POLITICS 4 HER

POLICY BRIEF

ADDRESSING CERVICAL CANCER AND HPV VACCINATION DISPARITIES IN UNDERSERVED COMMUNITIES OF KENYA:

JULY 2024

ABOUT POLITICS4HER

Politics4Her is an intersectional feminist youth-led digital platform & global movement advocating for the inclusive participation of young women and girls in politics, civil society, and decision-making processes. Politics4Her is a movement driven by the belief that young women and girls hold the power to create a more equitable and just world. Our platform is a place where every girl and woman can be heard, valued and recognized as an agent of change.

Authored by: Feiza Fadhili and Walae Kasmi
Designed by Walae Kasmi

TRIGGER WARNING

This policy brief delves into the significant yet sensitive topics of cervical cancer and HPV vaccination, particularly focusing on their impact within underserved communities in Kenya. It addresses issues related to healthcare access, sexual health, and gender disparities, which may resonate deeply and personally with readers.

Please be advised that this brief discusses topics that might be distressing, especially for individuals who have faced health disparities, gender-based discrimination, or have personal experiences with the conditions mentioned. The brief includes references to sexual transmission of HPV, which might be sensitive for some readers.

We recognize the importance of discussing these health challenges to foster understanding, advocacy, and change. However, we also understand that the nature of this content might evoke strong emotions or discomfort for those directly affected by such issues or who have experienced related discrimination.

In our discussion, we aim to employ respectful and inclusive language that acknowledges the diverse experiences and identities of those impacted by cervical cancer and HPV, transcending gender binaries. Our goal is to highlight disparities and advocate for equity in health access and outcomes for all, regardless of gender identity or social standing.

If you find any part of this brief challenging, we encourage you to prioritize your well-being and engage with the content in a manner that is most comfortable for you. We believe in the power of informed dialogue to drive positive change and appreciate your engagement with this critical issue.

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EXECUTIVE SUMMARY

Kenya, located in the East African region, grapples with numerous challenges within its healthcare sector. The accessibility and availability of sexual and reproductive healthcare services, particularly in underserved areas, remain areas in urgent need of development and improvement.

This policy report is dedicated to shedding light on the extent of accessibility of HPV vaccination in rural Kenya, providing information on cervical cancer, and spotlighting the struggles of women and young girls residing in marginalized regions of Kenya regarding the dissemination of healthcare services. It aims to identify the factors contributing to the low uptake of HPV vaccination among women, girls, and even boys in rural Kenya, as well as to assess people's knowledge and perceptions regarding the vaccine and cervical cancer.

Our findings indicate that lack of awareness, inadequate healthcare infrastructure, and socio-economic barriers significantly hinder the uptake of HPV vaccinations. Based on these insights, we propose tailored, comprehensive policy recommendations to address and enhance the current situation.

This research endeavors to amplify the voices and experiences of individuals from underserved communities in Kenya who are striving to access quality sexual and reproductive healthcare services.

INTRODUCTION

Cervical cancer poses a significant public health threat to women worldwide, with a markedly high burden in low- and middle-income countries such as Kenya. As the leading cause of cancer-related deaths among women in these regions, cervical cancer's impact is exacerbated by disparities in access to preventive measures such as the human papillomavirus (HPV) vaccination and effective screening programs. These disparities are particularly pronounced in underserved communities across Kenya, where economic, cultural, and informational barriers limit the reach and effectiveness of cervical cancer prevention strategies. The introduction of the HPV vaccine has offered hope for significantly reducing the incidence of cervical cancer. However, its potential remains unrealized in many Kenyan communities due to these persistent challenges.

This policy brief addresses gaps in cervical cancer prevention and care in underserved Kenyan communities. It proposes actionable policy recommendations to enhance access to HPV vaccination and cervical cancer screening, aiming to reduce incidence and mortality rates. By understanding current barriers and disparities, the brief aims to drive policy changes for equitable health outcomes. It emphasizes the disproportionate impact on underserved areas and advocates for awareness, accessibility, and affordability of vaccination programs. Recommendations target policymakers, healthcare providers, and community stakeholders, addressing cultural, financial, and infrastructure barriers. Implementation aims to decrease cervical cancer incidence and mortality, promoting health equity in underserved Kenyan communities.

Methodology:

Afro.WHO 2019


Valeriya Anufriyeva 2008

This policy brief was developed through a comprehensive review of secondary data and existing research. The methodology involved the systematic analysis of peer-reviewed articles, reviewing and synthesizing existing academic and non-academic sources, reports from global health organizations such as WHO, and policy documents issued by the Kenyan government. Key sources also included statistical data from health surveys and studies related to cervical cancer and HPV prevalence in Kenya.

