nor screened and remain at risk is key to the success of any programme. These women need to be screened and those with precancerous lesions of the cervix treated to prevent cervical cancer. For cervical (pre)cancer screening coverage, the data available indicate that only Cabo Verde and Senegal have screening coverage rates above 10%. Without a comprehensive intervention, the incidence of this preventable cancer will increase and put extra burden on already limited resources.

To address the challenges, it will be helpful to learn from areas that have seen some positive results. Many countries in Western Africa have experienced a reduction in maternal mortality⁴. As part of the Millennium Development Goals (MDGs)⁵, governments invested in bringing down maternal mortality and HIV/AIDS. Maternal mortality and HIV/AIDS were specifically captured under MDG 5 and 6 respectively. Governments looked for funding for these. In Ghana, for example, efforts are made to audit every maternal mortality. The same attention has not been given to cervical



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cancer. Women are escaping from maternal mortality but dying from cervical cancer. A similar thing is happening in HIV. Women are no longer dying from opportunistic infections seen in HIV because they receive therapy⁶. In the absence of cervical cancer prevention programmes, these HIV positive women are dying from cervical cancer.

Another issue is building capacity to properly screen, pick up premalignant lesions and treat them so they don't progress to cancer. Unfortunately graduates from most health institutions in Western Africa do not come out with skills to prevent cervical cancer. Intermittent programmes from the WHO and other agencies and institutions like the Cervical Cancer Prevention and Training Centre in Catholic Hospital, Battor, Ghana⁷ have been used to train health personnel in cervical cancer prevention skills. If cervical cancer is a major problem in Western Africa, then the education systems in the countries must be tailored to produce personnel to prevent it. To do this sustainably, curricula will have to be modified so that nurses, midwives, and medical doctors/specialists come out of training not just with theoretical knowledge but with practical skills to prevent cervical cancer.

Mortality from cervical cancer remains high in Western Africa. The interventions required to address this are clear. What is needed is strong commitment in the subregion to this cause.

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The Catalan Institute of Oncology (ICO) in Barcelona, Spain and the International Agency for Research on Cancer (IARC) in Lyon, France jointly lead the HPV Information Centre, a web-based resource that compiles, processes and disseminates published information on HPV infection and HPV-related diseases for all countries of the world.

Country-specific Fact Sheets are standardized summaries of HPV-related disease burden and associated risk factors, prevention strategies, screening activities, and immunization programs for each of the 194 WHO member states. Fact Sheets include concise, self-explanatory graphs and tables to offer a quick overview of the situation in the designated population. The system allows queries to generate statistics for individual countries, groups of countries, geographical regions or worldwide summaries.

More elaborated supplementary tables and comments can also be found in country-specific, regional and worldwide Full Reports from the original database (www.hpvcentre.net). The HPV Information Centre publishes internationally recognized review monographs and targeted scientific publications to address relevant questions in the path to the cervical cancer elimination campaign. The HPV Information Centre is an open access, publicly funded resource to support the work of the scientific HPV community worldwide.





1)	Benin	9) Liberia
2)	Burkina Faso	10) Mali
3)	Côte d'Ivoire	11) Mauritania
4)	Cabo Verde	12) Niger
5)	Ghana	13) Nigeria
6)	Guinea	14) Senegal
7)	Gambia	15) Sierra Leon
8)	Guinea-Bissau	16) Togo

8) Guinea-Bissau

WESTERN AFRICA: KEY DATA ON HPV AND HPV-**RELATED CANCERS**

Western Africa has a population of 111.1 millions women aged 15 years and older who are at risk of developing cervical cancer. Current estimates indicate that every year 27806 women are diagnosed with cervical cancer and 18776 die from the disease. Cervical cancer ranks as the 2nd most frequent cancer among women in Western Africa and the 2nd most frequent cancer among women between 15 and 44 years of age. About 4.3% of women in the general population are estimated to harbour cervical HPV-16/18 infection at a given time, and 55.6% of invasive cervical cancers are attributed to HPVs 16 or 18.

