Rapid Situation Analysis—Kenya

PREVENTING CERVICAL CANCER THROUGH VACCINATION

Situation Overview

1. Severity of crisis

In Kenya, the number of individuals diagnosed with cancer has doubled in the last five years, from 20,000 cases in 2012 to 40,000 in 2017. Today, cancer has become Kenya’s third leading cause of death, after infectious and cardiovascular diseases. Cervical cancer is the leading cause of cancer mortality among women in sub-Saharan Africa (SSA), including in Kenya. Women in Kenya are 14 times more likely to die from cervical cancer than women in the United States (35/100,000 women vs. 2.4/100,000 women annually). In 2012, cervical cancer was responsible for 8.6 percent of all cancer deaths in-country and 16.3 percent of all cancer deaths in women. Researchers estimate that given current rates of screening and treatment, the number of deaths from cervical cancer could almost double by 2025.

2. Status of HPV vaccine roll-out in Kenya

In 2017, Kenya applied to Gavi to roll out the HPV vaccine in the country in 2018. While the Ministry of Health (MoH) is waiting for a formal decision letter from Gavi, the roll-out is expected to take place in 2019. In the first year, Kenya has requested support for a multi-age cohort (10-14) that would be reached through accelerated outreach—where facility-based delivery will be combined with outreach efforts, including to schools. In the years following, the vaccination will focus on 10-year-old girls, and the facility-based approach will again be supplemented by outreach that targets hard-to-reach schools and communities. The out-of-school girls will be reached through community mobilization directing them to health facilities and/or outreach posts. The exact start date of the vaccination roll-out is not yet set.

While the MoH has confirmed its intention to nationally roll out the HPV vaccine in 2019 and it is part of the National Vaccine and Immunization Programme’s (NVIP) workplan, the vaccine is not currently included as part of the country’s routine immunization program.
3. Results of HPV demonstration project

From May 2013 to May 2015, a demonstration project was conducted in Kitui using a school-based approach targeting school-going girls in Standard 4 and out-of-school girls aged 10. In schools, the vaccine was administered by healthcare providers from the nearest health facility. The demonstration project vaccinated 40,000 girls and achieved high acceptability and coverage of over 85 percent in both years.

The cost of delivering the vaccine was high when compared both to other routine vaccines in Kenya, as well as to the cost of demonstration projects in other countries. In Kenya, the financial costs amounted to US$20.67, compared to an average of US$8.74 across all Gavi-funded demonstration projects.\(^5\)

The demonstration project was led by the Division of Family Health within the MoH, with the National Vaccine and Immunization Program (NVIP) providing logistical support. Financial support for the HPV demonstration project was channeled from Gavi through UNICEF.

4. Potential barriers

**AT THE SYSTEM LEVEL:**

- **COMPETING PRIORITIES:** In 2017, following strikes of both doctors and nurses, Kenya witnessed a drop in its national immunization coverage rate from 85 to 68 percent. As a result, the NVIP has focused its efforts on addressing that drop. In addition, the NVIP is working on several new vaccine introductions or scale-ups, including: yellow fever, meningitis A, pneumococcal and malaria vaccines.

- **DECENTRALIZATION:** Kenya’s 2010 Constitution devolved authority for several fiscal and administrative functions—including health—to its 47 counties. Under this system, counties are free to allocate funds across these functions as they see fit. In some cases, this means that certain aspects of immunization—namely outreach—are not adequately funded. For the HPV roll-out to be successful, it will require substantial engagement with, and buy-in from, county-level decision-makers including governors, the county executive committees and the country health management teams.

- **SUSTAINABILITY:** Gavi funding will only support the national introduction for one year, where the cost of the vaccine will be co-financed, and Gavi will issue a vaccine introduction grant of US$2.40 per targeted girl for the routine cohort, and US$0.55 per targeted girl for additional cohorts. Kenya’s co-financing obligation is likely to fall under 10 percent of the cost of the vaccine. Beyond the first year, however, the government’s ability to continue purchasing the vaccine, even at Gavi subsidized prices, and to fund related implementation costs is unclear.

**AT THE INDIVIDUAL LEVEL:**

- **PUBLIC AWARENESS AND STIGMA:** While public awareness of cancer is growing in Kenya, awareness and understanding of cervical cancer is relatively low. Awareness of HPV and its links to cancer are even lower.
• **VACCINE HESITANCY:** In 2014-2015, the Catholic Church in Kenya asked parents of children under five years and women of reproductive age to boycott the polio and tetanus vaccines. The Catholic Bishops expressed concern that the tetanus vaccine administered to women of reproductive age was laced with contraceptives in the form of the Human Chorionic Gonadotrophin. Calls to boycott the polio campaign were centered around the safety (or perceived lack thereof) of the vaccine. More recently, during the 2017 presidential elections, some political leaders echoed earlier unsubstantiated claims that the tetanus vaccine had been laced with an anti-fertility hormone.

5. Potential facilitators

• **POLITICAL GOODWILL:** The first lady recently released a second strategic plan (2018-2022) for her “Beyond Zero” campaign, which includes a focus on influencing government investment for decentralized breast and cervical cancer prevention, treatment and management. The County First Ladies Association of Kenya has also expressed its desire to support the roll-out of the vaccine. More broadly, the government has adopted policies—such as the National Cancer Control Strategy—that demonstrate its commitment to reducing cancer morbidity and mortality.

