Cervical cancer screening among primary care patients in an urban public safety net health system

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Purpose of Study

- In preparation for a pragmatic randomized controlled trial of mailed HPV self-sampling kits, we assessed characteristics associated with recent cervical cancer screening among women who regularly attend for primary care in an urban safety net health system in Houston, Texas.

Methods

- The electronic health record was used to identify female patients, 30-65 yrs, who attended for primary care ≥2 times in past 5 yrs.
- We excluded those with history of hysterectomy, cervical cancer, and cervical dysplasia in past 5 yrs.
- Patients were categorized as screened if they had a Pap test in the past 3.5 yrs or a Pap/HPV co-test in the past 5.5 yrs.

Results

- Among 49,699 patients identified, 77.7% were screened, mostly by Pap/HPV co-testing (95%). All underscreened women had a previous Pap test on record (i.e. none never-screened).
- In bivariable analyses, Hispanic women were more likely than White women to be screened. After controlling for insurance status and language, Hispanic women were less likely to be screened.

Table 1. Association between sociodemographic characteristics and recent cervical cancer screening status.

	PR (95% CI)	APR (95% CI)
Race/Ethnicity		
White	Ref	Ref
Hispanic/Latino	1.31 (1.21-1.43)*	0.82 (0.75-0.91)*
Black	0.89 (0.81-0.97)	0.97 (0.98-1.06)
Asian	4.65 (3.78-5.72)*	3.23 (2.53-4.15)*
Other	2.66 (2.30-3.08)*	1.89 (1.63-2.21)*
Unknown	0.52 (0.45-0.60)*	0.52 (0.44-0.62)*
Insurance		
Commercial	Ref	Ref
Indigent/County	2.47 (2.32-2.62)*	2.32 (2.18-2.47)*
Medicaid	0.64 (0.59-0.68)*	0.68 (0.63-0.73)*
Medicare	0.60 (0.54-0.67)*	0.67 (0.60-0.75)*
None	0.68 (0.64-0.73)*	0.69 (0.65-0.74)*
Other	0.92 (0.77-1.09)	0.96 (0.81-1.14)
Language		
English	Ref	Ref
Spanish	1.61 (1.54-1.68)*	1.48 (1.38-1.58)*
Vietnamese	1.17 (1.50-1.93)*	1.17 (0.96-1.42)
Other	1.99 (1.64-2.41)*	1.38 (1.11-1.70)*

PR: prevalence ratio; APR: adjusted prevalence ratio--adjusted for variables in model; *significant at p<0.05

Conclusion

- Prevalence of underscreening in our health system is higher than nationally (22.3 vs. 18.9%), despite patients' frequent use of primary care.
- The reversal of the association between Hispanic ethnicity and screening status after controlling for insurance status may reflect higher screening prevalence among immigrants, who are predominantly covered by the county program given ineligibility for federal programs.
- The PRESTIS trial will test whether screening participation increases when underscreened patients are mailed unsolicited HPV self-sampling kits.

PRESTIS Trial: PRospective Evaluation of Self-Testing to Increase Screening

Arm 1. Enhance usual care (n=754)
Arm 2. Mailed HPV self-sampling kit (n=754)
Arm 3. Mailed HPV self-sampling kit + Patient Navigation (n=754)

Primary Outcome: Screening participation

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Acknowledgements

1 Baylor College of Medicine / DAN L DUNCAN COMPREHENSIVE CANCER CENTER
2 HARRIS HEALTH SYSTEM
5 THE UNIVERSITY OF TEXAS MD Anderson Cancer Center — Making Cancer History®
4 USF HEALTH
3 UTHealth The University of Texas Health Science Center at Houston