

## SUPPLEMENTARY FILES

### Supplementary File 1: Database Search Results

Date of search	Electronic Database	Keywords/MeSH terms	Number of retrieved studies
14-06-2021	Web of Science	Human papillomavirus*" OR alphapapillomavirus OR hpv OR papillomavirus* OR "Cervical cancer*" OR "Uterine Cervical Neoplasm*" OR "cancer of the cervix" OR "uterine cervix tumor" AND "self-sampling" OR "self sampl*" OR "self collect*" OR "self screen*" OR screening AND Africa OR "sub-Saharan Africa" OR "Africa South of the Sahara" AND female OR woman OR women NOT algeria OR egypt OR libya OR morocco OR tunisia	533
06-07-2021	PubMed	(((("Uterine Cervical Neoplasms"[Mesh] OR "Uterine Cervical Neoplasm*"[tw] OR "Cervical Cancer"[tw] AND (female[Filter])) OR ("Alphapapillomavirus"[Mesh] OR Alphapapillomavirus[tw] OR "Human papillomavirus*"[tw] OR HPV[tw] OR papillomavirus*[tw] AND (female[Filter]))) AND ("Self Administration"[Mesh] OR self-sampl*[tw] OR "self collect*"[tw] OR "self Administ*"[tw] OR "self screen*"[tw] AND (female[Filter]))) AND ("Africa South of the Sahara"[Mesh] OR "Africa Sub-Saharan"[tw] OR "Subsaharan Africa"[tw] OR "Sub-Sahara africa"[tw] AND (female[Filter])) Filters: in the last 10 years, Female	122
06-07-2021	Scopus	(TITLE-ABS-KEY(Africa* OR "sub-Saharan Africa" OR SS OR "Africa South of the Sahara" OR "Subsahara* Africa") AND TITLE-ABS-KEY("Human papillomavirus*" OR alphapapillomavirus OR hpv OR papillomavirus* OR "Cervical cancer*" OR "Uterine Cervical Neoplasm*" OR "cancer of the cervix" OR "uterine cervix tumor") AND TITLE-ABS-KEY("self-sampling" OR "self sampl*" OR "self collect*" OR "self screen*" OR screening) AND NOT TITLE-ABS-KEY(Algeria OR Egypt OR Libya OR Morocco OR Tunisia)) AND ( LIMIT-TO ( PUBYEAR,2021) OR LIMIT-TO ( PUBYEAR,2020) OR LIMIT-TO ( PUBYEAR,2019) OR LIMIT-TO ( PUBYEAR,2018) OR LIMIT-TO ( PUBYEAR,2017) OR LIMIT-TO ( PUBYEAR,2016) OR LIMIT-TO ( PUBYEAR,2015) OR LIMIT-TO (	224

		PUBYEAR,2014) OR LIMIT-TO ( PUBYEAR,2013) OR LIMIT-TO ( PUBYEAR,2012) OR LIMIT-TO ( PUBYEAR,2011) ) AND ( LIMIT-TO ( SRCTYPE,"j" ) )	
12-07- 2021	Ovid Medline	<p>Ovid MEDLINE(R) &lt;1996 to August Week 3 2021&gt;</p> <p>1 exp Uterine Cervical Neoplasms/ 48683</p> <p>2 Uterine Cervical Neoplasms.af. 48719</p> <p>3 Cervical Cancer.af. 37377</p> <p>4 exp Alphapapillomavirus/ 8338</p> <p>5 Alphapapillomavirus.af.2733</p> <p>6 exp Papillomavirus Infections/ 31367</p> <p>7 Papillomavirus Infection*.af. 28075</p> <p>8 Human papillomavirus*.af. 33426</p> <p>9 HPV.af. 35627</p> <p>10 papillomavirus*.af. 42280</p> <p>11 Cervi* Cancer.af. 38169</p> <p>12 1 or 2 or 3 or 4 or 5 or 6 or 7 or 8 or 9 or 10 or 11 86646</p> <p>13 exp Self Administration/ 8841</p> <p>14 Self Administration.af. 11764</p> <p>15 self-sampl*.af. 682</p> <p>16 self collect*.af. 1155</p> <p>17 self administrat*.af. 12471</p> <p>18 self screen*.af. 205</p> <p>19 self-testing.af. 1129</p> <p>20 self-test*.af. 1491</p> <p>21 13 or 14 or 15 or 16 or 17 or 18 or 19 or 20 15594</p> <p>22 exp "Africa South of the Sahara"/ 168852</p> <p>23 sub-sahara* Africa.af. 19913</p> <p>24 22 or 23 173452</p> <p>25 12 and 21 and 24 101</p> <p>26 limit 25 to yr="2011 -Current" 95</p> <p>27 limit 26 to (female and humans) 95</p>	95

