# Preventing cervical cancer among diverse groups of sexual and gender minorities: Multilevel and intersectional approaches

## Madina Agénor, ScD, MPH

Assistant Professor Department of Behavioral and Social Sciences Brown University School of Public Health

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**UNC Lineberger • UNC School of Medicine** 

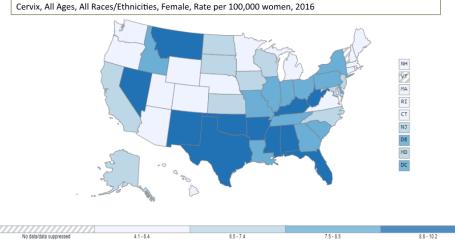
# **Cervical Cancer in the United States**

## In 2016, 12,984 U.S. women were diagnosed with cervical cancer, and 4,188 U.S. women died from cervical cancer.



Centers for Disease Control and Prevention CDC 24/7: Saving Lives, Protecting People™

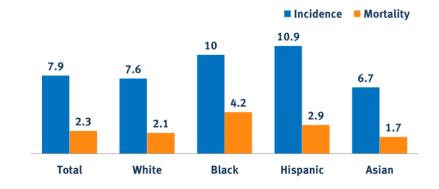
#### Rate of New Cancers in the United States



Rate per 100,000 women

Data source – U.S. Cancer Statistics Working Group. U.S. Cancer Statistics Data Visualizations Tool, based on November 2018 submission data (1999-2016): U.S. Department of Health and Human Services, Centers for Disease Control and Prevention and National Cancer Institute; https://www.cdc.gov/cancer/dataviz, June 2019. **Racial and Ethnic Disparities in Cervical Cancer** 

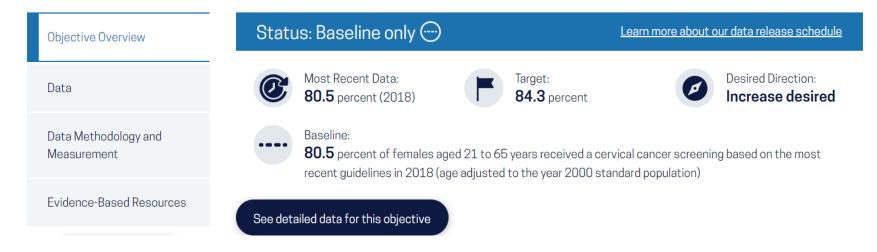
Incidence and Mortality of Cervical Cancer by Race/Ethnicity, 2009



NOTE: Rates are per 100,000 persons and are age-adjusted to the 2000 U.S. standard population. SOURCE: CDC, United States Cancer Center: 2009 Cancer Types Grouped by Race .



# Increase the proportion of females who get screened for cervical cancer — C-09



# Increase the proportion of adolescents who get recommended doses of the HPV vaccine — IID-08

Objective Overview	Status: Baseline only 💬	Learn more about our data release schedule
Data	Most Recent Data: <b>48.0</b> percent (2018)	ercent Desired Direction:
Data Methodology and Measurement	<ul><li>Baseline:</li><li>48.0 percent of adolescents aged 13 through 15 by 2018</li></ul>	years received recommended doses of the HPV vaccine
Evidence-Based Resources	See detailed data for this objective	

# **Cervical Cancer Screening Guidelines**

Population	Women aged 21 to 29 years	Women aged 30 to 65 years	Women younger than 21 years, women older than 65 years with adequate prior screening, and women who have had a hysterectomy
Recommendation	Screen for cervical cancer every 3 years with cytology alone. Grade: A	Screen for cervical cancer every 3 years with cytology alone, every 5 years with hrHPV testing alone, or every 5 years with cotesting. Grade: A	Do not screen for cervical cancer. Grade: D

https://www.uspreventiveservicestaskforce.org/Page/Document/UpdateSummaryFinal/cervical-cancer-screening2



The American College of Obstetricians and Gynecologists WOMEN'S HEALTH CARE PHYSICIANS

## **COMMITTEE OPINION**

Number 525 • May 2012

(Reaffirmed 2016)

### **Committee on Health Care for Underserved Women**

This information should not be construed as dictating an exclusive course of treatment or procedure to be followed.

## **Health Care for Lesbians and Bisexual Women**

**ABSTRACT:** Lesbians and bisexual women encounter barriers to health care that include concerns about confidentiality and disclosure, discriminatory attitudes and treatment, limited access to health care and health insurance, and often a limited understanding as to what their health risks may be. Health care providers should offer quality care to all women regardless of sexual orientation. The American College of Obstetricians and Gynecologists endorses equitable treatment for lesbians and bisexual women and their families, not only for direct health care needs, but also for indirect health care issues.



The American College of Obstetricians and Gynecologists

Women's Health Care Physicians

# **COMMITTEE OPINION**

Number 512, December 2011

(Reaffirmed 2019)

#### Committee on Health Care for Underserved Women

This information should not be construed as dictating an exclusive course of treatment or procedure to be followed.

**PDF Format** 

## Health Care for Transgender Individuals

ABSTRACT: Transgender individuals face harassment, discrimination, and rejection within our society. Lack of awareness, knowledge, and sensitivity in health care communities eventually leads to inadequate access to, underutilization of, and disparities within the health care system for this population. Although the care for these patients is often managed by a specialty team, obstetrician-gynecologists should be prepared to assist or refer transgender individuals with routine treatment and screening as well as hormonal and surgical therapies. The American College of Obstetricians and Gynecologists opposes discrimination on the basis of gender identity and urges public and private health insurance plans to cover the treatment of gender identity disorder.

### Human Papillomavirus Vaccination

## Recommendations of the Advisory Committee on Immunization Practices (ACIP)

Lauri E. Markowitz<sup>1</sup> Eileen F. Dunne<sup>1</sup> Mona Saraiya<sup>2</sup> Harrell W. Chesson<sup>1</sup> C. Robinette Curtis<sup>3</sup> Julianne Gee<sup>4</sup> Joseph A. Bocchini, Jr<sup>5</sup> Elizabeth R. Unger<sup>6</sup> <sup>1</sup>Division of STD Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD and TB Prevention, CDC

<sup>2</sup>Division of Cancer Prevention and Control, National Center for Chronic Disease Prevention and Health Promotion, CDC <sup>3</sup>Immunization Services Division, National Center for Immunization and Respiratory Diseases, CDC <sup>4</sup>Immunization Safety Office, National Center for Emerging and Zoonotic Infectious Diseases, CDC <sup>5</sup>Louisiana State University Health Sciences Center, Shreveport, Louisiana <sup>6</sup>Division of High-Consequence Pathogens and Pathology, National Center for Emerging and Zoonotic Infectious Diseases, CDC

#### Summary

This report summarizes the epidemiology of human papillomavirus (HPV) and associated diseases, describes the licensed HPV vaccines, provides updated data from clinical trials and postlicensure safety studies, and compiles recommendations from CDC's Advisory Committee on Immunization Practices (ACIP) for use of HPV vaccines.

Persistent infection with oncogenic HPV types can cause cervical cancer in women as well as other anogenital and oropharyngeal cancers in women and men. HPV also causes genital warts. Two HPV vaccines are licensed in the United States. Both are composed of type-specific HPV L1 protein, the major capsid protein of HPV. Expression of the L1 protein using recombinant DNA technology produces noninfectious virus-like particles (VLPs). Quadrivalent HPV vaccine (HPV4) contains four HPV type-specific VLPs prepared from the L1 proteins of HPV 6, 11, 16, and 18. Bivalent HPV vaccine (HPV2) contains two HPV type-specific VLPs prepared from the L1 proteins of HPV 16 and 18. Both vaccines are administered in a 3-dose series.

ACIP recommends routine vaccination with HPV4 or HPV2 for females aged 11 or 12 years and with HPV4 for males aged 11 or 12 years. Vaccination also is recommended for females aged 13 through 26 years and for males aged 13 through 21 years who were not vaccinated previously. Males aged 22 through 26 years may be vaccinated. ACIP recommends vaccination of men who have sex with men and immunocompromised persons (including those with HIV infection) through age 26 years if not previously vaccinated. As a compendium of all current recommendations for use of HPV vaccines, information in this report is intended for use by clinicians, vaccination providers, public health officials, and immunization program personnel as a resource. ACIP recommendations are reviewed periodically and are revised as indicated when new information and data become available.

