The case for collective Commonwealth action on cervical cancer

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Cervical cancer remains a public health challenge, particularly in the low-income and middle-income countries (LMICs) of the Commonwealth due to inequity, injustice and ignorance. The stark reality is that the global call by the World Health Organization (WHO) for the elimination of cervical cancer is only feasible in a few Commonwealth member countries. However, robust collective action that is driven by the highest political leadership could create a pathway for countries with a high burden of cervical cancer and weak health infrastructure to meet the 2030 targets of the cervical cancer elimination agenda. Thus, there is the need for genuine partnerships in research, and policies that will fit the local needs of individual countries. Indeed, single dose HPV vaccination with a "screen and treat" approach for those with premalignant cervical diseases may be a good alternative strategy to the conventional protocol in most Commonwealth countries. It is important that member countries should support each other to generate local evidence, health workforce development, infrastructure and healthcare financing for cervical cancer prevention and treatment. This will ensure that no one is left behind. The time for action is now.

Cervical cancer as a public health concern

Cervical cancer, the second most common cancer among women after breast cancer globally, has been described as a disease that manifests inequity, injustice, and ignorance *(1)*. Whilst most high-income countries, particularly in the West. had initiated the process of eliminating cervical cancer, the majority of low- and middle-income countries in the Commonwealth are experiencing an increasing or static incidence and mortality of cervical cancer *(2)*. Most of these high-burdened countries are members of the Commonwealth *(3)*. Worldwide, it was estimated that every two minutes a woman dies from cervical cancer. Of the half a million cases of newly diagnosed cervical cancer and more than a quarter of a million women who die from cervical cancer annually, over 70% are in the low- and middle-income countries *(4, 5)*. Commonwealth countries account for 40% of the global cervical cancer incidence and 43% of cervical cancer mortality. Women in Commonwealth countries with a high HIV burden – South Africa, Tanzania and Zambia – are at increased risk of morbidity and mortality from cervical cancer. Estimates suggests that the burden of new cases and mortality from cervical cancer might increase by 55% and 60%, respectively, in the Commonwealth member countries if there is no appropriate investment *(2, 5)*.

Effective cervical cancer strategy prevention and control is available

Generally, persistence of high-risk human papillomavirus (HPV) infection is a necessary cause of cervical cancer, accounting for 99% of all cases *(5)*. Although there might be variation in the pattern of detectable HPV genotypes in the invasive cervical cancer samples, HPV 16 and 18 have been reported in more than 70% *(6, 7)*. Thankfully, there are efficient and cost-effective vaccines – Cervarix, Gardasil and Gardasil 9 – that can be deployed and administered to young girls before sexual debut at the population level to prevent HPV infection acquisition and persistence *(8)*. Catch-up HPV vaccination for sexually active women has also been shown to be useful. Many high-income countries have adopted a gender neutral policy of vaccinating girls and boys, as a strategy to quickly promote community herd immunity against HPV *(9)*.

A recent review by the World Health Organization (WHO) showed that only two countries in Africa (Rwanda and Seychelles) have achieved 80% national HPV vaccine coverage, while many other countries have not introduced the vaccine *(9–11)*. In addition to mass vaccination, screening for premalignant lesions and prompt treatment of early invasive cancer are effective secondary and tertiary preventive strategies for cervical cancer, respectively *(11)*. In an attempt

to ensure that cervical prevention and control is accessible to all women, WHO prescribed a modified algorithm for cervical cancer *(1)*. Again, a number of countries in the Commonwealth, particularly in Africa, do not have national policies and or implementation plans for screening services *(1)*.

The landscape of cervical cancer in the Commonwealth

The increasing burden of cervical cancer in Commonwealth member countries does not appear to be due to a new histological type or increased aggressiveness of a variant HPV subtype; it is largely as a result of the high prevalence of risky sexual behaviour, poor knowledge and health-seeking behaviours of women, lack of capacity to effectively implement national screening services and prompt diagnosis and treatment of early stage cervical cancer *(1, 12)*. For example, hospital-based studies have shown that most women present in advanced stage (i.e., Figo Stage 2b and above) when a cure is no longer envisaged and the five-year survival is low *(1)*.

