Human papillomavirus genotype prevalence among African women with normal cervical cytologies and lesions: a systematic review and meta-analysis

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Citation

Review question(s)
What HPV genotypes are predominant in African women with normal and different cervical lesions?
What HPV genotypes are predominant in HIV positive African women with normal and different cervical lesions?

Searches
PubMed/MEDLINE (NCBI), Embase (Elsevier), Web of Science (Thomson), BIOSIS Preview (Thomson), Dissertations and Theses (ProQuest), Cochrane Register of Controlled Trials (Wiley), African Index Medicus (WHO), and POPLINE (K4Health). We also attempted to identify unpublished studies by examining ClinicalTrials.gov (NIH), International Clinical Trial Registry Platform (WHO), European Union Clinical Trials Register (EMA), and System for Information on Grey Literature in Europe (OpenGrey).

Types of study to be included
Observational studies or control arms of randomized controlled trials with individual level data will be assessed by a checklist of essential items as outlined in STROBE by three reviewers.

Condition or domain being studied
Human papillomavirus, the causal organism of cervical cancer in adult women.

Participants/ population
All African adult women screened for different HPV genotypes.

Intervention(s), exposure(s)
A comprehensive strategy was used to identify studies where the physical document and relevant data were accessible, studies including women living in African countries. The study should have included at least 10 women from sub-Saharan Africa, cervical cytology/histology was confirmed by fixed/fresh biopsy or exfoliated cervical cells, the study included HPV genotype-specific prevalence on at least types 16, 18, and one other genotype, and genotype prevalence was stratified by cervical histology/grade.

Comparator(s)/ control
Comparisons will be made within the groups e.g. African regions as per WHO classification, country, type of lesions, tissue biopsies, methods of genotyping.

Context
Studies must have included adult women living in the African continent.

Outcome(s)
Primary outcomes
Determine the prevalence of HPV genotypes in African women with normal and cervical cytologies. This will help inform whether the existing two prophylactic vaccines currently used in developed countries will have the same impact in the continent.
Open.

Secondary outcomes
Will help inform whether the existing two prophylactic vaccines currently used in developed countries will have the same impact in the continent.
Open.
Data extraction, (selection and coding)
Three separate reviewers (R.K.O, A.J.S. and J.G.O.) read the titles and abstracts to determine each study’s eligibility using the following pre-specified criteria for inclusion: the physical document and relevant data were accessible. Discrepancies were resolved by consensus.

Risk of bias (quality) assessment
Funnel plots will be used to assess the risk of bias of cross-sectional studies.

Strategy for data synthesis
Data will be grouped based on country where the study was conducted, geographical region as outlined by WHO, type of biopsies analyzed, methods of screening HPV genotypes.

Analysis of subgroups or subsets
High risk vs Low risk HPV genotypes

Dissemination plans
Publication in peer-reviewed journal

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Anticipated or actual start date
01 October 2013

Anticipated completion date
30 January 2014

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None

Conflicts of interest
None known

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English

Country
United States of America

Subject index terms status
Subject indexing assigned by CRD

Subject index terms
Africa; Alphapapillomavirus; Genotype; Humans; Papillomavirus Infections; Prevalence;

Stage of review
Ongoing

Date of registration in PROSPERO
29 November 2013

Date of publication of this revision
29 November 2013

Stage of review at time of this submission

Started
Completed
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<th>Activity</th>
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<td>Preliminary searches</td>
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<td>No</td>
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<td>Piloting of the study selection process</td>
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<td>Data analysis</td>
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