CONTEXTUAL BACKGROUND

Cervical cancer is a type of cancer that occurs in the cells of the cervix — the lower part of the uterus that connects to the vagina. It arises when healthy cells in the cervix develop mutations in their DNA. These mutations cause cells to grow uncontrollably, and they can accumulate to form a mass or tumor. Over time, these malignant cells can invade deeper into cervical tissue and spread to other parts of the body (metastasize).

Human Papillomavirus (HPV) on the other hand, is a sexually transmitted infection that plays a significant role in causing most cervical cancer cases. Among the many types of HPV, certain strains are considered high risk for leading to cervical cancer. However, not all women with HPV infection will develop cervical cancer. The body's immune system often prevents the virus from doing harm, and only a persistent HPV infection may lead to cancer.

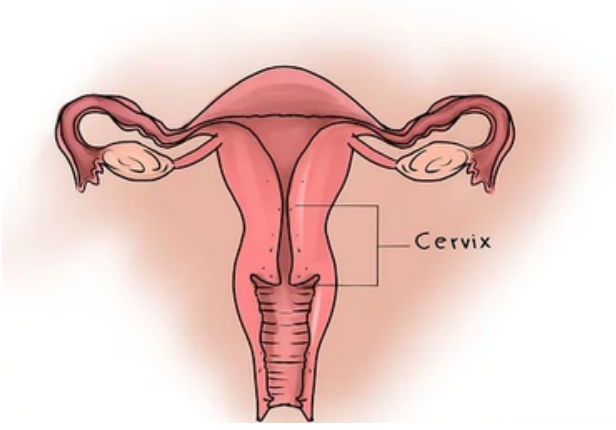
There are primarily two types of cervical cancer named after the cells they originate from:

1. Squamous cell carcinoma: This is the most common type, accounting for around 90% of cases. It begins in the thin, flat cells (squamous cells) lining the outer part of the cervix, which projects into the vagina.

2. Adenocarcinoma: This type starts in the glandular cells that line the cervical canal.

If the HPV infection in the cervix (see below) is persistent and left untreated, it causes 95% of cervical cancers. (WHO, 2024)

The cervix is the lower part of the uterus or womb, which opens into the vagina, also called the birth canal



Cervical cancer is notable for its slow progression, meaning that it typically develops over many years. This slow development process provides opportunities for the detection and treatment of precancerous conditions through regular screening tests such as the Pap smear or HPV testing. Prevention strategies, including HPV vaccination, play a crucial role in reducing the risk of cervical cancer.

Early-stage cervical cancer generally produces no symptoms. As the disease progresses it may present symptoms such as vaginal bleeding after intercourse, pelvic pain (sometimes during urination) and watery, bloody, vaginal discharge that may be heavy and have a foul odor. Due to the effectiveness of screening methods that can detect precancerous changes, cervical cancer is highly treatable when caught early.

Cervical Cancer and Its Uptake in Kenya:

Kenya has a population of 16.8 million women ages 15 years and older who are at risk of developing cervical cancer. Current estimates indicate that every year 5,236 women are diagnosed with cervical cancer, and 3,211 die from the disease. **Cervical cancer ranks as the 2nd most frequent cancer among women in Kenya and the 2nd most frequent cancer among women between 15 and 44 years of age.** About 9.1% of women in the general population are estimated to harbor cervical HPV-16/18 infection at a given time, and 63.1% of invasive cervical cancers are attributed to HPVs 16 or 18.

HPV 16 and HPV 18 are responsible for about 70% of cervical cancers worldwide. HPV 16, the most common high-risk type, usually shows no symptoms but can cause cervical changes, leading to 50% of cervical cancers. Similarly, HPV 18, another high-risk type, typically causes no symptoms but can also result in cervical cancer. (CDC)

A study done in the marginalized areas of Kenya titled "Access and Attitudes to HPV Vaccination amongst Hard-To-Reach Populations in Kenya" states that healthcare providers and support staff in rural government-run healthcare facilities in western Kenya have identified several major barriers to cervical cancer screening. The main barriers to service provision were staffing shortages and insufficient staff training. The staff also felt that lack of knowledge, long clinic wait times, and fear of the exam would be barriers for women to access screening.

Even though cervical cancer is largely preventable through screening, it continues to be the leading cause of cancer-related mortality among women in Kenya due to limited funding and infrastructure for prevention programs.

9 women	Each day in Kenya, nine women succumb to cervical cancer
14 cases	Each day in Kenya, 14 new cases are diagnosed.

However, this figure is likely a significant underestimate as the majority of cases are detected in hospitals and at advanced stages, with **only 7% of women reporting screening within the last three years.**

HPV Vaccination:

HPV infection may cause more serious conditions such as certain types of cancer. Of the more than 150 strains of HPV, 40 affect the genital area, but most don't pose a serious health risk. A person can be infected with more than one HPV strain at a time.