In Nigeria, more than 7 out of 10 women that present with cervical cancer for the first time at the gynaecological clinic already have Stage III of the disease *(13, 14)*. In this scenario, a cervical cancer patient is usually described as a woman with postcoital or abnormal vaginal bleeding, foul smelling vaginal discharge, and weight loss with or without urinary or feacal incontinence. This scenario, often the end stage of the disease spectrum, reflects the lack of awareness and understanding about the disease, prevention and treatment and failure of the health system *(12-14)*. In contrast, in some member states where effective national screening programmes have been operational for decades, advanced invasive cervical cancer is rare and women with invasive cervical cancer are usually detected early, offered surgery and radiotherapy, with excellent clinical outcomes such as high five-year survival rates *(2)*.

In low- and middle-income countries, the challenges of access to high-quality affordable healthcare are myriad *(1)*. Healthcare financing in many countries in Africa is also fraught with no insurance coverage for basic healthcare and cancer care *(1)*. High out-of-pocket costs make access to cervical care very challenging since most treatment protocols include radiotherapy and chemotherapy, which are very expensive. The poor investment in health infrastructure generally also has a negative toll on cervical cancer control. There are a number of countries in the Commonwealth that have inadequate health infrastructure including basic equipment for cervical cancer screening and treatment of pre-cancers. Availability of radiotherapy machines is one the key infrastructural challenges in Commonwealth countries. According to the 2019 IAEA report, many countries in Africa have less than 5

Figure 1: Cervical cancer deaths, cervix uteri (per 100,000)

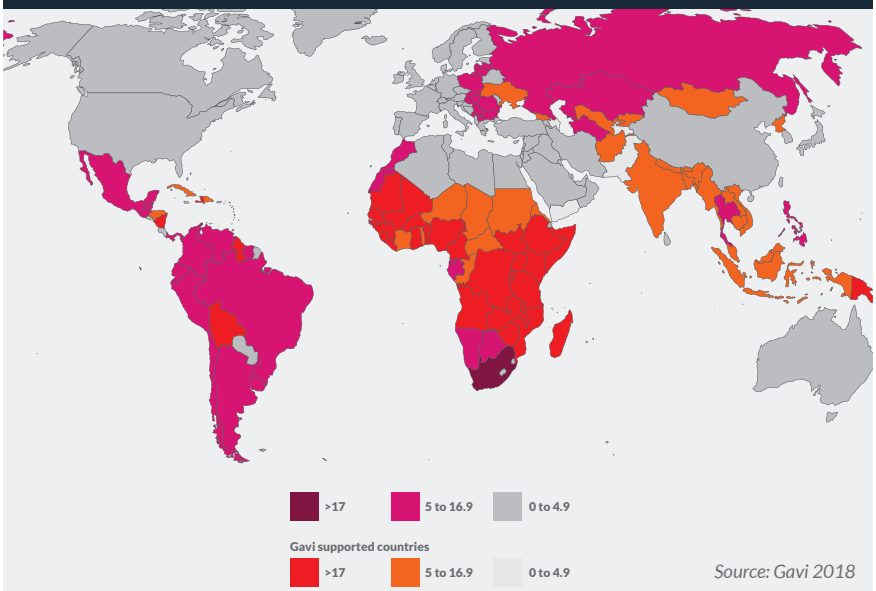


Figure 2: Overview of programmatic interventions over the life course to prevent hpv infection and cervical cancer