Table 1 Crude incidence rates of HPV-related cancers.*

	MALE	FEMALE
Cervical cancer	-	13.9
Anal cancer	0.53	0.35
Vulvar cancer	-	0.64
Vaginal cancer	-	0.22
Penile cancer	0.04	-
Oropharyngeal cancer	0.18	0.12
Oral cavity cancer	0.78	0.64
Laryngeal cancer	0.62	0.15

*per 100,000 persons and year



Table 2 Burden of cervical cancer.*

	INCIDENCE	MORTALITY
Annual number of new cases/deaths	27,806	18,776
Crude rate	13.9	9.41
Age-standardized rate	22.9	16.6
Cumulative risk 0-74 years (%)	2.48	1.88
Ranking of cervical cancer (all years)	2nd	2nd
Ranking of cervical cancer (15-44 years)	2nd	2nd

*rates per 100,000 persons and year

Table 3Burden of cervical HPV infection.

	No. TESTED	% (95% CI)
HPV 16/18 prevalence:		
Normal cytology	4,726	4.3 (3.8-4.9)
Low-grade cervical lesions	210	24.3 (19.0-30.5)
High-grade cervical lesions	163	35.6 (28.6-43.2)
Cervical cancer	926	55.6 (52.4-58.8)

CI: confidence interval



Figure 1

Comparison of the ten most frequent HPV oncogenic types in Western Africa

among women with and without cervical lesions.







CERVICAL CANCER





Table 4

Factors contributing to cervical cancer (cofactors).

Range of smoking prevalence among women (%)	0.1-8.6
Range of total fertility rate (live births per women)	2.3-6.3
Range of oral contraceptive use (%)	1.4-21.4
Range of HIV prevalence among women (15-49 years) (%)	0.2-3.8

Range of values among countries with information

Table 5

Sexual behaviour.

ange of percentage of 15-year-old who have had sexual intercourse	1.6-18.0
Range of median age at first sexual intercourse	16.8-25.6

Range of percentage of 15-year-old who have had sexual intercourse	5.7-26.0
Range of median age at first sexual intercourse	15.6-20.0

Range of values among countries with information

Table 6

HPV vaccine introduction.

	FEMALE	MALE
HPV vaccination programme	Introduced in Côte d'Ivoire, Gambia, Liberia, and Senegal	Not introduced
Year of introduction	Côte d'Ivoire, Gambia and Liberia in 2019, and Senegal in 2018	
Year of estimation	2020	
HPV coverage – first dose (%)	Côte d'Ivoire: 67, Gambia: *(68 in 2019), Liberia: 42, and Senegal: 45	
HPV coverage – last dose (%)	HPV coverage – last dose (%) Côte d'Ivoire: 13, Gambia: *, Liberia: 18, and Senegal: 31	

* HPV vaccination program interrupted due to COVID-19



Table 7

Cervical screening practices and recommendations.

Country	Cervical cancer screening coverage (%)	Screening ages (years)	Screening interval (years) or frequency of screens, and test
Burkina Faso	6% (All women ever screened in life- time aged 25-64, survey STEPS)	25-55	3, VIA
Cote d'Ivoire	2% (All women ever screened in life- time aged 30-49, survey STEPS)	25-55	3, VIA
Guinea	Unk	25-55	Unk
Senegal	10.9% (All women ever screened in lifetime aged 30-49, survey STEPS)	30-69	3, VIA
Ghana	3% (All women ever screened in life- time aged 20-70, study SAGE)	*	*
Cabo Verde	49% (All women ever screened in lifetime aged 25-65, survey STEPS)	*	*

Unk: unknown, VIA: Visual inspection of the cervix with acetic acid, *No recommendations identified

Figure 2

Estimated coverage of cervical cancer screening in Burkina Faso, Cote d'Ivoire, Cabo Verde and Ghana by age (year of estimation).

All women ever screened in Burkina Faso (2013)





Figure 2 (continuation)



All women ever screened in Cote d'Ivoire (2011-2012)







Figure 2 (continuation)



All women ever screened in Ghana (2014-2015)

OTHER HPV INFORMATION CENTRE FACT SHEETS PUBLISHED IN HPW

- Fact Sheet: Argentina
- Fact Sheet: Italy
- Fact Sheet: Japan
- Fact Sheet: Mexico
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