There are 3 vaccines currently approved for the prevention of HPV. All three types offer protection against HPV serotypes 16 and 18, which cause 70% of cervical cancer, with the latest nonavalent HPV vaccine offering an additional 20% protection against 31, 33, 45, 52, and 58, which are other high-risk serotypes for anogenital cancers. The quadrivalent and nanovalent HPV vaccines also protect against types 6 and 11, responsible for anogenital warts as well as the rare vertically transmitted respiratory papillomatosis.

HPV vaccines are licensed for use in both boys and girls between 9 and 26 years of age, with the optimal age of administration being 9–14 years of age. This is considered to be the most appropriate age for vaccination as most of the children have not had any sexual encounters by then and are therefore unlikely to have acquired HPV infection.

Regarding the susceptibility of Kenyan adolescents and young women and girls:

- 19.6 percent of 15-year-old young men have had sexual intercourse, and the range of median age at first sexual intercourse is 16.7 - 17.6 years.
- 10.7 percent of 15-year-old young women have had sexual intercourse, and the median age at first sexual intercourse is 16.7 - 18.2 years.

Screening ages:	Women between the ages of 25 to 49 are recommended for screening.
Screening tests:	Different screening tests are recommended for different age groups: • For women aged 25 to 30, cytology (commonly known as Pap smear) is the primary screening test used. • For women aged 30 to 49, the HPV (Human Papillomavirus) test is the primary screening test used. • For women aged 25 to 49, VIA (Visual Inspection with Acetic Acid) is used.
Screening frequency:	The frequency of screenings varies depending on the age group and the primary screening test used: • For women aged 25 to 49, VIA screening is conducted every 5 years. • For women aged 25 to 30, cytology screening is conducted every 5 years. • For women aged 30 to 49, HPV testing is conducted every 5 years.


Vanessa Cezarita Cordeiro - Humanium

The role of education

The lack of community engagement and education after the initial launch of the program resulted in knowledge gaps that fueled HPV vaccination refusals. At the time of the HPV vaccination launch, social mobilization and community education efforts were conducted to raise awareness and ignite vaccine uptake.

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Despite low knowledge levels about the HPV vaccine and a high prevalence of negative beliefs, parental willingness is high, with 90% of participating parents willing to have their children vaccinated. This represents a social phenomenon where people receive services which they have little understanding about and may well reflect the emotive nature of cancer. However, blind acceptance can be a concern, as well as acceptance of misinformation regarding HPV vaccines. A high willingness to have the child vaccinated against HPV is positive for future programs in Kenya.


Chariot for hope

Findings show the need to sensitize both parents and adolescent children simultaneously to improve future HPV vaccination. Lack of knowledge regarding the HPV vaccine among healthcare workers alongside misinformation that the vaccine is a form of contraception and encourages pre-marital sex are concerns that need to be addressed going forward.

A key concern is that children are too young to be vaccinated with the HPV vaccine, which has been reported in other studies, with some parents feeling that the sexual debut of their children was later than the recommended age for HPV vaccination. These further highlight the need for parental education to improve future vaccination rates.

Studies have found there's a negative association between parental level of education with willingness to vaccinate. These negative associations are significant even after adjusting for beliefs and knowledge.

Health officers and television, according to studies, have been mentioned as a significant source of health information, so it is very important for Kenya as a country and change-makers in this particular field to leverage that.

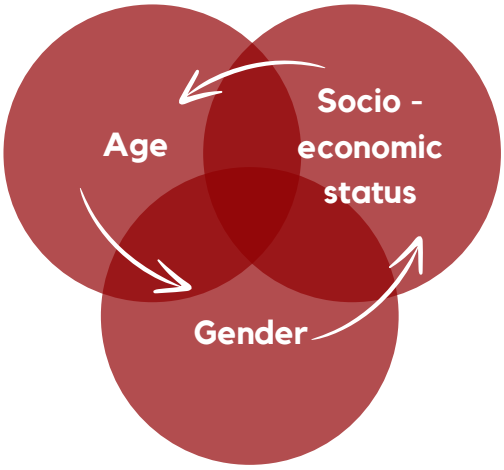
Research continues to show another concern to be the general poor knowledge about HPV and its association with cervical cancer and the availability of the HPV vaccine among both male and female participants.

Interestingly, according to a study done in Kenya, younger women were found to know less than males of the same age group about HPV. However, older females had a higher score than males of their age group. This may well be due to younger females being disadvantaged due to cultural issues, early school dropout rates, and early marriages in Kenya than in other countries. Such findings must be borne in mind when developing future educational programs directed at parents in Kenya and other similar countries.

Another key concern is that a significant population holds incorrect beliefs, with only a few believing that the vaccine is effective.

