Knowledge, Attitudes, and Practices towards HPV vaccination among reproductive-age women in an HIV hotspot in the US

Penn Medicine

MILLER SCHOOL of MEDICINE — MIAMI

Aim: Evaluate HPV knowledge, attitudes, and vaccination practices; and factors associated with HPV vaccination

METHODS

Validated questionnaires (REDCap© electronic surveys): socio-demographics, sexual behaviors; HPV knowledge, screening, vaccination practices; HPV vaccination barriers & motivators

HIV-negative, cisgender, sexually active women 18-45 y.o. living in Miami, a Southern US city with a high STI incidence and low HPV vaccination coverage

Recruitment from April to June 2022

Descriptive statistics; Chi-square, Fisher's exact test, t-test, multivariate logistic regression (MLR) analysis for factors associated with HPV vaccination

RESULTS

Figure 1. Predictors of HPV Vaccination in Multivariate Logistic Regression (n = 84)
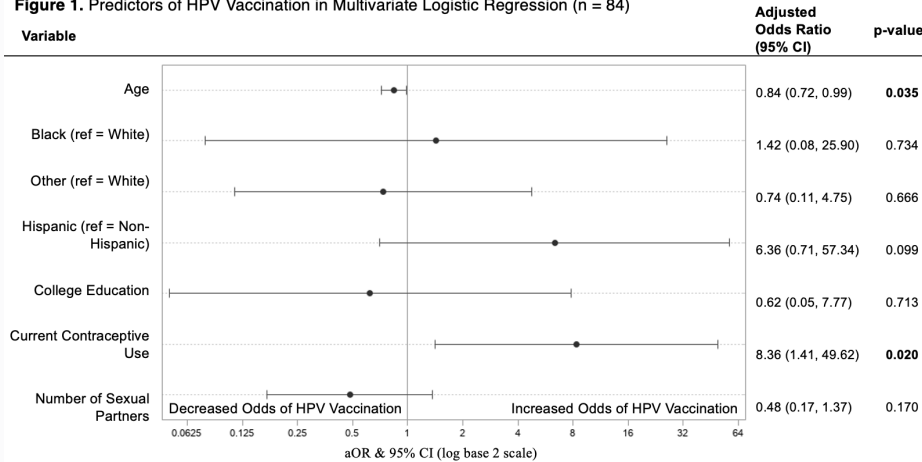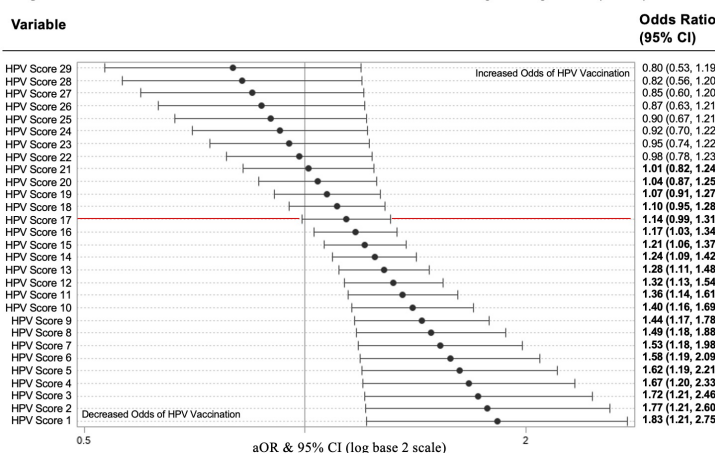
Variable		Adjusted Odds Ratio (95% CI)	p-value
Age		0.84 (0.72, 0.99)	**0.035**
Black (ref = White)		1.42 (0.08, 25.90)	0.734
Other (ref = White)		0.74 (0.11, 4.75)	0.666
Hispanic (ref = Non-Hispanic)		6.36 (0.71, 57.34)	0.099
College Education		0.62 (0.05, 7.77)	0.713
Current Contraceptive Use		8.36 (1.41, 49.62)	**0.020**
Number of Sexual Partners		0.48 (0.17, 1.37)	0.170

aOR & 95% CI (log base 2 scale)

Figure 2. HPV Score as a Predictor of HPV Vaccination in Multivariate Logistic Regression (n = 84)

Variable	Odds Ratio (95% CI)
HPV Score 29	0.80 (0.53, 1.19)
HPV Score 28	0.82 (0.56, 1.20)
HPV Score 27	0.85 (0.60, 1.20)
HPV Score 26	0.87 (0.63, 1.21)
HPV Score 25	0.90 (0.67, 1.21)
HPV Score 24	0.92 (0.70, 1.22)
HPV Score 23	0.95 (0.74, 1.22)
HPV Score 22	0.98 (0.78, 1.23)
HPV Score 21	1.01 (0.82, 1.24)
HPV Score 20	1.04 (0.87, 1.25)
HPV Score 19	1.07 (0.91, 1.27)
HPV Score 18	1.10 (0.95, 1.28)
HPV Score 17	1.14 (0.99, 1.31)
HPV Score 16	1.17 (1.03, 1.34)
HPV Score 15	1.21 (1.06, 1.37)
HPV Score 14	1.24 (1.09, 1.42)
HPV Score 13	1.28 (1.11, 1.48)
HPV Score 12	1.32 (1.13, 1.54)
HPV Score 11	1.36 (1.14, 1.61)
HPV Score 10	1.40 (1.16, 1.69)
HPV Score 9	1.44 (1.17, 1.78)
HPV Score 8	1.49 (1.18, 1.88)
HPV Score 7	1.53 (1.18, 1.98)
HPV Score 6	1.58 (1.19, 2.09)
HPV Score 5	1.62 (1.19, 2.21)
HPV Score 4	1.67 (1.20, 2.33)
HPV Score 3	1.72 (1.21, 2.46)
HPV Score 2	1.77 (1.21, 2.60)
HPV Score 1	1.83 (1.21, 2.75)

aOR & 95% CI (log base 2 scale)

n=84

43 vaccinated (at least 1 HPV vaccine dose)

41 unvaccinated

	vaccinated	unvaccinated
Age	24.7 (SD 4.03) y	31.4 (SD 8.33) y
Prior Pap screening (min once)	76.74%	87.80%
HPV score	18.9/29 (SD 6.05)	9.1/29 (SD 8.82)

BARRIERS TO VACCINATION
46.3% vaccine hesitancy & personal beliefs
29.3% healthcare barriers
14.6% low-risk perception

MOTIVATORS FOR VACCINATION
71.42% risk perception & vaccine beliefs
60.71% healthcare-related
55.95% social motivators

CONCLUSIONS: Findings suggest suboptimal HPV knowledge and low vaccination rates among women of reproductive age. Public health efforts should focus on increasing basic HPV knowledge among women with little-to-no HPV knowledge to increase vaccine uptake

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