14-07-2021	Cochrane	<p>ID Search Hits</p> <p>#1 MeSH descriptor: [Alphapapillomavirus] explode all trees 247</p> <p>#2 MeSH descriptor: [Uterine Cervical Neoplasms] explode all trees 2171</p> <p>#3 ("Uterine Cervical Neoplasm*" OR "Cervical Cancer" OR Alphapapillomavirus OR "Human papillomavirus*" OR HPV OR papillomavirus*) (Word variations have been searched) 7022</p> <p>#4 #1 OR #2 OR #3 6989</p> <p>#5 MeSH descriptor: [Self Administration] explode all trees 778</p> <p>#6 (self-sampl* OR "self collect*" OR "self Administ*" OR "self screen*") (Word variations have been searched) 6495</p> <p>#7 #5 OR #6 1040</p> <p>#8 MeSH descriptor: [Africa South of the Sahara] explode all trees 6811</p> <p>#9 ("sub-Saharan Africa") (Word variations have been searched) 2037</p> <p>#10 #8 OR #9 8279</p> <p>#11 #4 AND #7 AND #10 8</p> <p>Date range 2011-2021 Results 7</p>	7
31-08-21	Grey Literature identified through other sources	"Human papillomavirus" OR "cervical cancer" AND "self-sampling" AND "sub-Saharan Africa"	37
	Total articles		1018

### Extended search strategy from July 2021-March 2024

Date of search	Electronic Database	Keywords/MeSH terms	Number of retrieved studies
14-03-2023	Web of Science	Human papillomavirus*" OR alphapapillomavirus OR hpv OR papillomavirus* OR "Cervical cancer*" OR "Uterine Cervical Neoplasm*" OR "cancer of the cervix" OR "uterine cervix tumor" AND "self-sampling" OR "self sampl*" OR "self collect*" OR "self screen*" OR screening AND Africa OR "sub-Saharan Africa" OR "Africa South of the Sahara" AND female OR woman OR women NOT algeria OR egypt OR libya OR morocco OR tunisia	213
14-03-2023	PubMed	(((("Uterine Cervical Neoplasms"[Mesh] OR "Uterine Cervical Neoplasm*"[tw] OR "Cervical Cancer"[tw] AND (female[Filter])) OR ("Alphapapillomavirus"[Mesh] OR Alphapapillomavirus[tw] OR "Human papillomavirus*"[tw] OR HPV[tw] OR papillomavirus*[tw] AND (female[Filter]))) AND ("Self Administration"[Mesh] OR self-sampl*[tw] OR "self collect*"[tw] OR "self Administ*"[tw] OR "self screen*"[tw] AND (female[Filter]))) AND ("Africa South of the Sahara"[Mesh] OR "Africa Sub-Saharan"[tw] OR "Subsaharan Africa"[tw] OR "Sub-Sahara africa"[tw] AND (female[Filter]))	44
14-03-2023	Scopus	(TITLE-ABS-KEY(Africa* OR "sub-Saharan Africa" OR SS OR "Africa South of the Sahara" OR "Subsahara* Africa") AND TITLE-ABS-KEY("Human papillomavirus*" OR alphapapillomavirus OR hpv OR papillomavirus* OR "Cervical cancer*" OR "Uterine Cervical Neoplasm*" OR "cancer of the cervix" OR "uterine cervix tumor") AND TITLE-ABS-KEY("self-sampling" OR "self sampl*" OR "self collect*" OR "self screen*" OR screening) AND NOT TITLE-ABS-KEY(Algeria OR Egypt OR Libya OR Morocco OR Tunisia)) AND ( LIMIT-TO ( PUBYEAR,2021) OR LIMIT-TO ( PUBYEAR,2020) OR LIMIT-TO ( PUBYEAR,2019) OR LIMIT-TO ( PUBYEAR,2018) OR LIMIT-TO ( PUBYEAR,2017) OR LIMIT-TO ( PUBYEAR,2016) OR LIMIT-TO ( PUBYEAR,2015) OR LIMIT-TO ( PUBYEAR,2014) OR LIMIT-TO ( PUBYEAR,2013) OR LIMIT-TO ( PUBYEAR,2012) OR LIMIT-TO ( PUBYEAR,2011) ) AND ( LIMIT-TO ( SRCTYPE,"j" ) )	145

