

Supplementary file 3- Assessment of HPV knowledge by study

Study	Heard/ Aware of HPV	MOT/ Protection	Link with cervical cancer & genital warts	Heard/ Aware of HPV vaccine	Level of protection offered by HPV vaccine	Need for cervical screening in the future
Henderson et al 2011	NA	NA	NA	NA	Understood that the vaccine offered high but not complete protection against CC	Uncertainty regarding the need for cervical smears in the future
Hilton et al 2011	NA	<ul style="list-style-type: none"> • Little known about MOT but those that were aware of ST nature, perceived their own risk of contracting HPV as low, it was thought to be associated with “girls that sleep around” • Condoms and avoidance of sexual intercourse stated as protective factors 	About half were aware of the link to CC	NA	<ul style="list-style-type: none"> • Referred to as the “cancer jab”, unable to provide details on the level of protection • Some believed that the vaccine protects against all high risk HPV types, others knew it protects only against some 	Only half of vaccinated girls were aware of the need for cervical smears in the future
Racktoo et al 2009	Only a few had heard of HPV	<ul style="list-style-type: none"> • Misconceptions about MOT, spread in the same way as an air-borne virus- flu virus • Few identified MOT as ST 	Confusion about the link with CC, generally unaware	NA	Aware that the vaccine would not protect against all types of CC	Not well informed about the cervical screening programme
Williams et al 2011	Poor knowledge promoted as “cancer vaccine”	Misconceptions about the level of protection offered by condoms	Poor understanding of link with CC	NA	Aware it protects against CC	NA
Bowyer et al 2013	80% girls only	<ul style="list-style-type: none"> • 70% ST^a • 55.4% Genital skin contact^a • 57.6% condoms protective^a 	<ul style="list-style-type: none"> • 53.1% link with CC^a • 23.2% link with GW^a 	NA	<ul style="list-style-type: none"> • 46.9% know that it protects against most CC^a • 35.7% knew that you can still get CC even after vaccination 	52.7% ^a

Di Giuseppe et al 2008	29.8% girls only	<ul style="list-style-type: none"> • 75.2% penetrative ST • 29.1%, non-penetrative ST • 34.8% condoms 	NA	NA	42.1% knew it reduces risk of CC	NA
Forster et al 2012	52% boys only	NA	NA	NA	NA	NA
Gottvall et al 2009	<ul style="list-style-type: none"> • 16.4% girls, • 9.6% boys <p>(p=0.017)</p>	<p>ST</p> <ul style="list-style-type: none"> • 12.1% girls • 5.4% boys 	<p>CC</p> <ul style="list-style-type: none"> • 11.8% girls • 3.1% boys <p>(p= <0.001)</p> <p>GW</p> <ul style="list-style-type: none"> • 2.9 girls • 3.8% boys 	<ul style="list-style-type: none"> • 9.2% girls • 1.1% boys <p>(p= <0.001)</p>	NA	NA
Hoglund et al 2009	5% ^b	2.9% ST ^b	<p>1.2% link to CC^b</p> <p>1.4% link to GW^b</p>	1.1% ^b	NA	NA
Lenselink et al 2008	<ul style="list-style-type: none"> • 21% girls, • 12.1% boys <p>(p=<0.01)</p>	<ul style="list-style-type: none"> • 84% ST^{a,b} • 16% condom not fully protective^{a,b} 	81% link to CC ^{a,b}	NA	NA	NA
Marek et al 2011	<p>12-14yrs</p> <ul style="list-style-type: none"> • 31.2% girls, • 19.3% boys <p>(p=0.002)</p> <p>15-19yrs</p> <ul style="list-style-type: none"> • 49.1% girls, • 28.8% boys <p>(p=0.000)</p>	<p>ST (vaginal)</p> <p>12-14 yrs</p> <ul style="list-style-type: none"> • 40.1% girls • 43.2% boys <p>15-19yrs</p> <ul style="list-style-type: none"> • 50.7% girls • 47.1% boys <p>ST (any form)</p> <p>12-14yrs</p> <ul style="list-style-type: none"> • 53.7% girls • 48.3% boys <p>15-19yrs</p> <ul style="list-style-type: none"> • 44.5% girls • 47.7% boys <p>Skin to skin</p> <p>12-14 yrs</p> <ul style="list-style-type: none"> • 6.6% girls, 5.5% boys <p>15-19yrs</p> <ul style="list-style-type: none"> • 3.3% girls, 5.7% boys <p>Condoms fully protective</p> <p>12-14yrs</p> <ul style="list-style-type: none"> • 18% girls, 30.2% boys <p>(p=0.002)</p> <p>15-19yrs</p> <ul style="list-style-type: none"> • 24% girls, 	<p>CC</p> <p>12-14^a</p> <ul style="list-style-type: none"> • 43% girls • 45.5% boys <p>15-19^a</p> <ul style="list-style-type: none"> • 54% girls • 48.7 boys <p>(p=0.037)</p> <p>GW</p> <p>12-14^a</p> <ul style="list-style-type: none"> • 16.5% girls • 27.3% boys <p>15-19^a</p> <ul style="list-style-type: none"> • 28.4% girls • 33.8% boys 	<p>12-14 years</p> <ul style="list-style-type: none"> • 29.3% of girls • 13.7% of boys <p>(p=0.000)</p> <p>15-19yrs</p> <ul style="list-style-type: none"> • 46.4% girls • 24.1% boys <p>(p=0.000)</p>	NA	NA

