Ethiopia National Immunization Technical Advisory Group Ministry of Health, Addis Ababa, Ethiopia

Recommendation on single-dose HPV vaccination

Meeting date

09 March 2023

Issue

Single-dose HPV vaccination: Technical guidance and recommendation

Rationale

Globally, cervical cancer is the fourth leading cause of cancer and cancer deaths in women. In Ethiopia, it is the second most prevalent cancer among women adults (13.4%), next to breast cancer (30.2%). Prevention of cervical cancer is best achieved through the immunization of girls before they become sexually active.

Ethiopia introduced HPV vaccination in December 2018, targeting 14-year-old girls. Since the introduction, the ministry follows a two dose schedule with a minimum interval between the first and second dose. The HPV vaccination service delivery strategies are in-school and out-of-school. However, implementation challenges are observed with the two-dose schedule including increment of dropout and adherence to optimal interval between doses.

Current evidence suggests that a single dose HPV vaccination has comparable efficacy and duration of protection as a 2-dose schedule and may offer program advantages, be more efficient and affordable, and contribute to improved coverage. Data from immunogenicity trials, post-hoc analyses of efficacy trials, and post-licensure observational studies among females have demonstrated that a single dose of HPV vaccine is sufficient to elicit an immune response that provides similar protection as a multi-dose regimen against initial and persistent HPV infection. Although findings are subject to information bias and confounding, most studies found very high rates of sero-positivity for vaccine-type HPV genotypes, regardless of the number of doses received.

From a public health perspective and given to the substantial benefits and program advantages of a single dose schedule in Ethiopia, the NITAG (National Immunization Technical Advisory Group) was requested to advise the ministry and recommend on this issue.

Recommendation

After a thorough deliberation, the E-NITAG recommended postponed the decision of introducing a single-dose HPV vaccine until sufficient evidence is gathered. The E-NITAG agreed to re-examine its recommendation after additional review of evidence on the single-dose schedule of the HPV vaccine in its next meeting.