#### Use of a 2-Dose Schedule for Human Papillomavirus Vaccination — Updated Recommendations of the Advisory Committee on Immunization Practices

Elissa Meites, MD<sup>1</sup>; Allison Kempe, MD<sup>2,3</sup>; Lauri E. Markowitz, MD<sup>1</sup>

#### Introduction

Vaccination against human papillomavirus (HPV) is recommended to prevent HPV infections and HPV-associated diseases, including cancers. Routine vaccination at age 11 or 12 years has been recommended by the Advisory Committee on Immunization Practices (ACIP) since 2006 for females and since 2011 for males (1,2). This report provides recommendations and guidance regarding use of HPV vaccines and updates ACIP HPV vaccination recommendations previously published in 2014 and 2015 (1,2). This report includes new recommendations for use of a 2-dose schedule for girls and boys who initiate the vaccination series at ages 9 through 14 years. Three doses remain recommended for persons who initiate the vaccination series at ages 15 through 26 years and for insurant programment and the series and th Three HPV vaccines are licensed for use in the United States. All are noninfectious. Quadrivalent and 9-valent HPV vaccines (4vHPV and 9vHPV, Gardasil and Gardasil 9, Merck and Co, Inc., Whitehouse Station, New Jersey) are licensed for use in females and males aged 9 through 26 years (1). Bivalent HPV vaccine (2vHPV, Cervarix, GlaxoSmithKline, Rixensart, Belgium) is licensed for use in females aged 9 through 25 years (1). As of late 2016, only 9vHPV is being distributed in the United States. The majority of all HPV-associated cancers are caused by HPV 16 or 18, types targeted by all three vaccines. In addition, 4vHPV targets HPV 6 and 11, types that cause genital warts. 9vHPV protects against these and five additional types: HPV 31, 33, 45, 52, and 58. All three vaccines have been approved for administration in a 3-dose series at intervals of 0, 1 or 2, and 6 months. In October 2016, after considering new clinical trial results (4), the Food and Drug Administration

#### The New York Times

### HPV Vaccine Expanded for People Ages 27 to 45



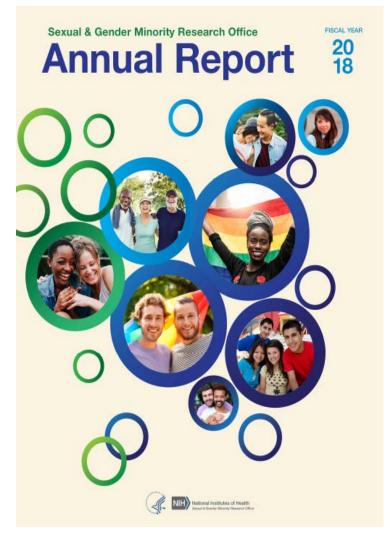
### The Health of Lesbian, Gay, Bisexual, and Transgender People

**Building a Foundation for Better Understanding** 



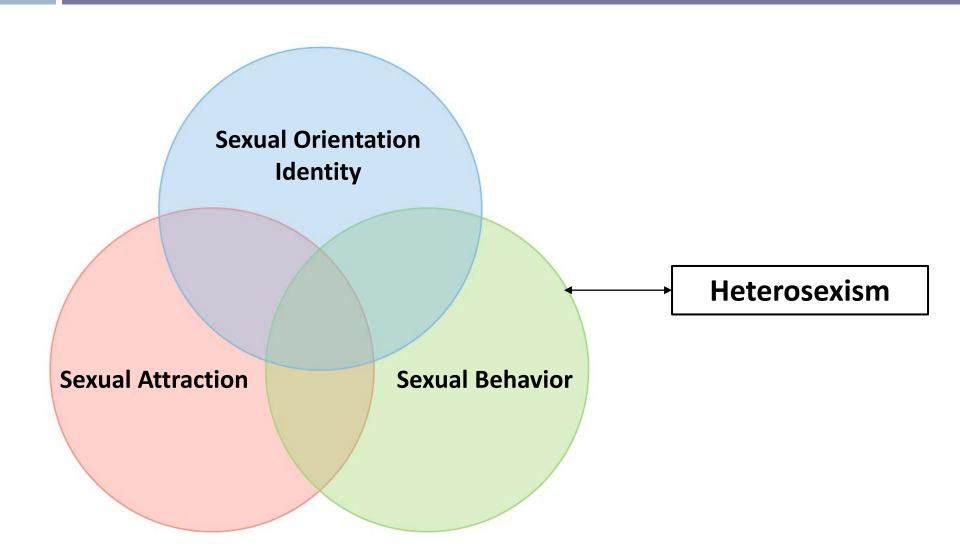
INSTITUTE OF MEDICINE

http://www.nationalacademies.org/hmd/Reports/2011/The-Health-of-Lesbian-Gay-Bisexual-and-Transgender-People.aspx

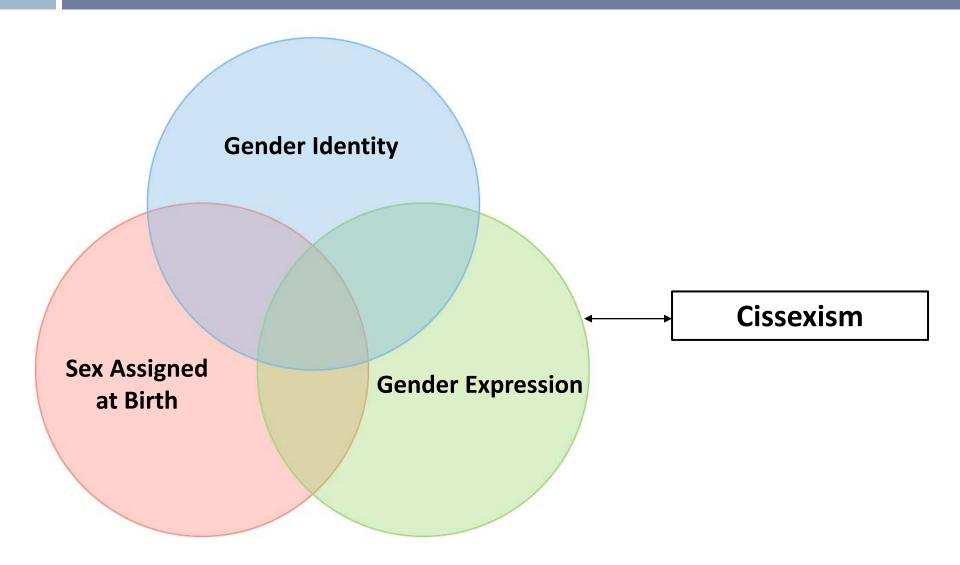


https://dpcpsi.nih.gov/sites/default/files/SGMRO\_AnnualReport\_ 2018\_FV\_RF508.pdf

# **Sexual Orientation**



# **Gender Identity**



# **Sexual Orientation and Cervical Cancer**

- Sexual minority women (SMW) are at risk of acquiring human papillomavirus (HPV)
  - Bisexual women (57.7%) at higher risk of HPV vs. heterosexual (41.1%) and lesbian (35.5%) women
- SMW are at risk of developing cervical cancer
  - SMW who acquire HPV may be at higher risk of cervical cancer vs. non-SMW
  - Health insurance, access to health care, smoking

## Sexual Orientation Disparities in Papanicolaou Test Use Among US Women: The Role of Sexual and Reproductive Health Services

Madina Agénor, ScD, MPH, Nancy Krieger, PhD, S. Bryn Austin, ScD, Sebastien Haneuse, PhD, and Barbara R. Gottlieb, MD, MPH

We investigated sexual orientation disparities in Papanicolaou screening among US women aged 21 to 44 years (n = 9581) in the 2006 to 2010 National Survey of Family Growth. The odds ratios for lesbian versus heterosexual women and women with no versus only male sexual partners were 0.40 and 0.32, respectively, and were attenuated after adjustment for sexual and reproductive health (SRH) care indicators. Administering Papanicolaou tests through mechanisms other than SRH services would promote cervical cancer screening among all women, (Am J Public Health, 2014; 104:e68-e73. doi:10.2105/AJPH.2013. 301548)

assessed the contribution of sexual and reproductive health (SRH) services to sexual orientation disparities in Pap test use.

#### METHODS

We analyzed data from the 2006 to 2010 National Survey of Family Growth, which provides a nationally representative US sample of 10 403 men and 12 279 women aged 15 to 44 years.<sup>23,24</sup> We restricted our analysis to women aged 21 years and older (n = 9581), in line with the American Congress of Obstetricians and Gynecologists' cervical cancer screening guidelines during the study period.<sup>25</sup>

The outcome was Pap test use in the past 12 months, and the predictors were sexual orientation identity and sex of sexual partners in the past year (shown with their categorization in Table 1). Covariates were social and economic factors and health care indicators, including the use of SRH services (Table 1). We excluded 299 women (3.1%) from multivariable analyses because of missing data.

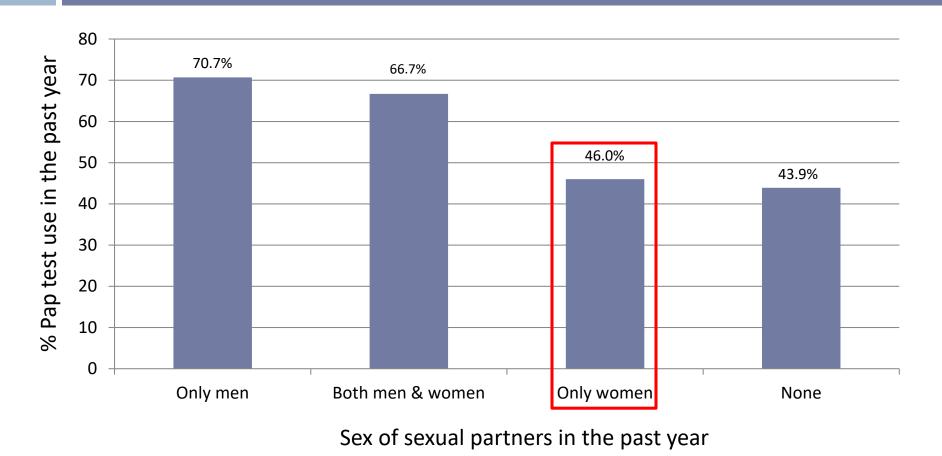
We used logistic regression to model the relationship between each measure of sexual orientation and Pap test use. After fitting bivariate models, we first added social and economic factors, followed by health care indicators. We tested for possible interactions between sexual orientation and receiving contraception as well as ever having been pregnant; we retained only statistically significant interaction terms ( $P \le .05$ ) in the

Including health care indicators (models 3a and 3b) attenuated the odds ratios for lesbians relative to heterosexual women (OR = 0.56; 95% CI=0.28, 1.12) and women with no relative to only male sexual partners (OR = 0.54; 95% CI = 0.43, 0.69). In these fully adjusted models, obtaining contraceptive and sexually transmitted infection services in the past year was positively associated with Pap test use among all women. However, including interaction terms (model 4a) showed that receiving contraception was positively associated with Pap test use among heterosexual (OR = 6.79; 95% CI = 5.46, 8.44) and bisexual (OR =10.03; 95% CI=1.51, 66.03) women only; having ever been pregnant was positively associated with Pap test use among heterosexual women only (OR = 1.37; 95% CI = 1.11, 1.70; Table 2). Similarly to contraceptive and sexually transmitted infection services use, the odds of Pap test use did not differ by pregnancy history among women with only male (OR = 1.12; 95% CI = 0.89, 1.41), both male and female (OR = 0.78; 95% CI = 0.10, 5.82), only female (OR=0.58; 95% CI=0.07, 4.68), and no (OR=0.91; 95% CI=0.31, 2.80) sexual partners in the past year (model 4b).

