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Assessment of Factors Preventing Adequate Decline in Cervical Cancer Rates Amongst Minority Women in New Jersey

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Wenrich, Rosie and Baker, Jillian, "Assessment of Factors Preventing Adequate Decline in Cervical Cancer Rates Amongst Minority Women in New Jersey" (2021). *Stratford Campus Research Day*. 17.
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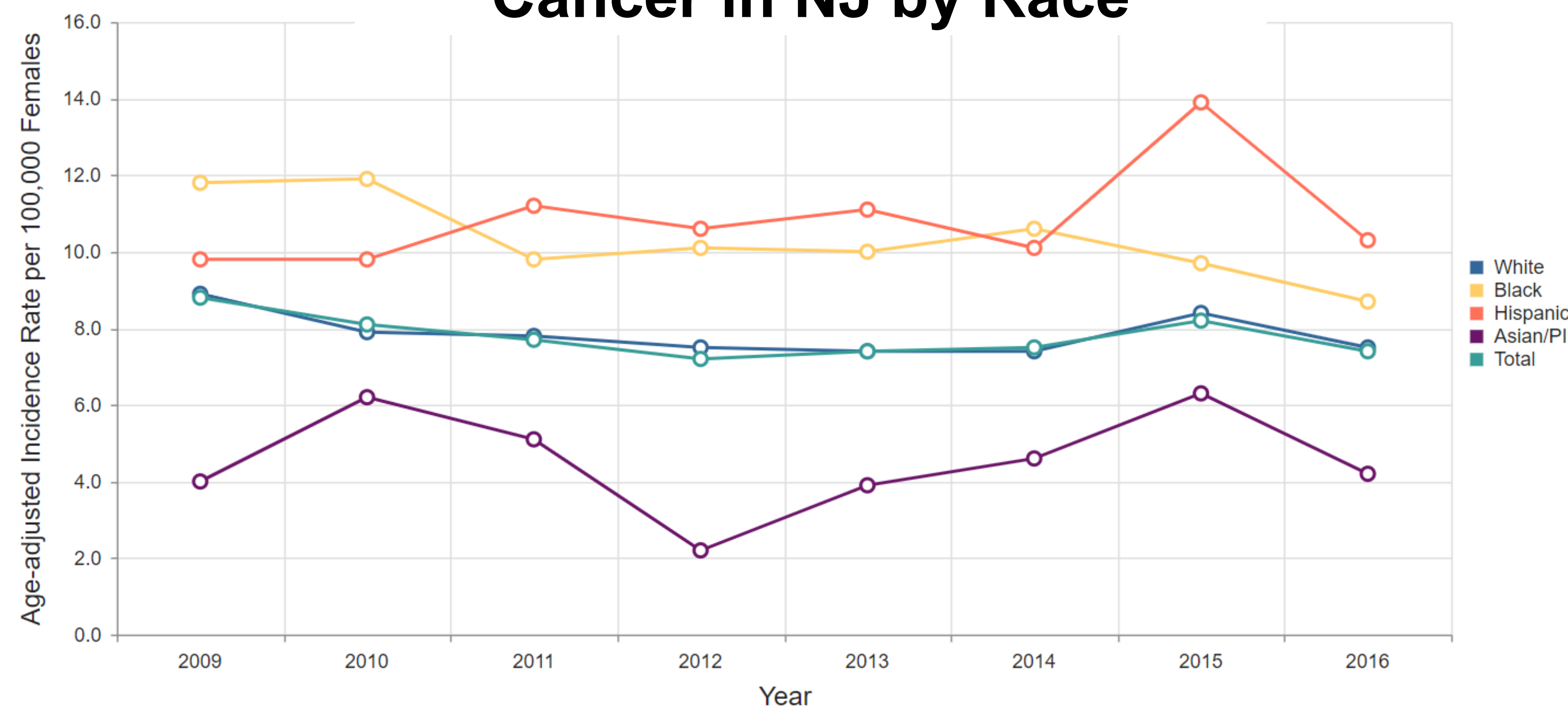
Assessment of factors preventing adequate decline in cervical cancer rates amongst minority women in New Jersey

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Background

- Nationally declining cervical cancer rates are still high amongst minority women in NJ, with Hispanic women being affected the most.
- The Human Papilloma Virus (HPV) is the most common sexually transmitted infection and can lead to cervical cancer
- Administration of the 9-valent HPV vaccine can prevent infection and progression to cancer
- Regular cervical cancer screenings allow for better outcomes
- Various barriers prevent people with a cervix receiving the vaccine
- Various barriers prevent people with a cervix aged ≥ 30 from receiving regular cervical cancer screenings

