

College Students' HPV Knowledge and Intention to be HPV Vaccinated

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INTRODUCTION

Although Human Papilloma Virus (HPV) issues have focused primarily on females, it is important to give attention to males because the primary mode of transmission of the virus is through sexual intercourse. There is increasing evidence that HPV is causing serious diseases like penile, anal head and neck cancer among males¹. Studies have also shown that, generally, males have similar rates of HPV infection (0.29 to 0.39 per 1000 person month) as females². The vaccine against HPV, Gardasil, has been used in women since 2006. In 2009, the FDA approved Gardasil® for men³. Although questions about the efficacy of HPV vaccination in males remain, it is important to understand what males know about HPV and their predisposition towards being vaccinated against the virus.

PURPOSE

The purpose of this study was to examine male college students' knowledge and intention to be HPV vaccinated, their HPV knowledge, attitudes, subjective norms, and perceived behavioral control towards vaccination. To facilitate acceptance of HPV vaccination among males, Health Educators may use the results from this study to develop relevant and informative educational materials specifically for young men.

METHOD

A descriptive, correlational, cross-sectional research design was employed. The investigators used a convenience sample from a mid-sized, four-year university in the Southeastern region of the United States. Participants in the study sample were delimited to male students who were at least 18 years of age and enrolled in at least one health or physical education course at the time data was collected. The Theory of Planned Behavior (TPB) construct was used to assess participants' intention to be HPV vaccinated. Fifteen questions solicited participants' knowledge of HPV, three items assessed behavioral intention, four items were used to measure attitudes towards HPV vaccination, four items addressed the subjective norms of students towards HPV vaccination, three items measured students' perceived behavioral control towards being HPV vaccinated and two questions addressed self-efficacy.

RESULTS

Only 91 (43.8%) out of the 208 participants had heard about HPV and 86 (41.3%) had heard of HPV vaccines. Four (1.92%) reported having had HPV and none had been vaccinated or in the process of being vaccinated against HPV at the time of data collection.

Knowledge: More than 70% of respondents knew about the cause and transmission of HPV. Respondents showed lack of knowledge in the area of the vaccine against HPV.

Attitude: Attitudes towards the vaccine and the perceived benefits of being vaccinated were fairly high.

Behavioral Intention: Only about 50% of respondents want to be HPV vaccinated but only slightly more than 40% plan on doing so.

Subjective Norm: Although about 60% of respondents believe they would have the support of significant others about their HPV vaccination, but only about 45% believe their significant others would consider HPV vaccination.

Predictors of Intention: Using a multiple linear regression model, attitudes, subjective norms and perceived behavioral control accounted for 39% of the variance of behavioral intention to be HPV vaccinated (R^2 of 0.39) and therefore are good predictors (Table 1).

Table 1

Regression Results of Attitudes, Subjective Norms, and Perceived Behavioral Control as Predictors of Male College Students' Behavioral Intention to be HPV Vaccinated

Model	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	B	t	Sig.
(Constant)	0.62	1.21		0.51	0.61
Attitude	0.11	0.07	0.12	1.49	0.14
Subjective Norms	0.39	0.07	0.41	5.65	0.00
Perceived Behavioral Control	0.23	0.10	0.18	2.28	0.02

Note: $F(3,199) = 42.42$, Sig. = 0.00, R Square (R^2) = 0.39, $N = 202$. Dependent Variable: Behavioral Intention. Predictors: (Constant), Attitude, Subjective Norms, Perceived Behavioral Control

RESULTS (cont.)

Both subjective norms [$t(199) = 5.65$, $p < 0.01$] and perceived behavioral control [$t(199) = 2.28$, $p = 0.02$] were better predictors of behavioral intention to be HPV vaccinated. There was no significant correlation (Table 2) between knowledge and intention to be HPV vaccinated ($p = 0.43$, $r = 0.06$).

Table 2

Pearson's Correlation Test Result of Relationship of HPV

Knowledge and Behavioral Intention to be HPV Vaccinated

		HPV Knowledge Level
	Pearson Correlation	0.06
Behavioral intention to be HPV vaccinated	Sig. (2-tailed)	0.43
	N	208

Note. Correlation is significant at the 0.05 level (2-tailed).

CONCLUSION

Respondents seemed to have good knowledge about HPV but short on HPV vaccination. Attitudes towards HPV vaccination were positive. Respondents indicated a sense of control and a favorable intention to be HPV vaccinated. Subjective norms and perceived behavioral control were significant predictors of behavioral intention to be HPV vaccinated. Lastly, level of HPV knowledge was not significantly correlated with intention to be HPV vaccinated.

While we await more information about the impact of HPV disease and vaccine on males, it is important to understand what they know about and their predisposition towards being vaccinated against the virus. The use of a more representative sample would greatly advance the generalizability of the results in this study.

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