#### DISCUSSION

Our findings provide the first national estimates of the relationship between sexual orientation and Pap test use among US women aged 21 to 44 years, derived from crosssectional, self-report data. They also indicate

# % Pap Test use by Sexual Behavior



#### N=9,581

Source: Agénor M, Krieger N, Austin SB, Haneuse S, Gottlieb BR. Sexual orientation disparities in Papanicolaou test use among U.S. women: The role of sexual and reproductive health services. American Journal of Public Health of Internal Medicine 2014;104:e68-e73.

# Adjusted Odds of Pap Test use by Sexual Behavior

Sex of sexual partners in the past year	Model 1 OR (95% CI)	Model 2 OR (95% CI)	
Only men (ref)	1.00	1.00	
Men & women	0.84 (0.58,1.22)	0.77 (0.49,1.22)	
Only women	0.32 (0.19,0.54)	0.62 (0.35,1.09)	
None	0.32 (0.25,0.42)	0.54 (0.43,0.69)	

**Model 1:** Adjusted for social and economic factors (i.e., age, relationship status, place of residence, language, nativity, education, and household poverty level, and employment status). **Model 2:** Adds health care factors (i.e., health insurance, receiving contraception, STI services use, and pregnancy history) to Model 1.

Source: Agénor M, Krieger N, Austin SB, Haneuse S, Gottlieb BR. Sexual orientation disparities in Papanicolaou test use among U.S. women: The role of sexual and reproductive health services. American Journal of Public Health of Internal Medicine 2014;104:e68-e73.

### **Annals of Internal Medicine**

ORIGINAL RESEARCH

## Sexual Orientation Identity Disparities in Awareness and Initiation of the Human Papillomavirus Vaccine Among U.S. Women and Girls A National Survey

## Madina Agénor, ScD, MPH; Sarah Peitzmeier, MSPH; Allegra R. Gordon, MPH; Sebastien Haneuse, PhD; Jennifer E. Potter, MD; and S. Bryn Austin, ScD

**Background:** Lesbians and bisexual women are at risk for human papillomavirus (HPV) infection from female and male sexual partners.

**Objective:** To examine the association between sexual orientation identity and HPV vaccination among U.S. women and girls.

**Design:** Cross-sectional, using 2006–2010 National Survey of Family Growth data.

Setting: U.S. civilian noninstitutionalized population.

**Participants:** The 2006–2010 National Survey of Family Growth used stratified cluster sampling to establish a national probability sample of 12 279 U.S. women and girls aged 15 to 44 years. Analyses were restricted to 3253 women and girls aged 15 to 25 years who were asked about HPV vaccination.

Measurements: Multivariable logistic regression was used to obtain prevalence estimates of HPV vaccine awareness and initiation adjusted for sociodemographic and health care factors for each sexual orientation identity group.

**Results:** Among U.S. women and girls aged 15 to 25 years, 84.4% reported having heard of the HPV vaccine; of these, 28.5% had initiated HPV vaccination. The adjusted prevalence of vaccine awareness was similar among heterosexual, bisexual, and lesbian respondents. After adjustment for covariates, 8.5% (P = 0.007) of lesbians and 33.2% (P = 0.33) of bisexual women and girls who had heard of the vaccine had initiated vaccination compared with 28.4% of their heterosexual counterparts.

Limitation: Self-reported, cross-sectional data, and findings may not be generalizable to periods after 2006 to 2010 or all U.S. lesbians aged 15 to 25 years (because of the small sample size for this group).

**Conclusion:** Adolescent and young adult lesbians may be less likely to initiate HPV vaccination than their heterosexual counterparts. Programs should facilitate access to HPV vaccination services among young lesbians.

Primary Funding Source: National Cancer Institute.

Ann Intern Med. 2015;163:99-106. doi:10.7326/M14-2108 www.annals.org For author affiliations, see end of text.

This article was published online first at www.annals.org on 12 May 2015.

Table 2. Prevalence of Awareness and Initiation of the HPV Vaccine Among U.S. Women and Girls Aged 15-25 y, Overall and by Sexual Orientation Identity\*

Variable	Total	Ever Heard of HPV Vaccine			Ever	Received HPV Vaccine†	ceived HPV Vaccine†	
		Participants, n	Prevalence Estimate (95% CI), %	P Value	Participants, n	Prevalence Estimate (95% CI), %	P Value	
Overall	3253	2698	84.4 (81.5-86.9)	-	790	28.5 (25.4-31.8)	_	
Sexual orientation identity								
Heterosexual	2914	2426	84.4 (81.6-87.2)	Reference	719	28.4 (25.2-31.6)	Reference	
Bisexual	235	195	85.7 (80.5-90.9)	0.64	56	33.2 (22.8-43.7)	0.33	
Lesbian	62	55	91.8 (83.7-99.8)	0.160	7	8.5 (0.0-17.2)	0.007	
Not reported‡	42	22	68.4 (56.6-80.2)	0.004	8	41.7 (13.2-70.2)	0.34	

Appendix Table 2. Logistic Regression Models for the Odds of Initiation of the HPV Vaccine Among U.S. Women and Girls Aged 15-25 y Who Had Ever Heard of the HPV Vaccine in Relation to Sexual Orientation Identity, Sociodemographic Factors, and Health Care Indicators\*

Variable	Model 1†	Model 2‡	Model 3§
Sexual orientation identity			
Heterosexual	1.00 (reference)	1.00 (reference)	1.00 (reference)
Bisexual	1.37 (0.83-2.25)	1.38 (0.83-2.30)	1.30 (0.76-2.21)
Lesbian	0.15 (0.05-0.47)¶	0.15 (0.05-0.49)¶	0.21 (0.07-0.64)¶
Not reported	1.44 (0.43-4.81)	1.74 (0.57-5.33)	1.98 (0.48-8.16)

**Model 1:** Unadjusted. **Model 2:** Adjusted for age, race/ethnicity, nativity, language, childhood religion, place of residence, relationship status, educational attainment, household poverty level, and employment status. **Model 3:** Adds health insurance status, receiving contraception in past year, sexually transmitted infection services use in past year.

### N=3,253

*Source:* Agénor M, Peitzmeier S, Gordon AR, Haneuse S, Potter J, Austin SB. Sexual orientation identity disparities in awareness and initiation of the human papillomavirus vaccine among U.S. women and girls: a national survey. *Annals of Internal Medicine* 2015;163:99-106.

# Conclusions

- Women with only female sexual partners were less likely to get a Pap test vs. women with only male sexual partners
  - Disparity completely attenuated by health care factors
- Lesbians were less likely to have initiated HPV
  vaccination vs. heterosexual women
  Disparity only slightly attenuated by health care factors
- Additional research needed to identify mechanisms
  of sexual orientation disparities in HPV vaccination

## Human Papillomavirus Risk Perceptions Among Young Adult Sexual Minority Cisgender Women and Nonbinary Individuals Assigned Female at Birth

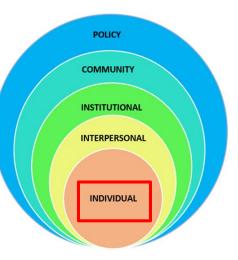
**CONTEXT:** Some sexual minority women may be less likely than other women to engage in human papillomavirus (HPV) prevention behaviors. Although risk perceptions have been found to be associated with health behaviors, HPV risk perceptions among U.S. sexual minority women have not been examined.

**METHODS:** In 2016–2017, in-depth interviews were conducted in Boston with 29 sexual minority individuals aged 18–36 who were assigned female at birth (AFAB) and identified as women or nonbinary. Purposive sampling was used to recruit participants online, through community-based and student organizations, and by word of mouth. Thematic analysis was employed to examine participants' HPV risk perceptions.

**RESULTS:** Participants incorrectly linked HPV risk to the exchange of genital fluids, and a hierarchy of perceived risk emerged in relation to sexual orientation: Individuals who engage in penile-vaginal sex with partners who were assigned male at birth (AMAB) were perceived to be at highest risk, and lesbians and individuals with only AFAB partners were perceived to be at low risk. Lesbians and participants with only AFAB partners identified sex with bisexual women or AFAB individuals with AMAB partners as a risk factor for HPV infection. Risk perceptions were shaped by health care providers' linking HPV risk to sex with AMAB individuals, a lack of discussion of HPV with parents and peers, and the exclusion of information on HPV and sexual minority women from school-based sex education.