Education emerges as pivotal in enhancing HPV vaccination uptake in Kenya. Initial gaps in community engagement and knowledge dissemination underscored early hesitancy, but efforts to educate parents and adolescents have shown promising results. Despite prevailing misconceptions and cultural barriers, a substantial majority of parents exhibit willingness to vaccinate their children against HPV, indicating a latent demand. Moving forward, comprehensive educational initiatives must target both healthcare providers and community influencers to dispel myths effectively. By leveraging diverse channels such as health officers, television, and social media, tailored campaigns can bridge information gaps and foster informed decision-making. Such a multi-faceted approach holds promise for bolstering future vaccination rates and combating cervical cancer effectively.

HOW HPV VACCINATION VARRIES ACROSS DIFFERENT SOCIAL CATEGORIES



Age:

HPV vaccines are licensed for use in both boys and girls between 9 and 26 years of age, with the optimal age of administration being 9–14 years of age. This is considered to be the most appropriate age for vaccination as most of the children have not had any sexual encounters by then and are therefore unlikely to have acquired HPV infection.

From research done so far, girls over the age of 14 face discrimination when it comes to the admission of the HPV vaccination. Sexual debut is assumed for girls over the age of 14, and mostly when girls and older women go for screening, they are immediately offered screening rather than both screening and vaccination.

There is still misinformation even among medical officers and health 'experts' that women who have had sex must not be administered the vaccination. This has therefore led to an increase in the number of unvaccinated women and girls.

Further perpetuated by the same assumption, there are younger girls who are vaccinated without prior conversation on their sexual activity history, which is very essential. Discrimination is also present when it comes to age as the younger girls who have had sexual intercourse are more likely to be judged and shunned upon, leading to less uptake of vaccination by younger girls as they fear being judged by the health administrators.

Socio -Economic Status:

Limited access to vaccination services poses a significant barrier to achieving widespread HPV vaccine coverage. Disparities in healthcare infrastructure, particularly in low-income and rural areas, have hindered individuals' ability to receive timely and affordable vaccinations. Improving access involves addressing logistical challenges, ensuring the availability of vaccines in diverse settings, and implementing outreach programs to reach underserved populations.

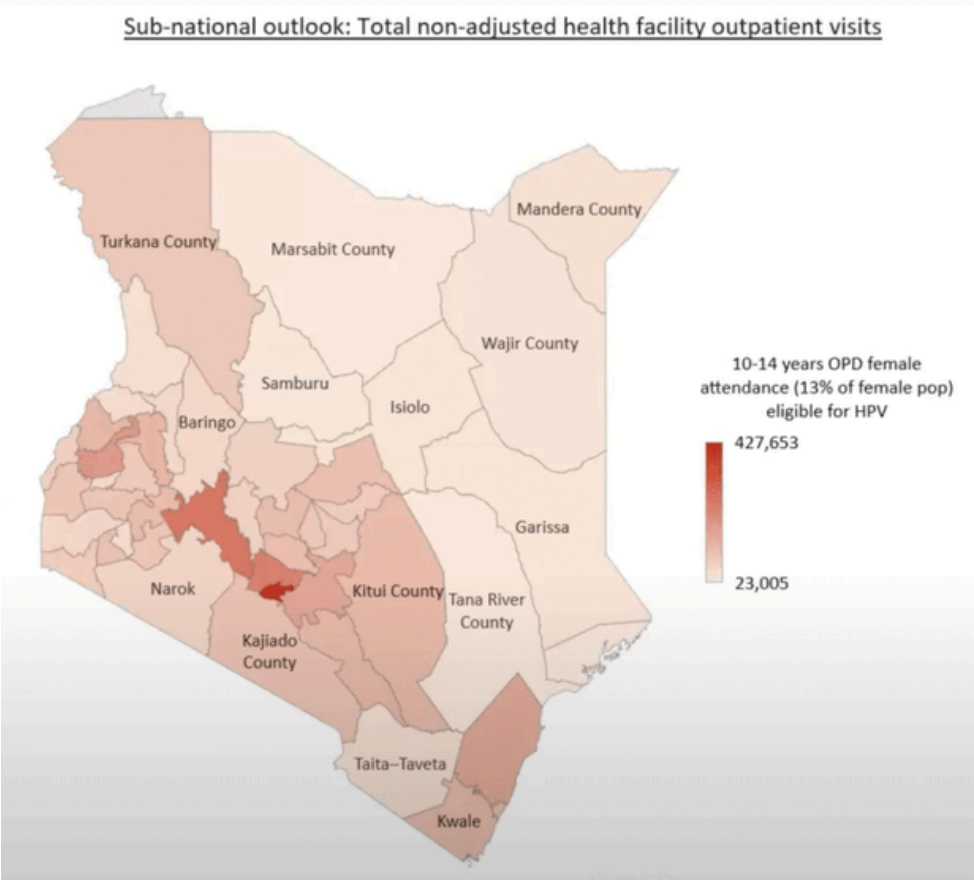
Efforts to expand access must consider the socio-economic factors that contribute to disparities. This includes promoting vaccination in schools, community centers, and healthcare facilities, and implementing mobile vaccination clinics to reach remote areas.

