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Health Literacy and Information Preferences Among Racial/Ethnic Minority Young Adults: Implications for Cervical Cancer Prevention



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Introduction

- Racial/ethnic minority young adults (YAs) face disparities in utilizing preventive care (receipt of human papillomavirus (HPV) vaccine and Pap test¹).
- Racial/ethnic minority immigrants reported a higher prevalence of "below basic" proficiency in health literacy (HL), reflecting upstream inequities in social determinants of health/health policy.²

Pap Tests Guidelines (ACOG)³

• Recommendations for cervical cancer screening involve Pap testing alone every 3 years for those aged 21-29, with co-testing (both Pap and HPV testing), HPV testing alone every 5 years, or Pap testing alone every 3 years for those aged 30-65.

HPV Vaccine Guidelines (CDC)⁴

• HPV vaccination is recommended for people 9 to 26 years old.

Objectives

• This study describes the level of HL and e-HL in racial/minority YAs and the associations between preventive care utilization (HPV/Pap tests).

Methodology

- Mixed-methods study was conducted to identify digital communication and social media use and preferences for health information among self-identifying minority YAs aged 18-40. Survey and interview responses were analyzed using descriptive and thematic approaches.
- Participants: Survey data was gathered from 228 participants, interview data from 16 participants.
- Recruitment: YAs between 18-40 years old, self-identify as a racial/ethnic minority.

*HPVv = HPV vaccine

Results

Survey Participants:

- $\bullet \quad M_{age} = 26$
- Primarily college-educated (74%)
- Females (83%)
- Non-Hispanic/Latinxs (90%)

Receipt of: • HPV vacc

• HPV vaccine: 65% (146 out of 225)

• Pap test: 68% (115 out of 170)

Results

Interviews (N=16) revealed that YAs accessed health information through search engines, healthcare providers, and family/friends, preferring reputable sources over social media. They preferred clear and understandable information (i.e., Medline, Mayo Clinic, research papers, and YouTube videos).

"...I would probably go to CDC, and any of the reputable medical institutions or organizations that I at least am aware of like Harvard School of Public Health..."

"I have two friends who are right now in school for PA school...I'll also consult with them."

"I think I avoid anecdotal stuff like blogs, I avoid social media, I think that it contributed to a lot of misinformation during our pandemic."

Participants had limited knowledge of the HPV and the HPV vaccine.

"I've heard of like HPV vaccines, but not like, exactly HPV cancer."

"...[My gynecologist] talk[s] about some of the cancers that can put you at risk if you get like an STD, but I don't know if that's included..."

Health Literacy & HPV Vaccine E-Health Literacy & HPV Vaccine/Pap Test Never Sometimes/occasionally Always/often strongly disagree/disagree undecided agree/strongly agree Difficulty comprehending info from providers HPVv yes Ability to distinguish high/low HPVv no 34.20% quality online info Problems getting to appointments due to instruction HPVv yes 6.20% 82.80% 80.10% 16.40% 3<mark>.40%</mark> HPVv yes HPVv no 65.80% 25.30% 25.30% 67.10% HPVv no | 7.60% Problems learning about medical Confidence using HPVv yes 30.80% online info to make health deicisons HPVv no 36.70% Unsure how to take meds due to 13.70% HPVv yes | 13.00% 73.30% bottle label confusion HPVv yes 29.70% 15.20% HPVv no | 29.10% 55.70% HPVv no Confidence in following medicine Awareness of bottle directions online health HPVv yes<mark>5.50%94.50%</mark> resources 12.20% 77.40% Pap test yes Confidence filling out medical forms alone HPVv yes 12.30% 90.90% Pap test no

Discussion

*HPVv = HPV vaccine

- HPV vaccine rate (65%) in this study was higher than the 2018 HPV vaccine rate of US adults ages 18-26 (40%). Pap test rate (68%) was lower than the 2021 USA cervical cancer screening rate among women (74%). A majority of the participants in this study were Asian; previous studies reported that rates of HPV vaccine (28%) and Pap test (52%) in non-Hispanic (NH) Asian females are lower than Hispanic, NH white, NH black, and NH others.
- Data emphasizes the need for culturally-based health education and personalized health information delivery methods (e.g. based on medical background or demographic). The next steps would be to implement targeted interventions aimed at improving HL, e-HL, and preventive care utilization among racial/ethnic minority populations.

Results

Health literacy: 16 questions⁸

	Vaccine (p value)	Pap Test (p value)
How often are written in a way that is easy to read and understand?		
Appointment slips	0.893	0.633
Medical forms	0.332	0.503
Medication labels	0.846	0.436
Educational materials	0.144	0.341
How often are difficult to understand /and fill out?		
Hospital or clinic signs	0.328	0.066
Appointment slips	0.386	0.723
Medical forms	0.959	0.083
Directions on medication bottles	0.206	0.303
How often do you have/are you		
Difficulty understanding written information your health care provider gives you	0.009	0.483
Problems getting to your clinical appointments at the right time because of difficulty understanding written instructions	0.043	0.592
Problems completing medical forms because of difficulty understanding the instructions	0.327	0.860
Problems learning about your medical condition because of difficulty understanding written information	0.002	0.361
Unsure on how to take your medication(s) correctly because of problems understanding written instructions on the bottle label	0.004	0.630
Someone help you read hospital materials	0.054	0.114
How confident do you feel/are you		
You are able to follow the instructions on the label of a medication bottle	0.001	0.779
Filling out medical forms by yourself	0.013	0.833

E-health literacy: 10 questions⁹

0.614	0.233
0.143	0.444
	0.444
0.410	0.032
0.831	0.536
0.333	0.521
0.171	0.473
0.209	0.057
0.174	0.485
0.016	0.156
	0.544
	0.174

*Highlighted p value indicates significant association (p < .05)

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References