**CONCLUSION:** Interventions providing sexual minority AFAB individuals with comprehensive, accurate and tailored information about HPV risk are needed.

Perspectives on Sexual and Reproductive Health, 2019, 51(1):TK, doi:10.1363/psrh.12087



By Madina Agénor, Jaquelyn L. Jahn, Eriko Kay, Rachel A. Bishop, Sarah M. Peitzmeier, Jennifer Potter and S. Bryn Austin

Madina Agénor is Gerald R. Gill Assistant Professor of Race, Culture and Society, Department of Community Health, Tufts University, Medford, MA. Jaquelyn L. Jahn is a Ph.D. candidate, Eriko Kay is research coordinator, Rachel A. Bishop is research assistant and S. Bryn Austin is professor—



#### Original article

### Patient–Provider Sexually Transmitted Infection Prevention Communication among Young Adult Sexual Minority Cisgender Women and Nonbinary Assigned Female at Birth Individuals

Jaquelyn L. Jahn, MPH<sup>a,\*</sup>, Rachel A. Bishop, MPH<sup>a,b</sup>, Andy S.L. Tan, PhD, MPH, MBA<sup>a,c</sup>, Madina Agénor, ScD, MPH<sup>d</sup>

<sup>a</sup> Department of Social and Behavioral Sciences, Harvard T.H. Chan School of Public Health, Boston, Massachusetts

<sup>b</sup> MassHealth, Office of Medicaid, Executive Office of Health & Human Services, Commonwealth of Massachusetts, Boston, Massachusetts

<sup>c</sup>Division of Population Sciences, Dana-Farber Cancer Institute, Boston, Massachusetts

<sup>d</sup> Department of Community Health, Tufts University, Medford, Massachusetts

Article history: Received 6 September 2018; Received in revised form 8 January 2019; Accepted 10 January 2019

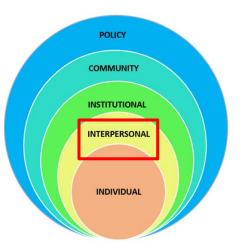
#### ABSTRACT

*Background:* Health care providers are an important source of sexually transmitted infection (STI) prevention information for young adult sexual minority women (SMW). However, very few studies have described patient–provider STI communication in this understudied and underserved population. We explore sexual minority women's experiences communicating with health care providers about sexual health, with particular attention to STI prevention, to inform programs and practices that address their unique needs and concerns.

*Methods:* We conducted 29 in-depth interviews with sexual minority cisgender women and nonbinary assigned female at birth (AFAB) individuals aged 18–36 years. The sample included White (55%), Asian (31%), Black (17.2%), and Latina (3.4%) participants. We used thematic analysis with deductive and inductive coding to identify themes related to patient–provider STI prevention communication.

*Results:* Heteronormative health care provider assumptions inhibited participants' willingness to disclose their sexual orientation and discuss sexual health issues with providers. Most sexual health conversations focused on pregnancy and contraception, which many felt was irrelevant to them, and <u>limited STI prevention recommendations to condom use</u>, Participants reported that some providers lacked medical knowledge on AFAB-to-AFAB STI transmission and were not able to provide relevant <u>STI prevention information</u>. Providers' bias related to gender identity and race/ethnicity furthered some participants' mistrust generated from providers' heteronormative assumptions.

Conclusions: Our study describes several barriers that AFAB sexual minorities felt inhibited their patient-provider sexual health communication. Interventions are needed to improve patient-provider STI prevention conversations with AFAB sexual minorities so they can access the sexual health information they need to effectively protect themselves from STIs. © 2019 Jacobs Institute of Women's Health. Published by Elsevier Inc.



HEALTH ISSUES

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### 4164.0: Sexual health information sources, needs, and preferences of young sexual minority cisgender women and nonbinary individuals assigned female at birth

**Allison Baker, MPH**<sup>1</sup>, Jaquelyn Jahn, MPH<sup>1</sup>, Rachel Bishop, MPH<sup>2</sup> and Madina Agénor, ScD, MPH<sup>3</sup>, (1)Harvard T.H. Chan School of Public Health, Boston, MA, (2)Executive Office of Health & Human Services, Commonwealth of Massachusetts, Boston, MA, (3)Tufts University, Medford, MA



#### Abstract

Background: Young sexual minority women have unique sexual health needs and disparate rates of risky sexual behaviors compared to heterosexual peers. Inequitable access to relevant sexual health information may contribute to this problem, but research on sexual health communication in young sexual minority women is sparse.

Methods: In-depth interviews investigated sexual health communication in a sample of 29 individuals assigned female at birth, aged 19–36, who identified as a sexual minority. About half identified as white and half as people of color. Data were analyzed thematically using inductive and deductive coding and a conceptually clustered matrix.

Results: Three broad themes pertained to sexual health information: 1) *Sources*; 2) *Needs*; and 3) *Preferences*. Participants discussed and critiqued healthcare providers, the Internet/mass media, schools, family, and peers/partners as *Sources* of sexual health information. Most used the Internet as their main source and had mixed experiences with healthcare providers. Participants described *Needs* for sexual health information that does not assume gender of sexual partners or types of sexual behaviors, and for information about preventing sexually transmitted infections in these different sexual situations. Participants indicated *Preferences* for healthcare providers, and gender identities, as key sources of sexual health information. Participants also wished for sexual health information shared via the Internet/mass media.

HSR Health Services Research

### Impact of the Affordable Care Act on human papillomavirus vaccination initiation among lesbian, bisexual, and heterosexual U.S. women

Madina Agénor ScD, MPH<sup>1,2</sup> 💿 | Gabriel R. Murchison MPH<sup>3</sup> 📋 Jarvis T. Chen ScD<sup>3</sup> Deborah J. Bowen PhD<sup>4,5</sup> | Meredith B. Rosenthal PhD<sup>6</sup> | Sebastien Haneuse PhD<sup>7</sup> Sydney Bryn Austin ScD<sup>3,8,9</sup>

<sup>1</sup>Department of Community Health, Tufts University, Medford, Massachusetts

<sup>2</sup>The Fenway Institute, Fenway Health, Boston, Massachusetts

<sup>3</sup>Department of Social and Behavioral Sciences, Harvard T.H. Chan School of Public Health, Boston, Massachusetts

<sup>4</sup>Department of Bioethics and Humanities, University of Washington School of Medicine, Seattle, Washington

<sup>5</sup>Department of Health Services, University of Washington School of Public Health, Seattle, Washington

<sup>6</sup>Department of Health Policy and Management, Harvard T.H. Chan School of Public Health, Boston, Massachusetts

<sup>7</sup>Department of Biostatistics, Harvard T.H. Chan School of Public Health, Boston, Massachusetts

<sup>8</sup>Department of Pediatrics, Harvard Medical School, Boston, Massachusetts

<sup>9</sup>Division of Adolescent and Young Adult Medicine, Boston Children's Hospital, Boston, Massachusetts

#### Correspondence

Madina Agénor, ScD, MPH, Department of Community Health, Tufts University, 574 Boston Ave., Suite 208, Medford, MA 02155. Email: madina.agenor@tufts.edu

#### **Funding information**

American Cancer Society, Grant/Award Number: 128863-PF-15-149-01-CPHPS

#### Abstract

Objective: To examine the effect of the 2010 Affordable Care Act (ACA) extended dependent coverage and no cost-sharing provisions on human papillomavirus (HPV) vaccination in relation to sexual orientation identity among U.S. women.

Data Sources: 2006-2010 and 2011-2015 National Survey of Family Growth.

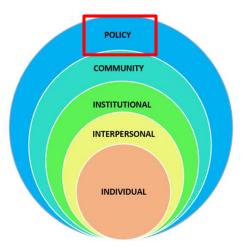
Study Design: We used an interrupted time series design and multivariable Poisson regression to assess differences in HPV vaccination initiation before (2007-2010) and after (2011-2015) the 2010 ACA provisions among heterosexual, bisexual, and lesbian U.S. women aged 15-25 years (N = 7033), adjusting for temporal trends and demographic factors.

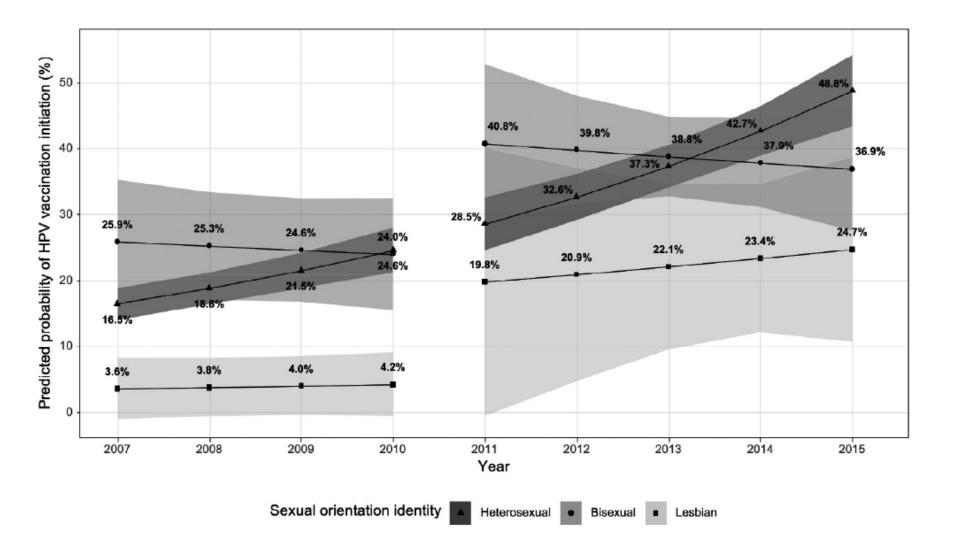
Data Collection: Computer-assisted personal interview and audio computer-assisted self-interview questionnaires.