Gender:

Overall, according to studies done in Kenya, males have less knowledge of the HPV vaccine for decision-making than their female counterparts, similar to studies conducted in Malaysia and India. This is speculated to be a perception among men that HPV and cervical cancer are health matters related to women. The feminization of the HPV vaccine, which has led to female-focused interventions, has resulted in systemic neglect of the male sex in the HPV vaccine campaigns, which is a concern. In view of this, there's a need for media outlets to increasingly portray maternal and reproductive health as an issue that also involves male partners. Men should also be encouraged to actively participate in reproductive health issues since when vaccine advocacy is focused on males, they are typically in favor of protecting women and therefore enhance vaccine uptake.

There is also a significant lack of testing for HPV in men, and currently, there is no approved screening for HPV in men. However, raising awareness is crucial since HPV can cause anal cancer. Consequently, there needs to be increased efforts in global calls for sex-neutral HPV vaccination initiatives. A major concern is the general poor knowledge about HPV and its association with cervical cancer and the availability of the HPV vaccine among both male and female participants.

To enhance HPV vaccination uptake through a gender-inclusive approach, it is essential to address the systemic neglect of males in HPV vaccine campaigns. Educational programs and media campaigns should emphasize that HPV and related health issues are not exclusively female concerns but affect everyone. Men should be encouraged to participate actively in reproductive health discussions and decisions, promoting a supportive environment for vaccination. Efforts should also focus on implementing sex-neutral HPV vaccination initiatives, ensuring that both males and females receive accurate information and equal access to the vaccine. By fostering a comprehensive understanding of HPV's impact and promoting gender-neutral health interventions, we can improve vaccination rates and overall public health outcomes.



This map illustrates the sub-national outlook of total non-adjusted health facility outpatient visits in Kenya, focusing on 10-14-year-old females eligible for the HPV vaccine. The data, sourced from DHIS2, highlights significant regional disparities in outpatient attendance, with darker areas indicating higher visit numbers. The visualization aims to identify coverage gaps and optimize HPV vaccination efforts, especially in underserved areas. Utilizing this data-driven approach, Kenya seeks to improve HPV vaccine uptake and address cervical cancer prevention more effectively across the country.
For more details, visit [DHIS2 Kenya HPV Vaccination](https://dhis2.org/kenya-hpv-vaccination/).

Men as Carriers of the HPV Virus:

A new study published in The Lancet Global Health shows that almost 1 in 3 men over the age of 15 are infected with at least one genital human papillomavirus (HPV) type, and 1 in 5 are infected with one or more of what are known as high-risk or oncogenic HPV types.

How do men get HPV?

Men can get HPV by having vaginal, anal, or oral sex with someone who has the virus. It most commonly spreads during anal or vaginal sex. It also spreads through close skin-to-skin touching during sex.

THE UNDERSERVED/MARGINALIZED COMMUNITIES IN KENYA:

Under Article 260, the Constitution states that "a marginalized community" is a community that because of its relatively small population or for any other reason has been unable to fully participate in the integrated social and economic life of Kenya as a whole (b) A traditional community that out of a need or desire to preserve its unique culture and identity from assimilation has remained outside the integrated social and economic life of Kenya as a whole © An Indigenous community that has retained and maintained a traditional lifestyle and livelihood based on a hunter or gatherer economy or (d) Pastoral persons and communities, whether they are (i) Nomadic; or (ii) A settled community that because of its relative geographic isolation has experienced only marginal participation in the integrated social and economic life of Kenya as a whole.

This policy brief analyzes the findings of research done in three sample regions and communities in Kenya, communities that are outrightly considered underserved communities as per the description mentioned above:

- Kajiado County, which predominantly hosts the famous Maasai community, the most widely known as the pastoralists in the country.
- Korogocho, a slum slightly on the outskirts of Nairobi city.
- The Western part of Kenya, including Kitui County, Eastern Kenya, and the Nyanza region.

Kitui county

Eastern Kenya

Western Kenya

Kajiiado county

Korogocho slums, Nairobi city

Nyanza Region

KEY CHALLENGES THAT KENYAN WOMEN AND YOUNG GIRLS IN THE SAMPLE RURAL UNDERSERVED AREAS ARE FACING:

According to research titled "Access and Attitudes to HPV Vaccination amongst Hard-To-Reach Populations in Kenya," the following are some of the challenges affecting women and young girls in underserved areas in Kenya:

Inadequate information about the HPV vaccine has been seen as the most important potential barrier to the successful roll-out of a national program. This is a particular concern in Kajiado because of high illiteracy rates, reluctance by some to accept modern medicine, and suspicion that activities surrounding girls have to do with the frequently resented criminalization of FGM.