Incidence Rate of Cervical Cancer in NJ by Race



<https://www-doh.state.nj.us/doh-shad/indicator/view/CervCancer.RaceEth.html>

Methods

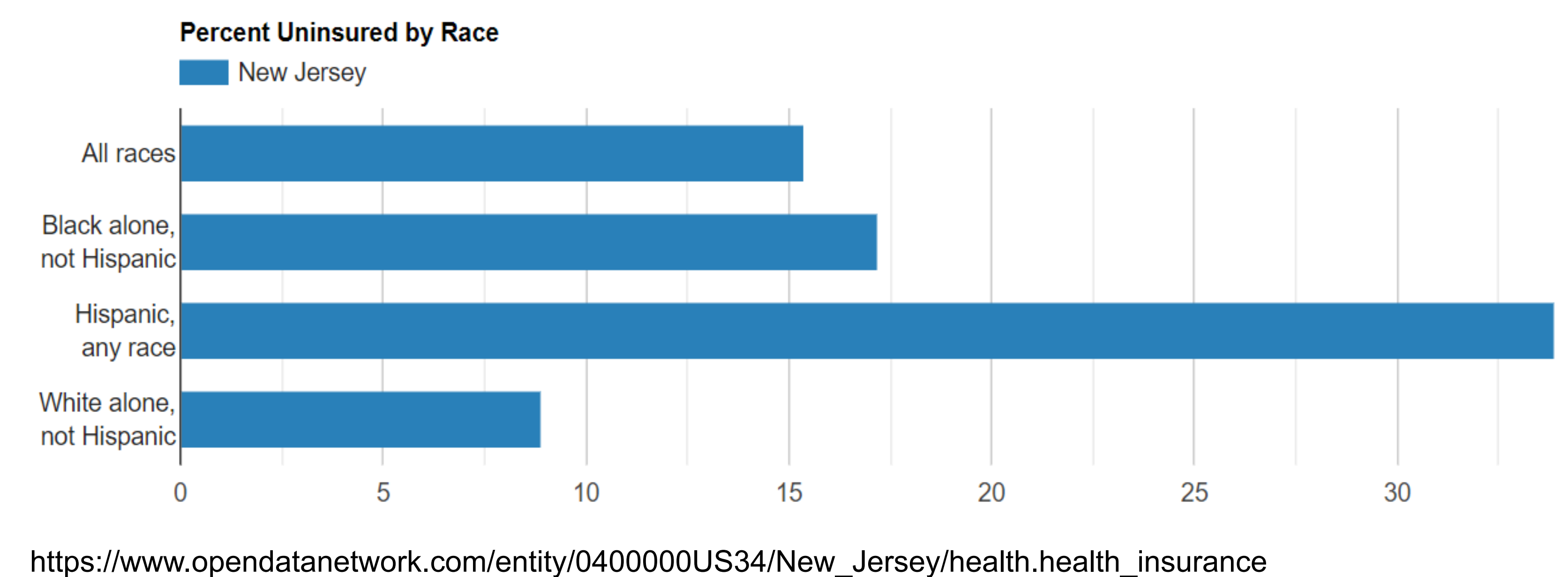
- Search databases including PubMed and SCOPUS for articles spanning from 2016-2020
- Keywords: Human Papilloma Virus, HPV, HPV Vaccine, Gardasil, Barriers to HPV Vaccine, New Jersey, cervical cancer, Pap smear

Results

Cervical Cancer Screenings:

- Women of non-white racial groups are 65% less likely to be up to date on cervical cancer screenings
- Of the Hispanic women who received the HPV DNA test, 56% tested positive
- Uninsured women are 50% less likely to be up to date on cervical cancer screenings
- Of the women enrolled in the NJCEED program, only 26.6% of eligible, high risk women received an HPV DNA test

NJ Percent Uninsured by Race



HPV Vaccine Uptake:

- 27% of women aged 21-36 report having received at least 1 dose of the HPV vaccine
- Uninsured women are 50% less likely to have received the HPV vaccine
- Those who received the vaccine are 2x more likely to be up to date on cervical cancer screenings
- Women who received a strong physician recommendation were 4x more likely to receive the vaccine

Discussion

- Hispanic women are the most likely group to lack health coverage, not receive the HPV vaccine, not be regularly screened for cervical cancer, and die from cervical cancer
- Uninsured women are less likely receive the HPV vaccine and receive regular cervical cancer screenings
- Those who receive early cancer detection screenings through the NJCEED program are not often tested for HPV

Conclusions

- Improved physician recommendation is required for the HPV vaccine and HPV testing
- Improved outreach to high-risk populations is required
- Education on programs such as NJCEED and the National Breast and Cervical Cancer Early Detection Program provide free screenings for low income and/or uninsured individuals
- Education on free vaccine programs such as Vaccines for Children

Limitations

- Review methodology- not using primary data
- Self reporting

Acknowledgements

I would like to thank Dr. Baker and the RowanSOM library staff for their support and guidance throughout this process.