Principal Findings: The adjusted prevalence of HPV vaccination initiation was significantly higher among lesbian and bisexual women after compared to before the 2010 ACA-at 19.1 (95% confidence interval [CI]: 5.4, 32.9) and 15.7 (95% CI: 4.4, 27.1) percentage points in 2015 compared to 2007-2010, respectively. We observed no association between the 2010 ACA provisions and HPV vaccination initiation among heterosexual women after adjusting for temporal trends and demographic factors. Conclusions: The 2010 ACA provisions may have improved HPV vaccination initiation among lesbian and bisexual women. Policies and programs that increase access to health insurance and provide HPV vaccines at no cost to patients may facilitate HPV vaccine uptake in these marginalized populations.

#### KEYWORDS

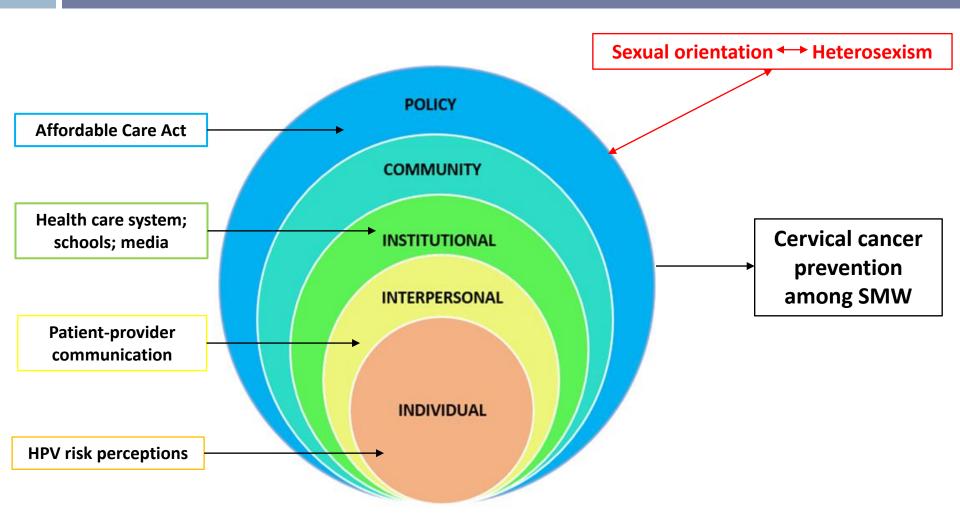
Affordable Care Act, health inequities, human papillomavirus vaccination, sexual orientation, women





Source: Agénor M, Murchison GR, Chen JT, Bowen DJ, Rosenthal MB, Haneuse S, Austin SB. Impact of the Affordable Care Act on human papillomavirus vaccination initiation among lesbian, bisexual, and heterosexual U.S. women. *Health Services Research* 2020;55:18-25.

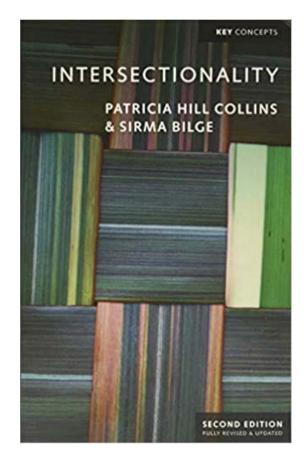
# **Multilevel Social Determinants**



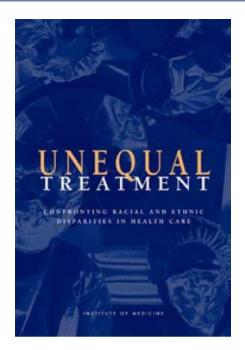
# Intersectionality

**Intersectionality** is an interdisciplinary "analytic tool" rooted in Black feminist theory and practice that allows us to more accurately capture the "complexity in the world, in people, and in human experiences," which are shaped by multiple social inequalities and power relations that act "in diverse and mutually influencing ways."

Adapted from Hill Collins and Bilge, Intersectionality, 2016



# **Race and Racism**



#### Structural racism and health inequities in the USA: evidence and interventions

Zinzi D Bailey, Nancy Krieger, Madina Agénor, Jasmine Graves, Natalia Linos, Mary T Bassett

Despite growing interest in understanding how social factors drive poor health outcomes, many academics, policy Lancet 2017; 389:1453-63 makers, scientists, elected officials, journalists, and others responsible for defining and responding to the public discourse remain reluctant to identify racism as a root cause of racial health inequities. In this conceptual report, the third in a Series on equity and equality in health in the USA, we use a contemporary and historical perspective to and 1378 discuss research and interventions that grapple with the implications of what is known as structural racism on population health and health inequities. Structural racism refers to the totality of ways in which societies foster racial discrimination through mutually reinforcing systems of housing, education, employment, earnings, benefits, credit, media, health care, and criminal justice. These patterns and practices in turn reinforce discriminatory beliefs, values, and distribution of resources. We argue that a focus on structural racism offers a concrete, feasible, and promising Longibland City, NY, USA approach towards advancing health equity and improving population health.

See Editorial page 1369 See Comment pages 1376

This is the third in a Series of five papers about equity and equality in health in the USA New York City Department of Health and Mental Hygiene, (Z D Bailey ScD, N Linos ScD, M T Bassett MD); Department

"Race is a social category based on external physical characteristics or geographic origin, which captures differential access to power and resources in society."

"Racism is an organized social system in which the dominant racial[ized] group ... categorizes and ranks people into social groups called 'races' and uses its power to devalue, disempower, and differentially allocate valued societal resources and opportunities to groups defined as inferior."

Williams et al., Public Health Reports, 1994 and Williams et al., Annual Review of Public Health, 2019



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At the intersection of sexual orientation, race/ethnicity, and cervical cancer screening: Assessing Pap test use disparities by sex of sexual partners among black, Latina, and white U.S. women



Madina Agénor <sup>a, \*</sup>, Nancy Krieger <sup>a</sup>, S. Bryn Austin <sup>a, b, c</sup>, Sebastien Haneuse <sup>d</sup>, Barbara R. Gottlieb <sup>a, e, f</sup>

<sup>a</sup> Department of Social and Behavioral Sciences, Harvard School of Public Health, USA

<sup>b</sup> Division of Adolescent and Young Adult Medicine, Boston Children's Hospital, USA

c Department of Pediatrics, Harvard Medical School, USA

<sup>d</sup> Department of Biostatistics, Harvard School of Public Health, USA

e Harvard Medical School, USA

<sup>f</sup> Department of Medicine, Division of General Internal Medicine and Primary Care, Brigham and Women's Hospital, USA

#### ARTICLE INFO

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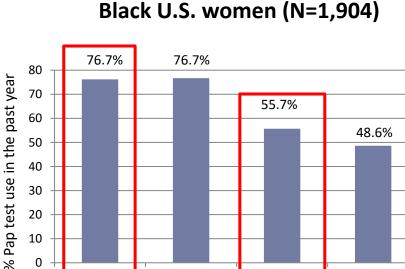
#### Keywords: Sexual orientation Race/ethnicity Cervical cancer screening Ecosocial theory Intersectionality

#### ABSTRACT

Understanding how various dimensions of social inequality shape the health of individuals and populations poses a key challenge for public health. Guided by ecosocial theory and intersectionality, we used data from the 2006–2010 National Survey of Family Growth, a national probability sample, to investigate how one dimension of sexual orientation, sex of sexual partners, and race/ethnicity jointly influence Pap test use among black, Latina and white U.S. women aged 21-44 years (N = 8840). We tested for an interaction between sex of sexual partners and race/ethnicity (p = 0.015) and estimated multivariable logistic regression models for each racial/ethnic group, adjusting for socio-demographic factors. The adjusted odds of Pap test use for women with only female sexual partners in the past year were significantly lower than for women with only male sexual partners in the past year among white women (odds ratio [OR] = 0.25, 95% confidence interval [CI]: 0.12,0.52) and may be lower among black women (OR = 0.32, 95% CI: 0.07,1.52); no difference was apparent among Latina women (OR = 1.54, 95% CI: 0.31,7.73). Further, the adjusted odds of Pap test use for women with no sexual partners in the past year were significantly lower than for women with only male sexual partners in the past year among white (OR = 0.30, 95% CI: 0.22,0.41) and black (OR = 0.23, 95% CI: 0.15,0.37) women and marginally lower among Latina women (OR = 0.63, 95% CI: 0.38,1.03). Adding health care indicators to the models completely explained Pap test use disparities for women with only female vs. only male sexual partners among white women and for women with no vs. only male sexual partners among Latina women. Ecosocial theory and intersectionality can be used in tandem to conceptually and operationally elucidate previously unanalyzed health disparities by multiple dimensions of social inequality.

