

Study	Country	Publication year	Subgroup	N Population	Response rate (%)	Knowledge of HPV infection (%)	Awareness of HPV- cervical cancer link (%)	Awareness of anti-HPV vaccination (%)	Acceptability of anti-HPV (%) (%)	Current cervical cancer awareness, knowledge and screening intervention
Females										
Moosa (19)	Bahrain	2014	Women	571	99.0	31.3	NA	NA	91.3	HPV vaccines are already licensed HPV vaccine not been included in the national immunization programme Baseline data on HPV epidemiology and distribution of HPV types in Bahrain are lacking
Shaltout (20)	Egypt	2014	Women older than 18 years	490	90.4	33.2	NA	NA	99.0	HPV vaccines are already licensed HPV vaccine not been included in the national immunization programme Baseline epidemiological data are lacking No nationwide policy for HPV prevention is implemented
Al-nuaimi (16)	Emirates	2011	Secondary school girls (grade 11 and 12)	334	99.4	65.0	NA	NA	83.0	HPV vaccine is included in the national immunization programme for girls entering grade 11 Need for an educational programme for both parents and girls on HPV vaccine
Dany (13)	Lebanon	2015	College female students	215	42.0	NA	81.9	63.5	NA	HPV vaccines are already licensed HPV vaccine not been included in the national immunization programme Need to learn about the behavioural perceptions towards HPV vaccination as a first step to develop a health policy Need to launch educational programmes that offer guidance to adolescents to increase their awareness of the risks associated with HPV infection
Al-Obaid (25)	Saudi Arabia	2014	Women	417	76.0	NA	32.2	NA	89.9	HPV vaccine not been included in the national immunization programme The epidemiology of HPV amongst women in Saudi Arabia is not fully understood
Hussain (26)	Saudi Arabia	2016	Young women	325	NA	34.5	27.4	32.3	64.3	HPV vaccines are already licensed HPV vaccine not been included in the national immunization programme
Almobarak (31)	Sudan	2016	Women between 14 and 58 years old	500	NA	NA	46.4	39.2	NA	HPV vaccines are already licensed HPV vaccine not been included in the national immunization programme Cervical cancer screening programme coverage is still incomplete due to lack of infrastructures and trained healthcare professionals, poor health care access and lack of awareness
Males										
Ortashi (15)	Emirates	2013	Male university students	356	71.0	31.0	25.0	NA	46.0	HPV vaccine is included in the national immunization programme for girls entering grade 11 An awareness and training campaign among health care providers was organized by the Health Authority of Abu Dhabi, and an extensive media campaign was also run; people were reached through the media and at work places
Healthcare clinicians and students										
Ortashi (12)	Emirates	2012	School nurses	125	100.0	97.0	80.0	97.0	74.0	HPV vaccine is included in the national immunization programme for girls entering grade 11 An awareness and training campaign among health care providers was organized by the Health Authority of Abu Dhabi and an extensive media campaign was also run. People were reached through the media and at work places
Obeidat (21)	Jordan	2012	Female health care workers	187 female health care workers: (53 physicians, 92 nurses/ midwives, 42 others)	NA	NA	NA	26.0	NA	HPV vaccines are already licensed HPV vaccine not been included in the national immunization programme The uptake of cervical cancer screening is poor and is not nationally organized Need to develop educational programmes that will target these women
Berraho (22)	Morocco	2013	Primary care physicians	87	77.7	NA	95.1	76.	NA	HPV vaccines are already licensed The initiation of a National Cancer Control Plan, have started in 2010 to implement organized screening programmes using for cervical cancer detection Adding HPV vaccine to the national immunization programme is not yet confirmed
Al-Darwish (27)	Saudi Arabia	2014	Medical school students	188	96.8	NA	Females: 53.2 Males: 45	Females: 27.2 Males: 38.7	NA	HPV vaccines are already licensed HPV vaccine not been included in the national immunization programme
Sait (29)	Saudi Arabia	2011	Physicians	200	80.0	NA	NA	48.5	50.0	HPV vaccines are already licensed HPV vaccine not been included in the national immunization programme Need for improvement in medical teaching for medical students and continuing education of the doctors regarding cervical cancer prevention and screening
Shaikh (28)	Saudi Arabia	2014	Female university students (healthcare)	1258	89.9	NA	59.6	NA	NA	HPV vaccines are already licensed HPV vaccine not been included in the national immunization programme Most female cancer awareness campaigns are mainly focused on breast cancer
Parents										
Moualif (14)	Morocco	2013	Parents	852	NA	Mothers: 4.2 Fathers: 6.6	NA	Mothers: 14.2 fathers: 14.8	Mothers: 32 fathers: 45	HPV vaccines are already licensed The initiation of a National Cancer Control Plan started in 2010 to implement organized screening programmes using for cervical cancer detection Adding HPV vaccine to the national immunization programme still a future perspective
Selmouni (23)	Morocco	2015	Parents of girls aged 12-15 years	653 mothers; 659 fathers	98.0	Mothers: 9 Fathers: 6.6	NA	NA	Mothers: 76.8 Fathers: 68.9	HPV vaccines are already licensed The initiation of a National Cancer Control Plan started in 2010 to implement organized screening programmes for cervical cancer detection Adding HPV vaccine to the national immunization programme still a future perspective
Alsaad (30)	Syria	2012	Mothers with daughters in sixth grade classes	345	86.0	18.0	8.4	34.2	NA	HPV vaccines are already licensed HPV vaccine not been included in the national immunization programme Need for health education and promotion campaign on the connection between HPV infection and cervical cancer
Adolescents and young adults										
Zouheir (24)	Morocco	2015	Adolescents and young adults	1044 subjects: 688 (12-16 years) 356 (18-30 years)	82.0	20.0	NA	NA	Females: 20.4 Males: 62.0	HPV vaccines are already licensed The initiation of a national cancer control plan started in 2010 to implement organized screening programmes for cervical cancer detection Adding HPV vaccine to the national immunization programme still a future possibility

NA = not available.