Patient Acceptance of Decreased Cervical Cancer Screening Frequency in an Urban Practice

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Background

History

- 1928 George Papanicolaou discovers malignant cervical cells can be seen through a microscope
- 1943 First introduction of Pap Smear Test
- 1983-84 Human papillomavirus is discovered to cause cervical cancer
- 1988 The Bethesda System standardizes Pap test results
- 1999 DNA testing for HPV approved
- 2006 HPV vaccine approved; 2009 approved for boys
- 2012-13 ASCCP, ACOG & USPSTF support current guidelines for cervical cancer screening
Background

**Summary**

- Guidelines are designed to maximize benefits and limit potential harm from over-screening.
- Over two decades have passed since the first triennial frequency was proposed.
- Providers and women continue to view the increased interval with resistance and suspicion.
- NPWH (2015) conducted a survey of patients, nurse practitioners, primary care physicians, and gynecologists:
  - all had the same reluctance to embrace guideline changes.
  - all providers believed the interval would not be a positive contribution to their patients’ health.
  - there is a lack of patient understanding regarding the purpose of cervical cancer screening.
- Most HPV infections are transitory and regress within 1-2 years, those that do not regress may take years to undergo oncogenic changes.
Purpose of the Study

- To examine women’s preferences for cervical cancer screening frequency in a multiethnic urban medical practice
Overview of the Literature

Risks of overtesting

- Unnecessary procedures
- Stigma of having sexually transmitted infection
- Cervical damage
Overview of the Literature

Concerns of providers

- Providers play a key role in dissemination of guidelines and recommendations
- The majority of physicians do not adhere to the recommended screening guidelines
- Reasons identified by physicians
  - fear of litigation in case of poor outcomes
  - patient expectations
  - assuage patient anxiety
  - client retention
  - guidelines frequently change
Overview of the Literature

Concerns of women

- Many studies concluded that women are reluctant to extend the cervical cancer screening interval

- Reasons identified by women
  - anxiety regarding cervical cancer
  - fear of a cervical cancer diagnosis
  - expectation of annual testing
  - low-income status predicted less acceptance
  - they attributed reason for less frequent screening to insurance companies dictating their health

- Most women did not know the purpose of cervical cancer screening

- Education and age were not consistent predictors of acceptance
Methods

- **Design**
  - descriptive, cross-sectional design

- **Setting**
  - two private offices located in New York City

- **Sample**
  - convenience sample of women, N = 250
  - inclusion criteria
    - age 33-65
  - exclusion criteria
    - history of gynecologic cancer
    - removal of cervix
    - pregnancy

- **Protection of Human Subjects**
  - Stony Brook University IRB approval
Methods

- **Survey**
  - self-administered
  - adapted with permission from Silver et al. (2015)

- **Survey questions**
  - participants’ current cervical cancer screening frequency
  - opinions about appropriate screening intervals
  - perceived risk of a personal cervical cancer diagnosis
  - concerns about a longer screening interval

- **Analysis**
  - descriptive statistics and bivariate analyses used to characterize the sample and examine associations between variables
### Description of the Sample

<table>
<thead>
<tr>
<th>N = 250</th>
<th>Age, years (mean = 44.1, SD = 8.4)</th>
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<tbody>
<tr>
<td>33-41</td>
<td>50.4%</td>
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</tr>
<tr>
<td>42-51</td>
<td>28.4%</td>
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<td>52-60</td>
<td>21.2%</td>
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<table>
<thead>
<tr>
<th>Ethnicity</th>
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<tr>
<td>African American</td>
<td>39.2%</td>
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<tr>
<td>Hispanic</td>
<td>31.6%</td>
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<tr>
<td>Caucasian</td>
<td>22.0%</td>
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<tr>
<td>Other</td>
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<table>
<thead>
<tr>
<th>Marital Status</th>
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<tbody>
<tr>
<td>Single, never married</td>
<td>33.2%</td>
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<tr>
<td>Married</td>
<td>30.8%</td>
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<td>Separated/Divorced/Widowed</td>
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<tr>
<td>Unmarried, living with partner</td>
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<table>
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<th>Education</th>
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<td>24.0%</td>
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<tr>
<td>Some College</td>
<td>18.4%</td>
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<tr>
<td>Completed four years college</td>
<td>34.4%</td>
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<tr>
<td>Five or more years of college</td>
<td>23.2%</td>
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</tbody>
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Results

- Most women ($n = 170, 68\%$) preferred to have annual screening even if their provider suggested triennial screening
  - of these women, 90\% reported early cancer detection as the reason for annual screening preference

- Other reasons for preferring annual testing
  - history of an abnormal cancer screening
  - fear/anxiety
  - family history of cancer
  - new partner/new exposure

- Most participants ($n = 221, 88.4\%$) thought women their age should have a Pap screening annually

- Most participants ($n = 206, 82\%$) felt their chances of getting cervical cancer were low chance to no chance
Clinical Implications

- Patient acceptance of the changes in cervical cancer screening recommendations has been slow.
- There is a gap between implementation of evidence-based guidelines and actual practice.
- There is a need for patient education about human papillomavirus, the pathogenesis of cervical cancer, and the evidence that supports the screening recommendations.
Acknowledgments

References