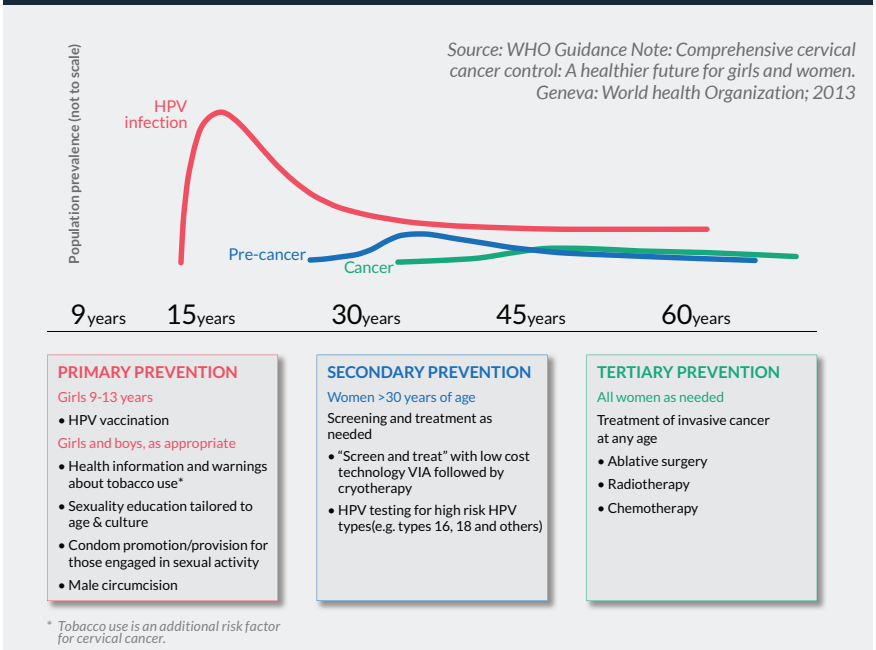
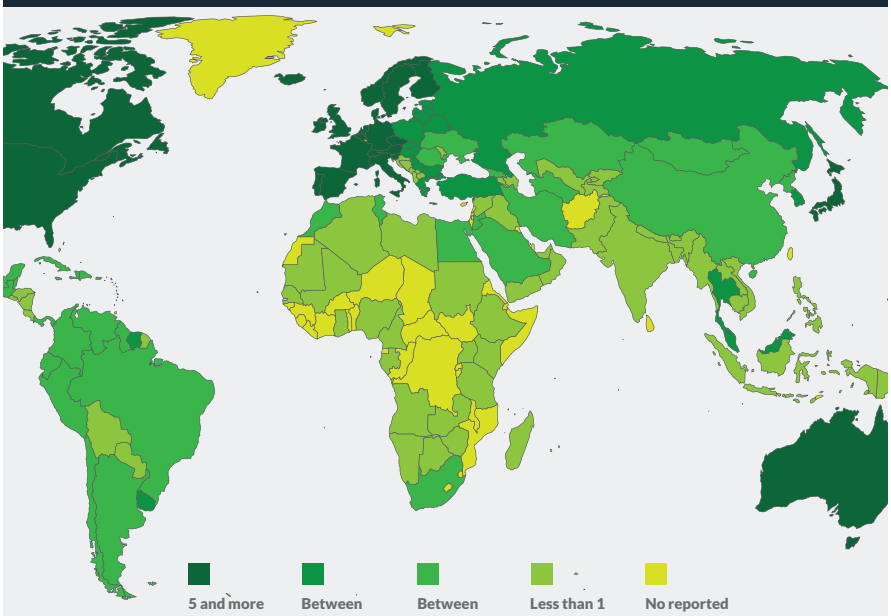


Figure 3: **Number of radiotherapy machines per million people**



Source: IAEA DIRAC

radiotherapy machines *(15, 16)*. Nigeria, with a population of 200 million, has fewer than 10 functional radiotherapy machines, considerably less than the required 1 machine per million people *(15-17)*. The inadequate supply of radiotherapy machines has negatively impacted on the survival of cervical cancer patients. However, Australia and the United Kingdom have more than 5 functional radiotherapy machines per million people and treatment at these centres is covered by health insurance *(15, 16)*.

The trio of ignorance, poverty and disease is responsible for the high burden of diseases in Africa. Poor awareness about the aetiology of cervical cancer, especially among women and young girls, has been reported to be associated with poor health-seeking behaviour *(2)*. Women with poor knowledge of cervical cancer tend to present late when they eventually develop the disease.