• **ACCEPTABILITY OF THE HPV VACCINE:** Most studies carried out in Kenya, including as part of a pilot (Eldoret) and demonstration project (Kitui), found that once provided with accurate information about the HPV vaccine, most people—including parents, children and healthcare workers—welcomed the vaccine and demonstrated high rates of willingness to vaccinate.

• **INVOLVEMENT OF THE NATIONAL CANCER CONTROL PROGRAM:** When the country was developing its proposal to Gavi for the national roll-out, two representatives from the cancer control program as well as a representative from the Kenya Network of Cancer Organizations (KENCO) were part of the technical advisory group.

6. Government capacity to respond

• Kenya has a strong immunization program and has put in place the required infrastructure, human resources and systems to effectively procure and deliver vaccines. All routine vaccination services are provided free of charge in public health facilities, except those required for foreign travel, which are offered at a cost.

• While the NVIP does not deliver any routine immunizations to the age group targeted for the HPV vaccine, they have experience delivering three doses of the Tetanus Toxoid (TT) vaccine to school-going children aged 7-14 as well as to young girls aged 14. In both cases, however, this has taken place through campaigns targeting high-risk districts, mainly in the coastal region.

• In 2017, the Government of Kenya committed to implementing health system reforms aimed at accelerating movement toward Universal Health Coverage. Yet, in 2014, public health expenditure in Kenya stood at approximately 3.5 percent of GDP (WHO, 2014). On average, low- and lower middle-income countries spend around 6 percent of their GDP on health, upper middle-income countries about 7 percent, and OECD countries around 10 percent. In the financial year that ended June 2017, Kenya had an overall budget deficit of 8.8 percent of GDP.
7. Other relevant developments and trends

- Due to a global HPV vaccine shortage, there has been a delay in the introduction in Kenya and other African countries. While the vaccine is expected to be supplied to Kenya in 2019, it is not yet clear how many doses will be available, which will determine whether the vaccine is rolled out through a single or multi-age cohort.

- In May 2017, the US government suspended any direct assistance to the MoH in Kenya—including salaries, operations and travel, as well as meetings and workshops. The suspension resulted from corruption reports and lack of accountability. The suspension affected approximately US$21 million (a small proportion of the overall US health investment in Kenya, which exceeds US$650 million). The US government is continuing to fund health services and medications going directly to Kenyans, but the suspension is still in effect, with no set date for its removal and could impact activities such as the ability to host meetings and trainings.

- Currently, funding for cancer work in Kenya, including cervical cancer, is limited. For example, while the Bill & Melinda Gates Foundation used to fund a large cervical cancer screening and preventive therapy program in Africa (Kenya, Nigeria, Tanzania and Uganda), this program ended in 2017.

- According to the regional cancer registry at Kenya Medical Research Institute (KEMRI), about 80 percent of reported cases of cervical cancer are diagnosed at advanced stages, when very little can be achieved in terms of curative treatment. Yet to date, population-level screening among eligible women between the ages of 18 and 69 remains low, with fewer than 15 percent of eligible women having ever been screened, and with only 3.2 percent of women being screened every three years. Implementation of the National Cervical Cancer Prevention Program has been slow and mostly opportunistic, and the link between screening and treatment remains weak.

Final Thoughts

As Kenya has yet to get started with the detailed planning for the national roll-out of the HPV vaccine, this is an opportune time and context for the cancer community—including external partners such as the American Cancer Society—to play a key role in the process. Given that this is a vaccine that will be given to an age cohort that is currently not routinely targeted for immunization in Kenya, the communication and social mobilization efforts around the roll-out will have a critical role to play in creating demand for the vaccine, as will adequate messaging around the fact that it is a vaccine against six types of cancer.

The successful roll-out of the HPV vaccine in Kenya not only presents a unique opportunity to save lives, but also provides an opportunity to demonstrate how strong involvement of the cancer community could serve as a model for other countries to emulate moving forward.

Endnotes

1 Stacey Perlman et al., Knowledge and Awareness of HPV Vaccine and Acceptability to Vaccinate in Sub-Saharan Africa: A Systematic Review, PLOS One, March 2014.
2 Sylvia Becker-Dreps, HPV vaccine acceptability among Kenyan women, Vaccine, July 2010
5 Siobhan Botwright et al., Experiences of operational costs of HPV vaccine delivery strategies in Gavi-supported demonstration projects. PLOS One, October 20, 2017.

Photo credits:

Page 1: Girls collect water at a well courtesy of the Finnish Development Aid, Finnida, which supported the creation of several thousand bore wells in Western Kenya. © 1989 Harry Blässar, Courtesy of Photoshare
Page 4: A girl bonds with her mother after attending a life skills education session held by USAID’s AIDS, Population and Health Integrated Assistance (APHIAplus Nuru ya Bonde) Project, implemented by FHI 360, in Doldol, Laikipia County, Kenya. Photo ID: 61086-11 © 2016 George Obanyi/FHI 360, Courtesy of Photoshare