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## % Pap Test Use by Sexual Behavior & Race



55.7%

Only women

48.6%

None

70

60

50

40

30

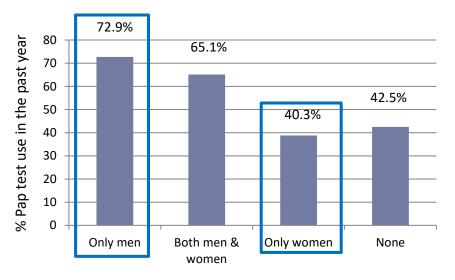
20

10

0

Only men





Sex of sexual partners in the past year

Both men &

women

Sex of sexual partners in the past year

Source: Agénor M, Krieger N, Austin SB, Haneuse S, Gottlieb BR. At the intersection of sexual orientation, race/ethnicity, and cervical cancer screening: Assessing Papt test use disparities by sex of sexual partners among black, Latina, and white U.S. women. Social Science & Medicine 2014;116:110-118.

# Odds of Pap Test Use by Sexual Behavior & Race

Model	Black (N OR (9	l=1,904) 5% Cl)	White (N=4,846) OR (95% CI)		
	1	2	1	2	
Past-year sexual partners					
Only male (ref)	1.00	1.00	1.00	1.00	
Male & female	1.12 (0.54,2.34)	0.93 (0.40,2.19)	0.75 (0.46,1.21)	0.74 (0.40,1.38)	
Only female	0.31 (0.07.1.39)	0.39	0.23	0.56	
None	0.25 (0.16,0.40)	0.34 (0.21,0.56)	0.30 (0.21,0.42)	0.54 (0.38,0.77)	

**Model 1:** Adjusted for social and economic factors (i.e., age, place of residence, relationship status, nativity, education, household poverty level, and employment status).

**Model 2:** Adds health care factors (i.e., health insurance status, receiving contraception, and STI services use) to Model 1.

Source: Agénor M, Krieger N, Austin SB, Haneuse S, Gottlieb BR. At the intersection of sexual orientation, race/ethnicity, and cervical cancer screening: Assessing Papt test use disparities by sex of sexual partners among black, Latina, and white U.S. women. Social Science & Medicine 2014;116:110-118.

JOURNAL OF WOMEN'S HEALTH Volume 00, Number 00, 2018 © Mary Ann Liebert, Inc. DOI: 10.1089/jwh.2017.6768

### **Original Article**

## Human Papillomavirus Vaccination Initiation Among Sexual Orientation Identity and Racial/Ethnic Subgroups of Black and White U.S. Women and Girls: An Intersectional Analysis

Madina Agénor, ScD, MPH,<sup>1</sup> Ashley E. Pérez, ScM<sup>2</sup>, Sarah M. Peitzmeier, PhD, MSPH,<sup>3</sup> Jennifer Potter, MD,<sup>4,5</sup> and Sonya Borrero, MD, MS<sup>6,7</sup>

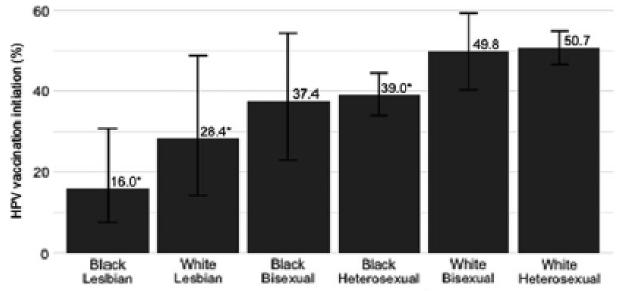


FIG. 1. Prevalence of human papillomavirus vaccination initiation among sexual orientation identity and racial/ethnic subgroups of white and black heterosexual, bisexual, and lesbian U.S. women aged 15–24 years (N=2,413).

Prevalence estimates and error bars account for the complex sampling design. \*Prevalence estimate was significantly different from that of white heterosexual women (reference) at p > 0.05 based on the adjusted Wald test.

*Source:* Agénor M, Pérez AE, Peitzmeier SM, Potter J, Borrero S. Human papillomavirus vaccination initiation among sexual orientation identity and racial/ethnic subgroups of black and white U.S. women and girls: An intersectional analysis. *Journal of Women's Health* 2018. doi: 10.1089/jwh.2017.6768.

# TABLE 2. ADJUSTED ODDS OF HUMAN PAPILLOMAVIRUS VACCINATION INITIATION AMONG SEXUAL ORIENTATION IDENTITY AND RACIAL/ETHNIC SUBGROUPS OF WHITE AND BLACK HETEROSEXUAL, BISEXUAL, AND LESBIAN U.S. WOMEN AGED 15–24 YEARS (N=2,413)

Variable	Model 1 OR (95% CI)	Model 2 OR (95% CI)	Model 3 OR (95% CI)
Sexual orientation identity × race/ethnicity			
subgroup White heterosexual (reference)	1.00	1.00	1.00
Black heterosexual	0.63 (0.47, 0.85)	0.70 (0.52, 0.93)	0.71 (0.53, 0.94)
White bisexual	0.98(0.67, 1.44)	1.08 (0.73, 1.61)	1.09 (0.72, 1.64)
Black bisexual	0.52 (0.24, 1.13)	0.65 (0.29, 1.46)	0.65 (0.29, 1.47)
White lesbian	0.33(0.13, 0.82)	0.37 (0.15, 0.90)	0.35 (0.14, 0.88)
Black lesbian	0.16 (0.06, 0.46)	0.19 (0.06, 0.56)	0.21 (0.07, 0.67)

*Note*. Model 1 adjusts for age, race/ethnicity, place of residence, nativity, and childhood religion. Model 2 adds educational attainment, household federal poverty level, and employment status to Model 1. Model 3 adds health insurance status and usual source of care to Model 2.

*Source:* Agénor M, Pérez AE, Peitzmeier SM, Potter J, Borrero S. Human papillomavirus vaccination initiation among sexual orientation identity and racial/ethnic subgroups of black and white U.S. women and girls: An intersectional analysis. *Journal of Women's Health* 2018. doi: 10.1089/jwh.2017.6768.

# Conclusions

 Magnitude of sexual orientation disparities in Pap test use differed between Black and white women
 Disparity completely attenuated by health care factors among qhite but not Black women

Magnitude of sexual orientation disparities in HPV
 vaccination varied in relation to both sexual orientation and race

- Disparities only slightly attenuated by socioeconomic and health care factors
- Additional research needed to identify mechanisms of sexual orientation disparities in Pap test use among Black women and HPV vaccination disparities among sexual orientation and racial subgroups

Women & Health, 55:717–736, 2015 Copyright © Taylor & Francis Group, LLC ISSN: 0363-0242 print/1541-0331 online DOI: 10.1080/03630242.2015.1039182



## Exploring the Cervical Cancer Screening Experiences of Black Lesbian, Bisexual, and Queer Women: The Role of Patient-Provider Communication

### MADINA AGÉNOR, ScD, MPH, ZINZI BAILEY, ScD, MSPH, and NANCY KRIEGER, PhD

Department of Social and Behavioral Sciences, Harvard T. H. Chan School of Public Health, Boston, Massachusetts, USA

### S. BRYN AUSTIN, ScD

Department of Social and Behavioral Sciences, Harvard T. H. Chan School of Public Health; Division of Adolescent and Young Adult Medicine, Boston Children's Hospital; and Department of Pediatrics, Harvard Medical School, Boston, Massachusetts, USA

### BARBARA R. GOTTLIEB, MD, MPH

Department of Social and Behavioral Sciences, Harvard T. H. Chan School of Public Health; Department of Medicine, Harvard Medical School; and Division of General Medicine and Primary Care, Department of Medicine, Brigham and Women's Hospital, Boston, Massachusetts, USA

"I'd love to have a Black female doctor. I feel like I'd see more of myself in her than I do in other doctors I would visit and that would, at least for me, at the outset, create a higher comfort level. If she reacted badly [to my sexual orientation], obviously that would detract from the situation. But I would instantly feel more comfortable with her than I would with a doctor who didn't fit those two criteria. More comfortable being my more authentic self. And, oh, if she's gay, I mean, that's Christmas for me."

- Black bisexual woman, age 27 years

"At that time, I was actively dating a woman. I kind of said that, and her response was very ... it was awkward. So after that, I switched, I didn't see her anymore. But I never told the new person. You know, she's old ... and she's white ... I'm afraid that I'm going to possibly ruin this great relationship we have."

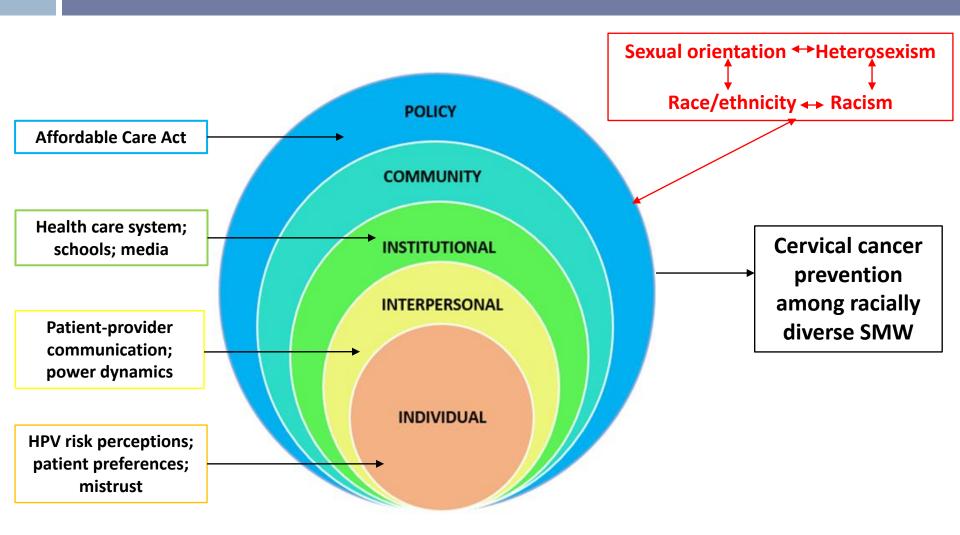
- Black bisexual woman, age 25 years

## Intersectionality: Compounding Influence of Gender and Racial/ Ethnic Bias

Our fourth theme examines how heteronormative assumptions in provider communication can compound gender and <u>racial/ethnic bias</u> in the clinical encounter, which can undermine patients' willingness to <u>communicate</u> about sexual health issues with providers and contribute to a context of provider <u>mistrust</u>.