McCusker et al 2013	NA	ST <ul style="list-style-type: none"> • 96% & 92% girls (2008/2009) • 100% & 86% boys (2008/2009) 	CC <ul style="list-style-type: none"> • 44% & 39% girls (2008/2009) , • 46% & 35% boys (2008/2009) 	NA	HPV vaccine protects against 0-5 types of HPV <ul style="list-style-type: none"> • 50% & 73% girls (2008/2009) • 52% 51% boys (2008/2009) 	94% of fully vaccinated girls would attend for cervical smears in the future (2009)
Medeiros et al 2010	<ul style="list-style-type: none"> • 64.1% girls • 40.2% boys 	Health sciences students (boys and girls) more likely to say vaginal ST and skin contact than non-health science students. (figures not provided)	CC <ul style="list-style-type: none"> • 70.7-91.2% girls^a • 63.6-89.3% boys^a 	NA	NA	NA

Pelucchi et al 2010	<ul style="list-style-type: none"> • 72% girls, • 51% boys <p>(p<0.001)</p>	ST <ul style="list-style-type: none"> • 90.5% girls, • 92.5% boys 	90.5% of girls, 89.7% boys perceive HPV as “dangerous”	NA	To prevent CC <ul style="list-style-type: none"> • 75.3% girls • 62.6% boys To prevent a STD <ul style="list-style-type: none"> • 12% girls • 14% boys 	NA
Samkange-Zeeb et al 2013	<ul style="list-style-type: none"> • 18% girls • 8% boys <p>(p<0.001)</p>	NA	CC <ul style="list-style-type: none"> • 36% girls • 15% boys 	<ul style="list-style-type: none"> • 29% girls, • 9% boys 	NA	NA
Schmeink et al 2011	<ul style="list-style-type: none"> • 53.6 % girls • 38.7% boys <p>(p<0.01)</p>	<ul style="list-style-type: none"> • 87.6% ST^{a,b} • 79.6% condom fully protective^{a,b} 	CC <ul style="list-style-type: none"> • 55.5% girls • 45.9% boys <p>(p=0.01)</p> <ul style="list-style-type: none"> • 32% GW^{b,c} 	NA	NA	NA
Sopracordevole et al 2012	<ul style="list-style-type: none"> • 92.8% girls • 51.3% boys 	ST <ul style="list-style-type: none"> • 74.7% girls^a • 60.7% boys^a <p>(p<0.001)</p> Condoms protective <ul style="list-style-type: none"> • 72.6% girls^a • 61.5% boys^a <p>(p=0.002)</p>	CC <ul style="list-style-type: none"> • 93.8% girls^a • 72.5% boys^a <p>(p<0.0001)</p> GW <ul style="list-style-type: none"> • 17.3% girls^a • 18.4% boys^a 	<ul style="list-style-type: none"> • 94.5% of girls^a • 71.3% boys^a <p>(p<0.001)</p>	Protects against CC ^d <ul style="list-style-type: none"> • 97.1% of girls • 77% of boys <p>(p<0.001)</p> Protects against GW ^d <ul style="list-style-type: none"> • 13% girls • 13.2% boys Protects against HIV/AIDS ^d <ul style="list-style-type: none"> • 7.6% of female, 21.3% of boys (p<0.001) 	Smear after vaccination <ul style="list-style-type: none"> • 93.3% girls, • 81.6% boys <p>(p<0.001)</p> Use of condoms after vaccination <ul style="list-style-type: none"> • 75.5% of girls 51.7% of boys <p>(p<0.001)</p>
Stöcker et al 2013	NA	ST <ul style="list-style-type: none"> • 73.1% girls, • 52.5% boys <p>(p<0.001)</p>	CC <ul style="list-style-type: none"> • 50.8-64% girls^e • 43.9% boys 	NA	NA	NA

- a = assessed only in those that had heard of HPV
- b = no breakdown between sexes given but reported that no significant difference was noted
- c= assessed only in those that had heard of GW
- d= assessed in those that had heard of both HPV and HPV vaccine
- e= unvaccinated/ vaccinated girls
- MOT- mode of transmission
- ST- sexually transmitted
- CC- cervical cancer
- GW – genital warts
- NA- not assessed