14-03-2023	Ovid Medline	<p>Ovid MEDLINE(R) &lt;1996 to August Week 3 2021&gt;</p> <p>1 exp Uterine Cervical Neoplasms/ 48683</p> <p>2 Uterine Cervical Neoplasms.af. 48719</p> <p>3 Cervical Cancer.af. 37377</p> <p>4 exp Alphapapillomavirus/ 8338</p> <p>5 Alphapapillomavirus.af. 2733</p> <p>6 exp Papillomavirus Infections/ 31367</p> <p>7 Papillomavirus Infection*.af. 28075</p> <p>8 Human papillomavirus*.af. 33426</p> <p>9 HPV.af. 35627</p> <p>10 papillomavirus*.af. 42280</p> <p>11 Cervi* Cancer.af. 38169</p> <p>12 1 or 2 or 3 or 4 or 5 or 6 or 7 or 8 or 9 or 10 or 11 86646</p> <p>13 exp Self Administration/ 8841</p> <p>14 Self Administration.af. 11764</p> <p>15 self-sampl*.af. 682</p> <p>16 self collect*.af. 1155</p> <p>17 self administrat*.af. 12471</p> <p>18 self screen*.af. 205</p> <p>19 self-testing.af. 1129</p> <p>20 self-test*.af. 1491</p> <p>21 13 or 14 or 15 or 16 or 17 or 18 or 19 or 20 15594</p> <p>22 exp "Africa South of the Sahara"/ 168852</p> <p>23 sub-sahara* Africa.af. 19913</p> <p>24 22 or 23 173452</p> <p>25 12 and 21 and 24 101</p> <p>26 limit 25 to yr="2011 -Current" 95</p> <p>27 limit 26 to (female and humans) 95</p>	47
14-03-2023	Cochrane	<p>ID Search Hits</p> <p>#1 MeSH descriptor: [Alphapapillomavirus] explode all trees 247</p> <p>#2 MeSH descriptor: [Uterine Cervical Neoplasms] explode all trees 2171</p>	2

		#3 ("Uterine Cervical Neoplasm*" OR "Cervical Cancer" OR Alphasapillomavirus OR "Human papillomavirus*" OR HPV OR papillomavirus*) (Word variations have been searched) 7022 #4 #1 OR #2 OR #3 6989 #5 MeSH descriptor: [Self Administration] explode all trees 778 #6 (self-sampl* OR "self collect*" OR "self Administ*" OR "self screen*") (Word variations have been searched) 6495 #7 #5 OR #6 1040 #8 MeSH descriptor: [Africa South of the Sahara] explode all trees 6811 #9 ("sub-Saharan Africa") (Word variations have been searched) 2037 #10 #8 OR #9 8279 #11 #4 AND #7 AND #10	
	Total articles		451

**Supplementary File 2: Critical Appraisal of Included studies**

<b>Author &amp; Year</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>	<b>Methodological limitation</b>
Saidu et al, 2019	Y	Y	Y	Y	Y	C	Y	Y	Y	Y	NO
Bakiewicz et al, 2020	Y	Y	C	Y	Y	N	Y	Y	Y	Y	Minor
Lee et al, 2021	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Minor
Oketch et al, 2019	Y	Y	Y	Y	Y	C	Y	Y	Y	Y	NO
Behnke et al, 2020	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Minor
Brandt et al, 2019	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NO
Bansil et al, 2014	Y	Y	Y	Y	Y	C	Y	Y	Y	Y	NO
Roux et al, 2021	Y	Y	Y	Y	Y	C	Y	C	Y	Y	Minor
Rawat et al, 2021	Y	Y	Y	Y	Y	C	Y	Y	Y	Y	NO
Mensah et al, 2020	Y	Y	Y	Y	Y	C	Y	Y	Y	Y	NO
Megersa et al, 2020	Y	Y	Y	Y	Y	C	Y	Y	Y	Y	NO
Podolak et al, 2017	Y	Y	Y	C	C	Y	C	Y	Y	Y	Minor
Teng et al, 2014	Y	Y	Y	Y	Y	C	Y	Y	Y	Y	NO

**KEY**

Y=YES, N=NO, C= can't tell, Q=Question

*Q1. Was there a clear statement of the aims of the research?*

*Q2. Is a qualitative methodology appropriate?*

*Q3. Was the research design appropriate to address the aims of the research?*

*Q4. Was the recruitment strategy appropriate to the aims of the research?*

*Q5. Was the data collected in a way that addressed the research issue?*

*Q6. Has the relationship between researcher and participants been adequately considered?*

*Q7. Have ethical issues been taken into consideration?*

*Q8. Was the data analysis sufficiently rigorous?*

*Q9. Is there a clear statement of findings?*

*Q10. How valuable is the research?*