

EDITORIAL

Preventing and Controlling Cervical Cancer in Africa: A Call for Action

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Cancer of the cervix is one of the most deadly cancers in women, accounting for over 270,000 annual deaths globally. About 85% of these deaths occur in developing countries, with Africa topping the list of countries with the highest prevalence and death rates from the disease. In 2010, the World Health Organization estimated that about 75,000 women were diagnosed with cervical cancer in the African region, with more than 50,000 dying from the disease¹. Despite this high burden of the disease in Africa, it is worrisome that very little public health measures have been put in place to tackle the disease in a purposeful and action-oriented manner.

It is now known that cervical cancer is caused by the Human Papilloma Virus (HPV), which is largely acquired through sexual intercourse. The risk factors for HPV and therefore cervical cancer include early age of first sexual intercourse, having multiple sexual partners and having experienced a weakened immunity system. Data from the WHO¹ indicate that the prevalence of HPV in Africa is 21.3% - ranging from 21% in Southern Africa, to 21.5% in West Africa, and 33.6% in East Africa. Fortunately, HPV does not immediately cause cervical cancer, but produces a series of pre-malignant lesions called "cervical intra-epithelial neoplasia (CIN)" over a long period of time before invasive cancer develops. This long period of pre-malignant lesions offers an opportunity for early recognition, and the application of complete and effective treatment of the disease.

Apart from promotion of health sexual lifestyles, the advent of effective vaccines against HPV that causes cervical cancer are effective approaches for the primary prevention of cervical cancer. Two types of HPV vaccines are now available: quadrivalent vaccine active against HPV

genotype 6, 11, 16 and 18, and bivalent vaccine that is active against HPV types 16 and 18. Both are now widely available in African markets. Secondary prevention of cervical cancer is by screening for pre-cancerous lesions and early diagnosis followed by effective treatment, while tertiary prevention involves the diagnosis and treatment of confirmed cases of cancer.

The best approach for dealing with this disease is to get women to seek primary or secondary prevention since tertiary prevention has little effectiveness even in the best health systems. Indeed, the incidence and mortality associated with cervical cancer has declined in high income countries largely due to the wider use of primary or secondary prevention. By contrast, the prevalence and case-fatality from cervical cancer remains high in many African countries as a result of the inadequate use of primary and secondary prevention methods. Most women in these countries wait until the terminal stages of the disease before they seek treatment, while primary and secondary prevention methods remain poorly integrated into Africa's health care delivery systems.

The paper by Peter Memlah and colleagues in this edition of the journal² demonstrate the higher susceptibility of HIV positive women in Kenya to HPV infection and more severe forms of cervical cancer. This is due to the immunosuppression that is associated with HIV. Thus, it is possible that the higher prevalence of HIV/AIDS in sub-Saharan Africa accounts for the persistence of severe forms of cervical cancer in the region. The paper by Adejuyigbe and others in the journal³ report the low knowledge of HPV vaccine among a cohort of youth in Nigeria, an important problem that needs to be overcome in efforts to promote primary prevention of cervical cancer in the

region.

In dealing with cervical cancer in Africa, some of the challenges that need to be overcome include: the lack of cervical control policies, strategies and programs; inadequate information and skills to manage the disease; lack of recent and accurate data; high cost of HPV vaccines and unavailability of secondary prevention methods; and the geographical inaccessibility and limited tertiary prevention methods. The delay in seeking primary prevention and treatment of early cases of cervical cancer is a major challenge that needs to be overcome in Africa. Delay in treatment also brings huge economic losses to the region. The World Bank has estimated that the cost of screening for cervical cancer every five years is US\$ 100 per disability –adjusted year (DALY) gained, compared with \$2,600 per DALY for treatment and palliative care for invasive cancer⁴. Thus, primary prevention and prompt secondary prevention makes sense and should be the major focus of any attempt to deal with the disease in the African region.

Surely, the time to act is now. Estimates indicate that if nothing is done the number of deaths from cervical cancer could rise by up to 25% in the African region in the next 10 years. Three concrete actions are urgently needed to deal with the high burden of cervical cancer in Africa. The first is for African countries to work towards integrating policies and programs for the prevention and treatment of cervical cancer into their health care systems. Many African countries currently do not have such a plan, and many are oblivious of the consequences of inaction on this front. This includes making HPV vaccines affordable and accessible, providing facilities for secondary and tertiary care, and training care providers to offer high quality treatment and palliative care. The second is to address the current inequality in access that increases the likelihood of death from cervical cancer for poor women, especially illiterate women who live in rural areas. Targeted information as well as social safety nets needs to be provided to these women to enable them access preventative and curative care for cervical cancer.

Thirdly and most importantly, accurate comprehensive research and service delivery data

are sorely needed to better manage the disease in Africa. Current data on cervical cancer from many parts of Africa are largely based on retrospective data or case reports from single hospitals. More expansive data based on systematically collected prospective data are needed to guide future policymaking and programming. Attempts to establish cancer registries that provide accurate prospective multicentre data to track the incidence and patterns of various forms of cancer, including cervical cancer have largely been unsuccessful in Africa. A properly organized effort based on integration of data collection into health care systems may likely address this problem. Furthermore, community based data are needed to establish the actual prevalence and incidence of the disease and to determine why women use or do not use primary or secondary prevention methods. Intervention research that provides information on ways to increase women's access to services such as HPV vaccines and simple screening methods for CIN are also urgently needed.

In conclusion, we posit that the prevention of cervical cancer is one of the most important issues and yet unmet need for promoting the sexual and reproductive health of African women. We challenge African countries to take steps to improve access to modern technology for prevention and treatment in efforts to reduce the burden and consequences of cervical cancer in the continent.

Conflict of Interest

None

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