*Source:* Jahn JL, Bishop RA, Tan ASL, Agénor M. Patient-provider sexually transmitted infection prevention communication among young adult sexual minority cisgender women and nonbinary assigned female at birth individuals. *Women's Health Issues* 2019; 29(4):308-314.

## **Multilevel Social Determinants**



# Terminology

- Transgender man: a man who was assigned female at birth
- Non-binary: an umbrella term that includes gender identities that are outside of the gender binary
- Transmasculine: an umbrella term that includes transgender men and non-binary individuals assigned female at birth with masculine gender identities

## **Cervical Cancer in Transmasculine People**

## Transmasculine people are at risk of acquiring HPV

- Sexual partners of various genders
- Sexual violence
- Transmasculine people are at risk of developing cervical cancer
  - Transmasculine people who acquire HPV may be at higher risk of cervical cancer vs. cisgender women
     Health insurance, access to health care, smoking

### American Journal of Preventive Medicine

### **RESEARCH ARTICLE**

### Gender Identity Disparities in Cancer Screening Behaviors



Ariella R. Tabaac, MS,<sup>1</sup> Megan E. Sutter, PhD,<sup>2</sup> Catherine S.J. Wall, BS,<sup>1</sup> Kellan E. Baker, MA, MPH<sup>3,4</sup>

	Lifetime Pap test		UTD Pap test		
Pap test					—
Cis woman	ref		ref		
Trans man	0.50	0.26, 0.97	0.70	0.39, 1.24	
GNC	0.20	0.08, 0.49	0.33	0.14, 0.79	

Note: Covariates included age, sexual orientation, race, relationship status, education, income, health insurance, personal doctor, and survey year. Boldface indicates statistical significance (p < 0.05).

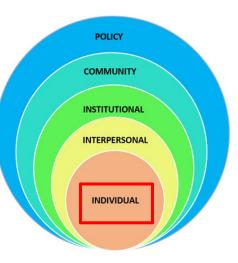
Source: Tabaac AR, Sutter ME, Wall CSJ, Baker KE. Gender identity disparities in cancer screening behaviors. American Journal of Preventive Medicine 2018;54:385-393.

#### Table 3

Receipt of (a) HPV vaccine recommendation or (b) at least one dose of HPV vaccine among rural LGBT recruited online in August 2014 who were age-eligible for HPV vaccination, stratified by current gender identity relative to sex assigned at birth.

Sex/gender measure		Received HPV vaccine reco	ommendation	Received 1+ dose of HPV vaccine			
	Category	Total N (non-missing)	Ν	%	Total N (non-missing)	Ν	%
Sex assigned at birth	Male	312	53	17.0	292	40	13.7
	Female	309	146	47.2	296	130	43.9
	Missing	39			72		
Gender identity	Male	294	51	17.3	275	39	14.2
	Female	241	109	45.2	230	97	42.2
	Transman	36	17	47.2	34	14	41.2
	Transwoman	15	1	6.7	15	1	6.7
	Non-binary	14	6	42.9	14	7	50.0
	Missing	60			92		
Sex assigned at birth/	Cismale	286	50	17.5	267	38	14.2
Gender identity	Cisfemale	236	109	46.2	225	97	43.1
	Transman	43	18	41.9	41	15	36.6
	Transwoman	19	1	5.3	19	1	5.3
	Non-binary, assigned male at birth	6	2	33.3	5	1	20.0
	Non-binary, assigned female at birth	29	19	41.9	29	18	62.1
	Missing	31			74		

*Source:* Bednarczyk RA, Whitehead JL, Stephenson R. Moving beyond sex: Assessing the impact of gender identity on human papillomavirus vaccine recommendations and uptake among a national sample of rural-residing LGBT young adults. *Papillomavirus Research* 2017;3:121-125.



### "It Can Promote an Existential Crisis": Factors Influencing Pap Test Acceptability and Utilization Among Transmasculine Individuals

Qualitative Health Research 1–12 © The Author(s) 2017 Reprints and permissions: sagepub.com/journalsPermissions.nav DOI: 10.1177/1049732317725513 journals.sagepub.com/home/qhr



Sarah M. Peitzmeier<sup>1,2</sup>, Madina Agénor<sup>3</sup>, Ida M. Bernstein<sup>4</sup>, Michal McDowell<sup>3,4</sup>, Natalie M. Alizaga<sup>5</sup>, Sari L. Reisner<sup>1,3,6</sup>, Dana J. Pardee<sup>1</sup>, and Jennifer Potter<sup>1,4,7</sup>

#### Abstract

Transmasculine (i.e., female-to-male transgender) individuals have lower rates of cervical cancer screening than nontransgender women and often report negative experiences with the Pap test. Deciding to undergo screening and the test experience itself are characterized by the following processes: *negotiating identity* as the patient, provider, and insurance company wrestle with the degree of (in)congruence between a patient's masculine gender identity and their conception of the Pap test as feminine; *bargaining for health* as a Pap test may be required to obtain medical transition services or avoid undesired health outcomes; *withstanding acute challenges* during the Pap test to body, identity, and privacy; or *reframing challenges as affirmation*. The degree of distress triggered by the Pap test varied from "routine" to traumatic. Participants affirmed that a trusted, trans-competent health care provider could significantly reduce barriers to regular and satisfactory cervical cancer screening. Data are from 32 in-depth Interviews conducted in Boston, Massachusetts, with transmasculine individuals; a modified grounded theory approach informed the analysis.

LGBT Health Volume 4, Number 4, 2017 © Mary Ann Liebert, Inc. DOI: 10.1089/lgbt.2016.0187

### ORIGINAL ARTICLE

Cervical Cancer Screening Preferences Among Trans-Masculine Individuals: Patient-Collected Human Papillomavirus Vaginal Swabs Versus Provider-Administered Pap Tests

Michal McDowell, MPH<sup>1,2</sup> Dana J. Pardee<sup>3</sup>, Sarah Peitzmeier, MSPH<sup>3,4</sup> Sari L. Reisner, ScD<sup>3,5,6</sup>, Madina Agénor, ScD, MPH<sup>7</sup>, Natalie Alizaga, MPH, MPhil<sup>8</sup>, Ida Bernstein, MD<sup>1</sup>, and Jennifer Potter, MD<sup>1,3,9</sup>

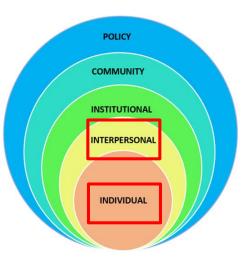
#### Abstract

**Purpose:** Trans-masculine (TM, i.e., persons who have a masculine spectrum gender identity, but were assigned female sex at birth) individuals face disparities in cervical cancer screening rates compared to cisgender women. Some unique barriers to screening in this population are specific to Pap tests. Introduction of self-collected frontal (i.e., vaginal) swabs for human papillomavirus (HPV) testing as a screening strategy may obviate these barriers. This study elucidates cervical cancer screening preferences among TM individuals.

Methods: TM individuals participated in in-depth interviews (n=31) and online surveys (n=32) to explore perceptions and experiences regarding cervical cancer screening, including the acceptability of self-collected frontal HPV swabs for cervical cancer screening compared to provider-administered Pap tests. Provider-collected frontal HPV swab acceptability was also explored.

**Results:** Most TM individuals (94% in-person and 91% online participants) preferred either the self- or providercollected frontal HPV swab to the Pap test. Participants perceived self- and provider-collected frontal HPV swabs to be less invasive, provoke less gender discordance, and promote a greater sense of agency compared to Pap tests. However, some participants expressed concern about HPV swab accuracy and, regarding the self-collected swab, discomfort about the need to engage with genitals they may not want to acknowledge. Individuals who reported positive provider relationships found Pap tests and provider-collected frontal swabs more acceptable than those who did not.

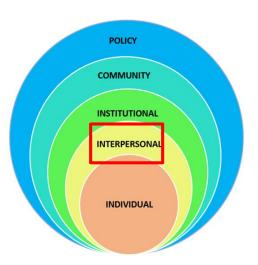
**Conclusion:** Frontal HPV swabs have the potential to promote regular cervical cancer screening among TM individuals and to narrow screening disparities. Work is ongoing to establish swab accuracy and develop shared decision-making tools.