A major concern is the rumors about potential effects on fertility which would undermine vaccine uptake as it had done in the tetanus vaccination campaign. The provision of information about the vaccine and its benefits is felt to be critical to preventing this.

Community leaders of Kajiado County have raised concerns about whether vaccination timing would be compatible with household duties or taking livestock out to graze, particularly for pastoralist communities. Additionally, they have stated that it would be hard to vaccinate girls if they had to travel long distances to receive the vaccine and that girls who were pregnant or who married early would be out of school and would not have access to the vaccination.

Discrimination against boys was raised as an issue especially by males. Boys in Kajiado stated that they would need clear information about why only girls will receive the vaccine and that it would be useful if boys were also taught about cervical cancer and HPV (District Public Health Nurse, Kajiado).

Injection pain, fear of side effects, and the fact that the HPV vaccine would only be offered to girls were also mentioned as factors potentially affecting vaccine uptake.

The fact that the vaccine should ideally be given before girls have passed sexual debut has been seen as potentially discouraging young girls who have already had sex from getting the vaccine.

There have also been concerns about lack of parental guidance which might lead to difficulties in obtaining parental acceptance for the vaccine if this was required.

In Korogocho, which had government NGO-supported and private health facilities, Mashuru town had one government health center and two private clinics; none of the participants reported using these latter clinics. Although most adult participants stated that they had attended government clinics to vaccinate their children because the service is free, reported barriers to health facility attendance were numerous and included:

- Distance to the health center
- Complaints about the quality of care
- A preference for traditional medicine
- Religious beliefs
- In Kajiado, seasonal features such as high rivers in the rainy season prevent access.

In research done in four locations of the Nyanza region in Kenya, perceived barriers included potential concerns about vaccine safety/side effects (infertility) and intentions of vaccinators.

A study titled "Determinants of Acceptance and Subsequent Uptake of the HPV Vaccine in a Cohort in Eldoret Kenya" done in Eldoret, Kenya showed that up to 59.4% considered a lack of information as potentially preventing them from vaccinating their daughter. Concerns about side effects were expressed by 38.0% (interference with fertility was indicated by 23.7%) and almost one out of four was afraid that the vaccine would not be administered safely. In addition, over one-fifth of the participants doubted the efficacy of the vaccine

Some women refused the vaccine thinking that it would encourage their daughter to have unprotected sex (7.1%) or that she was too young (8.5%). Considering vaccination as time-consuming or perceiving three doses as inconvenient was hardly mentioned (1.1% and 1.8% respectively), but 11.0% of the women believed that their partner would not approve of the HPV vaccination.

WHO Advises That:

- Women should be screened for cervical cancer every 5–10 years starting at age 30.
- Women living with HIV should be screened every 3 years starting at age 25.
- The global strategy encourages a minimum of two-lifetime screens with a high-performance HPV test by age 35 and again by age 45 years.
- Precancers rarely cause symptoms, which is why regular cervical cancer screening is important even if you have been vaccinated against HPV.

POTENTIAL VENUES FOR VACCINATING GIRLS IN THESE COMMUNITIES:

Most stakeholders and other participants are supportive of HPV vaccination being conducted at schools because of:

- The ability to vaccinate a large number of girls quickly
- Trust in teachers' authority
- Lack of fear about attending a school.

Schools were sometimes also considered to be more accessible than health facilities. Health facility vaccine provision is considered useful to potentially vaccinate some out-of-school girls, especially in Korogocho. Other potential venues for vaccination included:

- Watering points
- Markets
- Chiefs' camps
- Churches.

Furthermore, Religious leaders suggested that conducting vaccinations at chiefs' camps might reach more girls.

Adolescent young girls and women in the remote areas of Kajiado County have stated that the vaccinations should be conducted within the community and that the vaccination venue should be accessible. Offering the vaccine through many centers was also felt to be an important strategy to reach as many girls as possible.

MOH (Ministry of Health) staff recognized that reaching these communities with health interventions is challenging. Service delivery has relied on a combination of static clinics along the routes that pastoralists frequently travel, outreach services, and mobile clinics (using e.g. motor vehicles, motorcycles, bicycles, and camels). Given that these systems are in place, HPV vaccination could potentially be integrated or delivered with these other services.