Goal for action

The overarching goal for action for all member states in the Commonwealth is to ensure that "every person has access to cancer prevention and screening, those with cancer are diagnosed early, have timely referrals and access to access to the highest standard of specialty care, where competent health workers provide quality, affordable treatment in an efficient system that delivers maximum outcomes" *(18)*. Following the global call for the elimination of cervical cancer by the Director General of WHO in 2018, every country in the Commonwealth must, as a matter of priority, initiate a national policy and programme that aligns with the elimination agenda *(18)*. Given the disparity in resources and implementation efforts for the control of cervical cancer in the Commonwealth, it is imperative that member states form a coalition for collective action in cervical cancer prevention and control. This would cover primary, secondary and tertiary prevention, including supportive and palliative care.

Rationale for collective action for cervical cancer prevention and control

1. **Global elimination agenda: This is a global effort and few countries can do it alone:** It is imperative that member nations in the Commonwealth position themselves to adopt, introduce and implement the global elimination agenda for cervical cancer control. The thrust of the agenda is to eliminate cervical cancer as a public health problem when all countries reach an incidence rate of less than 4 cases per 100,000 women *(18)*. The expectation is that every country would meet the global target by 2030 – 90% coverage of HPV vaccination of girls; 70% coverage of screening; and 90% management for women with pre-cancers and invasive cervical cancer *(1, 18, 19)*
2. **Political commitment and action needed: A resolution is likely to be adopted at the 73rd World Health Assembly.** High-level political commitment among member countries in the Commonwealth is critical as this will guarantee prioritization, investment and aggressive programmatic implementation. Individual countries should ensure that their cervical control strategy is driven by the highest political leadership in order to facilitate the required action necessary for progress towards the elimination of cervical cancer. For example, the President of Rwanda played a critical role in generally reshaping the health system of his country, including HPV vaccination *(20)*.
3. **Differential capacity and infrastructure to control cervical cancer:** Vast disparities exist between member states in the Commonwealth in terms of human resources and health infrastructure, including well-equipped diagnostic and treatment facilities necessary for comprehensive services. Investment in the training of frontline health workers of cadres through acquisition of skills on screening and treatment of premalignant and early cervical cancer should be explored between member countries.

Commonwealth member states need to use evidence-based data for collective action

Establish a Commonwealth evidence base for cancer control

to support health professionals, policy makers and researchers involved in cancer control. Although the primary data to understand the social context and epidemiological risk factors of cervical cancer is available, data to understand possible differences in the response, as well as toxicities of different treatment protocols, are lacking in many Commonwealth countries. Basic science research on cervical cancer is not fully developed in Africa, and investment in this type of research will help in the development of new treatment protocols that may be beneficial to the survival of patients, policy formulation and future research. For example, it will desirable for some countries in the Commonwealth, particularly in Africa, to initiate clinical trials for a single-dose HPV vaccination or single screening for premalignant lesions of the cervix among sexually active women *(21)*. These cost saving strategies for primary and secondary prevention of cervical cancer would need to be further tested to consolidate the initial evidence from other countries.

Apart from generating national evidence, it is also desirable that member states share research findings including new drug or treatment protocols to promote evidence-based resource-tailored services for cervical cancer. Government, corporate organizations and foundations should make funds available for cutting edge research in different aspects of cervical cancer.

Conclusion

The Commonwealth consists of a highly varied group of member nations in terms of policies, implementation strategies and progress towards the elimination of cervical cancer. There are countries that are almost at the verge of eliminating cervical cancer, whereas there are others that are yet to initiate national policy and implementation strategies for the disease. Cervical cancer still remains a public health challenge in many Commonwealth countries, where most women present with advanced disease that is not amenable or feasible to treat with curative intent. Elimination of cervical cancer is possible, provided a genuine coalition is formed among member countries to address the ambitious targets for HPV vaccination, screening and treatment. Adequate investment in evidence generation, healthcare workforce development and infrastructure, and the introduction of appropriate healthcare financing models under a political leadership that prioritizes cervical cancer control can eliminate this entirely preventable cancer. Urgent action is needed now. ■

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