### Perceptions of cervical cancer risk and screening among transmasculine individuals: patient and provider perspectives

Madina Agénor<sup>a</sup>, Sarah M. Peitzmeier<sup>b</sup>, Ida M. Bernstein<sup>c</sup>, Michal McDowell<sup>c</sup>, Natalie M. Alizaga<sup>d</sup>, Sari L. Reisner<sup>e</sup>, Dana J. Pardee<sup>f</sup> and Jennifer Potter<sup>g</sup>

<sup>a</sup>Department of Social and Behavioral Sciences, Harvard TH Chan School of Public Health, Boston, USA; <sup>b</sup>Department of Population, Family and Reproductive Health, Johns Hopkins Bloomberg School of Public Health, Baltimore, USA; <sup>c</sup>Harvard Medical School, Boston, USA; <sup>d</sup>Department of Psychology, The George Washington University, Washington, USA; <sup>e</sup>Division of General Pediatrics, Boston Children's Hospital/Harvard Medical School, Boston, USA; <sup>f</sup>Fenway Health, The Fenway Institute, Boston, USA; <sup>g</sup>Department of Medicine, Beth Israel Deaconess Medical Center/Harvard Medical School, Boston, USA



#### ABSTRACT

Transmasculine people (individuals assigned a female sex at birth who identify as male or masculine) are at risk of cervical cancer. Despite low rates of Pap test use in this population, research examining the determinants of cervical cancer screening among transmasculine individuals is scarce. We conducted in-depth interviews and focus groups with 49 participants (32 transmasculine patients and 17 healthcare providers) in order to examine transmasculine individuals' and healthcare providers' perceptions of cervical cancer risk and screening among individuals on the transmasculine continuum. Overall, patients believed that transmasculine individuals should receive regular Pap tests, especially in the event of gynaecological concerns. While healthcare providers' views varied, many perceived transmasculine individuals to be at low risk of cervical cancer. Contrary to existing screening guidelines, several providers believed that transmasculine individuals who did not engage in penile-vaginal intercourse with cisgender men, expressed discomfort about Pap testing or intended to obtain a hysterectomy might not need to be screened regularly or at all. Our findings underscore the importance of educating patients and providers about cervical cancer risk among transmasculine individuals and establishing evidencebased guidelines for cervical cancer screening in this underserved population.

#### **ARTICLE HISTORY**

Received 14 September 2015 Accepted 7 April 2016

Taylor & Francis

Taylor & Francis Group

#### **KEYWORDS**

Transgender; transmasculine; healthcare providers; cervical cancer; risk perceptions; USA



Check for updates

## Enacting power and constructing gender in cervical cancer screening encounters between transmasculine patients and health care providers

Sarah M. Peitzmeier<sup>a</sup>\* (), Ida M. Bernstein<sup>b</sup>\*, Michal J. McDowell<sup>c</sup>, Dana J. Pardee<sup>d</sup>, Madina Agénor<sup>e,f</sup>, Natalie M. Alizaga<sup>g,h</sup>, Sari L. Reisner<sup>d,e,i</sup> () and Jennifer Potter<sup>c,d,j</sup>

<sup>a</sup>School of Nursing, Center for Sexuality and Health Disparities, University of Michigan, Ann Arbor, MI, USA; <sup>b</sup>Department of OB/GYN, Brown University, Providence, RI, USA; <sup>c</sup>Harvard Medical School, Boston, MA, USA; <sup>d</sup>Fenway Health, Boston, MA, USA; <sup>a</sup>Harvard T.H. Chan School of Public Health, Boston, MA, USA; <sup>f</sup>Department of Community Health, Tufts University, Medford, MA, USA; <sup>g</sup>Center for Tobacco Control Research and Education, Cardiovascular Research Institute, University of California San Francisco, San Francisco, CA, USA; <sup>h</sup>Cañada College, Department of Psychology, Redwood City, CA, USA; <sup>l</sup>Boston Children's Hospital, Boston, MA, USA; <sup>J</sup>Beth Israel Deaconess Medical Center, Boston, MA, USA

#### ABSTRACT

Transmasculine people are at risk of cervical cancer but have lower rates of cervical cancer screening than cisgender women. Disaffirmation of the patient's gender and unequal power dynamics between patient and provider during screening contribute to patient unwillingness to be screened. The mechanisms by which the balance of power may be shifted between patient and provider, and by which gender is constructed during the Pap test, are not well understood. A qualitative study using a modified grounded theory approach was undertaken to analyse patient interview and provider interview and focus group data pertaining to power and gender in the context of cervical cancer screening among transmasculine individuals. The study was conducted at an LGBTQ-focussed health centre in Boston, USA. Processes by which power is enacted included constraining or affirming patient choice, mitigating or exacerbating vulnerability, and self-advocacy. Gendering processes included naming patients and their bodies, invoking gender norms, de-gendering/re-gendering Pap tests, and othering or normalising trans bodies. The interplay between these processes promotes or constrains patient agency over body and health, impacting patient care, patient-provider interaction, and service utilisation. Understanding patient and provider roles in power and gender dynamics are critical for the provision of patient-centred care.



POLICY

COMMUNITY

INSTITUTIONAL

INTERPERSONAL

#### ARTICLE HISTORY

Received 6 February 2019 Accepted 4 October 2019

#### KEYWORDS

Gender; patient-provider interaction; Pap testing; transgender; empowerment; cancer screening



- **25%** had a problem with <u>health</u> <u>insurance</u> related to being transgender in past year
- 33% had at least one <u>negative health</u> <u>care experience</u> related to being transgender in past year
- 23% didn't see a doctor when they needed in past year to due to <u>fear of</u> <u>being mistreated</u> as a transgender person
- **33%** didn't see a doctor when they needed in past year to due to <u>cost</u>

"When I was in college, I had my health insurance list me as male, and then they denied coverage for my routine pap smear and a gynecological prescription due to my gender."

POLICY

COMMUNITY

INSTITUTIONAL

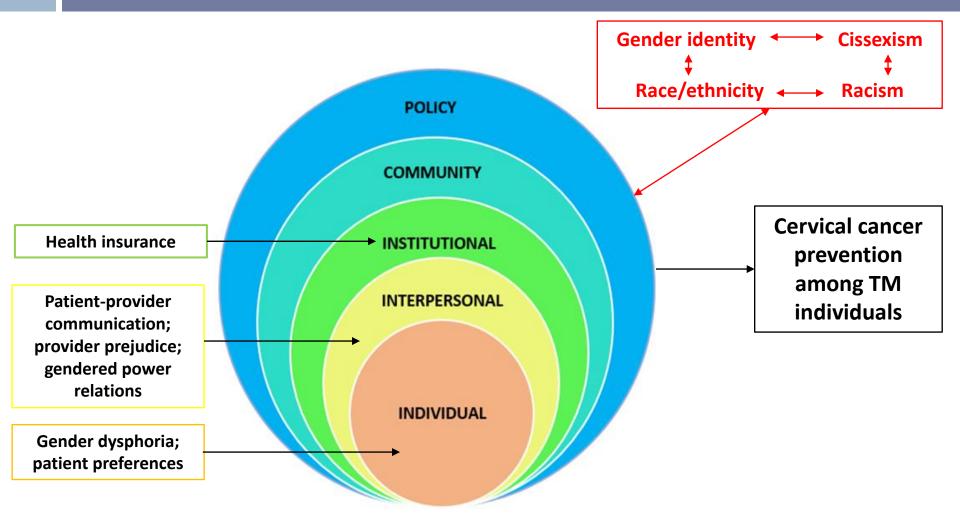
INTERPERSONAL

INDIVIDUAL

### **Racism and Cervical Cancer Prevention Among Transmasculine People**

"And even trying to find doctors that...There's this common **misconception** that Black folks, especially **Black** people who are assigned female at birth are less likely to feel **pain**. [That] is a consistent thing that I do notice [when seeking care]." 's something to imply that rsexual, that I'm a drug anything like that. That be my **race**...especially in nter places. [...] Because s so specifically centered **Q** health, I think that's t level of disappointment really came in."

## **Multilevel Social Determinants**



## Conclusions

- Sexual orientation and gender identity disparities in Pap test use and HPV vaccination
  - Heterogeneity among sexual minority women by sexual orientation and race
  - Heterogeneity among transmasculine individuals by gender identity and race
- Influence of social determinants at multiple levels in context of heterosexism, racism, and cissexism
- Multilevel interventions that are tailored to the specific needs of SGM people of color are needed to effectively address intersectional disparities

# **Research Implications**

 Center lived experiences of sexual minority women and transmasculine people of color and other multiply marginalized SGM groups

### Focus on multilevel social factors

- □ Individual, interpersonal, institutional, community, structural
- Multiple, intersecting forms of discrimination
  - Sexual orientation, race/ethnicity, gender identity, nativity, disability, weight
  - □ In health care and other social settings
  - At multiple levels (structural, cultural, institutional, interpersonal)
- Mixed- and multi-methods research (patterns and experiences)
- Critical theories and social science scholarship (social context)
- Community-based/led participatory research
  - Community engagement/leadership throughout research process, equity, action

# **Practice Implications**

### Increase competence in sexual and reproductive health care settings

- Health care provider and staff education, training, and accountability
- Hire, retain, and promote multiply marginalized health care providers
- Person-centered care with shared decision-making
- Institutional practices, policies, norms, and regulations
- Support SGM communities of color in promoting sexual and reproductive health for themselves
  - Facilitate access to tailored and accurate health information (peers)
  - Peer patient navigators who can provide support during clinical encounters
  - Cervical cancer screening in trusted community-based settings

### Address heterosexism, racism, and cissexism at all levels of society

Institutional and societal level initiatives (practices, laws, norms, regulations)

# **Questions?**

## Madina Agénor, ScD, MPH



Madina agenor@brown.edu