FINDINGS AND CASE STUDIES:

1. Crude incidence rates of HPV-related cancers:

Crude incidence rates of HPV-related cancer	Male	Female
Cervical Cancer	-	19.4
Anal Cancer	0.22	0.54
Vulva Cancer	-	0.58
Vaginal Cancer	-	0.24
Penile Cancer	0.18	-
Oropharyngeal cancer	0.18	0.07
Oral cavity cancer	1.46	1.36
Laryngeal cancer	1.26	0.27

Data from - ICO/IARC Information Centre on HPV and Cancer

This graph presents the crude incidence rates of HPV-related cancers categorized by gender. Here's the interpretation:

- Cervical cancer: The crude incidence rate among females is notably high at 19.4 cases per 100,000 population.
- Anal cancer: The incidence rates are relatively low with males experiencing a rate of 0.22 cases per 100,000 population and females slightly higher at 0.54 cases per 100,000 population.
- Vulva and vaginal cancer: Both cancers are more prevalent among females with incidence rates of 0.58 and 0.24 cases per 100,000 population respectively.
- Penile cancer: Incidence is reported only for males with a relatively low rate of 0.18 cases per 100,000 population.
- Oropharyngeal cancer: Both genders experience relatively low rates with males slightly higher at 0.18 cases per 100,000 population compared to females at 0.07 cases per 100,000 population.
- Oral cavity cancer: Incidence rates are relatively higher for both genders compared to other cancers with males at 1.46 cases per 100,000 population and females at 1.36 cases per 100,000 population.
- Laryngeal cancer: Males experience a significantly higher incidence rate compared to females with rates of 1.26 and 0.27 cases per 100,000 population respectively.

2. Burden of Cervical Cancer in Kenya

Burden of cervical cancer	Incidence	Mortality
Annual number of new cases	5236	3211
Crude rate	19.4	11.9
Age standardized rate	31.3	20.6
Cumulative risk (0-74) years	3.60	2.50
Ranking of cervical cancer (all years)	2nd	1st
Ranking of cervical cancer (15- 44 years)	2nd	2nd

Data from - ICO/IARC Information Centre on HPV and Cancer

Interpretation:

- Incidence: The annual number of new cases of cervical cancer in Kenya is reported as 5236, with a crude incidence rate of 19.4 cases per 100,000 population.

- Mortality: The annual number of deaths due to cervical cancer is reported as 3211, with a crude mortality rate of 11.9 deaths per 100,000 population.

- Age-standardized rate: Adjusting for age, the incidence rate increases to 31.3 cases per 100,000 population, and the mortality rate increases to 20.6 deaths per 100,000 population. Age-standardization allows for a more accurate comparison between populations with different age structures.

- Cumulative risk (0-74 years): The cumulative risk of developing cervical cancer by age 74 is 3.60%, indicating that approximately 3.60% of individuals in Kenya will develop cervical cancer at some point between birth and age 74. The cumulative risk of dying from cervical cancer by age 74 is 2.50%.

- Ranking of cervical cancer: Cervical cancer ranks as the 2nd leading cancer in terms of both incidence and mortality rates for all age groups in Kenya. Among individuals aged 15-44 years, cervical cancer maintains its 2nd ranking for both incidence and mortality rates.

LEGAL FRAMEWORKS AND POLICES:

Kenya has recognized the importance of addressing cervical cancer and HPV and is trying to implement a multi-faceted approach to ensure SRHR through various legal frameworks and policy initiatives reflecting its commitment to improving public health and gender equality. These policies reflect a commitment to leveraging legal and policy tools to combat this public health challenge, enhance healthcare access, and protect the rights and well-being of women and girls across the nation. But the country is still way behind.

The Kenya Health Policy (2014-2030):

The Kenya Health Policy aims to improve health and well-being, reduce health inequalities, and protect the population against the financial consequences of ill health. It specifically targets non-communicable diseases, including cervical cancer, and emphasizes the integration of SRHR services, thereby providing a comprehensive approach to women's health.

The National Guidelines for Prevention and Management of Cancer (2012):

The National Guidelines for Prevention and Management of Cervical, Breast and Prostate Cancer aim to standardize the prevention and management of cervical cancer across healthcare facilities. They emphasize early screening and HPV vaccination as critical components of cervical cancer prevention.

The National Cancer Control Strategy (2023-2027):

This strategy outlines a multisectoral approach to reduce the incidence and mortality rates of cancer. It prioritizes the enhancement of screening and diagnostic services and cancer prevention and ensures the availability of treatment and palliative care services across the country.

HPV Vaccination Program (2019):

The national HPV vaccination program aims to vaccinate girls against HPV, targeting those aged 10-14 years as a primary prevention measure against cervical cancer. The program is integrated into the national immunization schedule, highlighting the government's proactive stance on cervical cancer prevention.