Citations

1. Llanos AA, Tsui J, Rotter D, Toler L, Stroup AMJBwsh. Factors associated with high-risk human papillomavirus test utilization and infection: a population-based study of uninsured and underinsured women. 2018;**18**(1):162
2. Cronin KA, Lake AJ, Scott S, et al. Annual Report to the Nation on the Status of Cancer, part I: National cancer statistics. *Cancer* 2018;**124**(13):2785-800
3. Siegel RL, Miller KD, Jemal A. Cancer statistics, 2019. *CA: a cancer journal for clinicians* 2019;**69**(1):7-34
4. Markowitz LE, Dunne EF, Saraiya M, et al. Human papillomavirus vaccination: recommendations of the Advisory Committee on Immunization Practices (ACIP). *Morbidity and Mortality Weekly Report: Recommendations and Reports* 2014;**63**(5):1-30
5. Meites E, Szilagyi PG, Chesson HW, Unger ER, Romero JR, Markowitz LE. Human papillomavirus vaccination for adults: updated recommendations of the Advisory Committee on Immunization Practices. *American Journal of Transplantation* 2019;**19**(11):3202-06
6. Group FIS. Quadrivalent vaccine against human papillomavirus to prevent high-grade cervical lesions. *New England Journal of Medicine* 2007;**356**(19):1915-27
7. Olusola P, Banerjee HN, Philley JV, Dasgupta SJC. Human Papilloma Virus-Associated Cervical Cancer and Health Disparities. 2019;**8**(6):622
8. Silver MI, Kobrin S. Exacerbating disparities?: Cervical cancer screening and HPV vaccination. *Preventive Medicine* 2020;**130**:105902 doi: <https://doi.org/10.1016/j.ypmed.2019.105902>[published Online First: Epub Date]].
9. Burd EM. Human papillomavirus and cervical cancer. *Clinical microbiology reviews* 2003;**16**(1):1-17
10. Akinlotan M, Bolin JN, Helduser J, Ojinnaka C, Lichorad A, McClellan DJJoch. Cervical cancer screening barriers and risk factor knowledge among uninsured women. 2017;**42**(4):770-78
11. Cancer IAfRo. Cervix cancer screening. *Cervix cancer screening*, 2005:302-02.
12. Miller KD, Goding Sauer A, Ortiz AP, et al. Cancer statistics for hispanics/latinos, 2018. *CA: A Cancer Journal for Clinicians* 2018;**68**(6):425-45
13. Silvera SAN, Bandera EV, Jones BA, Kaplan AM, Demisse K. Knowledge of, and beliefs about, access to screening facilities and cervical cancer screening behaviors among low-income women in New Jersey. *Cancer Causes & Control* 2020;**31**(1):43-49 doi: 10.1007/s10552-019-01244-5[published Online First: Epub Date]].
14. Radecki Breitkopf C, Finney Rutten LJ, Findley V, et al. Awareness and knowledge of Human Papillomavirus (HPV), HPV-related cancers, and HPV vaccines in an uninsured adult clinic population. 2016;**5**(11):3346-52
15. Watts L, Joseph N, Velazquez A, et al. Understanding barriers to cervical cancer screening among Hispanic women. *American journal of obstetrics and gynecology* 2009;**201**(2):199. e1-99. e8
16. Boom K, Lopez M, Daher M, et al. Perspectives on cervical cancer screening and prevention: challenges faced by providers and patients along the Texas–Mexico border. *Perspectives in Public Health* 2019;**139**(4):199-205
17. Cartmell KB, Young-Pierce J, McGue S, et al. Barriers, facilitators, and potential strategies for increasing HPV vaccination: A statewide assessment to inform action. 2018;**5**:21-31
18. Rosenthal S, Weiss TW, Zimet GD, Ma L, Good M, Vichnin M. Predictors of HPV vaccine uptake among women aged 19–26: importance of a physician's recommendation. *Vaccine* 2011;**29**(5):890-95
19. Gerend MA, Zapata C, Reyes E. Predictors of human papillomavirus vaccination among daughters of low-income Latina mothers: the role of acculturation. *Journal of Adolescent Health* 2013;**53**(5):623-29
20. Calderón-Mora J, Ferdous T, Shokar N. HPV Vaccine Beliefs and Correlates of Uptake Among Hispanic Women and Their Children on the US-Mexico Border. *Cancer Control* 2020;**27**(1):1073274820968881
21. Watts LA, Joseph N, Wallace M, et al. HPV vaccine: A comparison of attitudes and behavioral perspectives between Latino and non-Latino women. *Gynecologic oncology* 2009;**112**(3):577-82
22. Niccolai LM, Mehta NR, Hadler JL. Racial/ethnic and poverty disparities in human papillomavirus vaccination completion. *American journal of preventive medicine* 2011;**41**(4):428-33
23. Ward E, Jemal A, Cokkinides V, et al. Cancer disparities by race/ethnicity and socioeconomic status. *CA: a cancer journal for clinicians* 2004;**54**(2):78-93
24. Freeman HP, Wingrove BK. Excess cervical cancer mortality: a marker for low access to health care in poor communities. Rockville, MD: National Cancer Institute, Center to reduce cancer health disparities 2005;**5**:5282
25. Brandt HM, Pierce JY, Crary AJHv, immunotherapeutics. Increasing HPV vaccination through policy for public health benefit. 2016;**12**(6):1623-25