Attempted Intervention in Kenya:

HPV Vaccine Pilot in Kenya:

To help expand vaccination coverage, many African countries, including Kenya, have tried integrating HPV vaccination into free childhood immunization and school-based HPV vaccination programs.

HPV vaccines have been in use in the private sector in Kenya since 2006. In 2013–2015, a pilot vaccination program was conducted by the Ministry of Health in Kitui county, eastern Kenya. Over the two-year period, 22,500 girls in class 4, who were aged between 9 and 12 years, received 2 doses of the HPV vaccine. The grades-based approach was found to be more suitable to capture a large cohort of eligible children in one class. This successful uptake of 96% was used as an indicator of the country's readiness to roll out the HPV vaccine and incorporate it into the routine immunization schedule beginning with 10-year-old girls, with a plan to increase the scope of coverage sequentially when more doses became available. The pilot vaccination program in Kitui county was school-based and this is likely the main reason for the high coverage reported.

Rwanda, another eastern African country, reported a similarly high uptake of 95% in 2011 when they introduced HPV vaccination for 10–14-year-old girls using a school-based program.

High acceptability was correlated with high levels of awareness regarding the availability of the vaccine. It is therefore imperative that teachers be supported to deliver accurate information regarding the HPV vaccine to bolster confidence in recipients and their caregivers.

Schools are considered better for vaccination programs targeting school-age children and adolescents. There is increased acceptability among parents and caregivers as teachers are seen as trusted custodians of children and schools as safe havens for the welfare of children. Teachers' knowledge and attitude about vaccination, therefore, play a major role in ensuring the success of school-based vaccination programs.

POLICY RECOMMENDATIONS

1 Integrate Cervical Cancer Screening with Existing Vaccination Programs:

Leverage the existing infrastructure of childhood immunization programs to include cervical cancer screening. This approach can broaden the reach and ensure more comprehensive preventive healthcare services, increasing the population's access to early detection and treatment.

2 Implement School-Based Cervical Cancer Screening Programs:

Utilize the successful model of school-based HPV vaccination programs to implement cervical cancer screening in schools. This strategy leverages the trusted environment of schools and the influential role of teachers to enhance the accessibility and acceptability of screening services.

3 Enhance Awareness Through Teacher and Caregiver Education:

Conduct targeted education programs for teachers and caregivers about the importance and availability of cervical cancer screening. This will increase awareness, acceptance, and uptake of screening services, driven by informed and supportive community leaders.

4 Provide Comprehensive Training for Teachers on Cervical Cancer Screening:

Develop and deliver accurate and detailed training programs for teachers on cervical cancer screening. Empower them to effectively communicate the importance of these screenings to students and their caregivers, thus enhancing confidence and participation in screening initiatives.

POLICY RECOMMENDATIONS

5 Utilize Schools as Community Hubs for Health Outreach:

Designate schools as central hubs for community engagement and health outreach activities. Provide information and resources about cervical cancer screening, making it accessible to students, families, and the broader community in a trusted and familiar setting.

6 Expand HPV Vaccination Coverage to Include Boys:

Prioritize policy reforms to expand HPV vaccination coverage beyond adolescent girls to include boys. This inclusive approach addresses the role of men as carriers of the virus, contributing to broader population immunity and reducing overall HPV transmission.

7 Improve Vaccination Delivery Through Enhanced Outreach and Education:

Focus on enhancing the delivery of HPV vaccination with a combination of facility-based and community outreach strategies. Strengthen social mobilization efforts, implement community education programs, and establish active invitation systems to increase vaccine uptake among eligible individuals.

8 Implement Active Invitation for Cervical Cancer Screening:

Reform policies to ensure systematic active invitations for cervical cancer screening, aligned with national recommendations. Utilize healthcare provider outreach, community awareness campaigns, and integration with existing healthcare services to invite eligible individuals for screening.

CONCLUSION:

In conclusion, addressing the challenges surrounding HPV vaccination and cervical cancer screening uptake among women and young girls in underserved areas of Kenya requires multifaceted strategies and policy reforms. The identified barriers, including inadequate information, fears about side effects, and logistical challenges necessitate tailored interventions at both community and policy levels. Integrating cervical cancer screening with existing vaccination programs, implementing school-based screening initiatives, and enhancing awareness through teacher training are crucial steps toward improving uptake. Moreover, collaboration with local health authorities and community organizations is essential for the development and implementation of comprehensive educational programs. Policy reforms should prioritize expanding HPV vaccination coverage, improving vaccine delivery mechanisms, and ensuring active invitation to screening services. Continuous monitoring and evaluation, along with feedback mechanisms, are imperative for assessing the effectiveness of interventions and guiding future strategies. By addressing these challenges holistically and advocating for policy reforms, we can make significant strides towards reducing the burden of cervical cancer in rural areas of Kenya and ensuring equitable access to life-saving interventions.

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