INTRODUCTION

Colorectal cancer (CRC) is the 3rd most commonly diagnosed cancer among Asian American and Pacific Islander (API) men and the 2nd most commonly diagnosed cancer among API women. CRC is also the third leading cause of cancer-related deaths among APIs.

Although regular CRC screening can prevent and detect cancer early when it is highly curable, APIs aged 50-75 years (54.4%) continue to have lower screening prevalence as compared to Non-Hispanic Whites (66.4%) and Non-Hispanic Blacks (64.8%) according to data from the 2010 Behavioral Risk Factor Surveillance System.

Few if any studies have employed a mixed method approach to examine non-cultural and cultural facilitators and barriers of CRC screening in Asian Americans.

OBJECTIVE

To examine facilitators and barriers of CRC screening among Chinese and Korean Americans.

METHODS

Study Design
- Mixed Methods Study

Study Population
- Chinese and Korean Americans, aged 50-85 years, residing in the Washington, D.C. metropolitan area
- Individuals with a history of CRC were excluded from the study

Outcome
- Ever received a colonoscopy

Data Collection and Analysis
- Quantitative Data
  - Data collected from self-administered surveys completed by 120 focus group participants
  - Independent variables: items on facilitators and barriers of CRC screening
  - Covariates: age, years of U.S. residency, income, marital status
  - Final statistical analysis was conducted using multivariable-adjusted logistic regression

- Qualitative Data
  - Key informant interviews were conducted from January to March 2014 with 7 community leaders and 10 physicians
  - 12 focus groups were conducted from May to August 2014 and consisted of 120 participants
  - Prompted by semi-structured open-ended questions, participants were asked to discuss salient non-cultural and cultural facilitators and barriers of CRC screening.
  - Interviews and focus groups were audiorecorded and transcribed.
  - Data were analyzed using standard text analysis and the coding structure was developed using grounded theory and content analysis.

RESULTS

Characteristics of Focus Group Participants

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Total (n=120)</th>
<th>Ever Screened (n=50)</th>
<th>Never Screened (n=70)</th>
<th>p-value*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age in Years (mean, SD)</td>
<td>62.9 (7.5)</td>
<td>64.3 (6.7)</td>
<td>61.9 (7.9)</td>
<td>0.08271</td>
</tr>
<tr>
<td>Years of U.S. Residency (mean, SD)</td>
<td>19.3 (12.2)</td>
<td>22.8 (11.6)</td>
<td>16.6 (12)</td>
<td>0.00721</td>
</tr>
<tr>
<td>Gender (n, %)</td>
<td>Male</td>
<td>47 (39.2)</td>
<td>17 (34.0)</td>
<td>30 (42.9)</td>
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<tr>
<td>Female</td>
<td>73 (60.8)</td>
<td>33 (66.0)</td>
<td>40 (57.1)</td>
<td>0.5576</td>
</tr>
<tr>
<td>Race (n, %)</td>
<td>Chinese</td>
<td>59 (49.2)</td>
<td>23 (46.0)</td>
<td>36 (51.4)</td>
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<tr>
<td>Korean</td>
<td>61 (50.8)</td>
<td>27 (54.0)</td>
<td>34 (48.6)</td>
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</tr>
<tr>
<td>Education (n, %)</td>
<td>Less than high school</td>
<td>24 (20.0)</td>
<td>10 (20.0)</td>
<td>14 (20.0)</td>
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<tr>
<td>High school graduate</td>
<td>25 (20.8)</td>
<td>9 (18.0)</td>
<td>16 (22.9)</td>
<td></td>
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<tr>
<td>College graduate</td>
<td>36 (30.0)</td>
<td>17 (34.0)</td>
<td>19 (27.1)</td>
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<tr>
<td>Graduate school or more</td>
<td>18 (15.0)</td>
<td>8 (16.0)</td>
<td>10 (14.3)</td>
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<tr>
<td>Income (n, %)</td>
<td>Less than $10,000</td>
<td>38 (31.7)</td>
<td>12 (24.0)</td>
<td>26 (37.1)</td>
</tr>
<tr>
<td>$10,001 - $25,000</td>
<td>31 (25.8)</td>
<td>15 (30.0)</td>
<td>16 (22.9)</td>
<td></td>
</tr>
<tr>
<td>$25,001 - $50,000</td>
<td>19 (15.8)</td>
<td>5 (10.0)</td>
<td>14 (20.0)</td>
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<tr>
<td>$50,001 - $75,000</td>
<td>14 (11.7)</td>
<td>8 (16.0)</td>
<td>6 (8.6)</td>
<td></td>
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<tr>
<td>More than $75,000</td>
<td>18 (15.0)</td>
<td>10 (20.0)</td>
<td>8 (11.4)</td>
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<tr>
<td>Marital Status (n, %)</td>
<td>Married</td>
<td>104 (86.7)</td>
<td>45 (90.0)</td>
<td>59 (84.3)</td>
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<tr>
<td>Not married</td>
<td>16 (13.3)</td>
<td>5 (10.0)</td>
<td>11 (15.7)</td>
<td></td>
</tr>
</tbody>
</table>

* p-values from t-tests, Fisher's exact tests, and chi-square tests

Quantitative Analysis

- Unadjusted and adjusted ORs for Colonoscopy Specific Facilitators and Barriers and Ever Having a Colonoscopy (n=94)

Qualitative Analysis - Key Facilitators and Barriers of CRC Screening

- Non-cultural Barriers: Lack of CRC knowledge and awareness, concerns relating to the procedure, and logistical issues (e.g., time and transportation)
  - “Even if we try to screen early, cost is always the issue…Taking the fluid and the hardships - I can deal with that, but cost is the biggest issue.”

- Non-cultural Facilitators: Having a physician’s recommendation, regular physician, CRC education, and having friends/family with CRC
  - “I do whatever the doctor tells me to do.”

- Cultural Barriers: Fear of finding cancer, language barriers, burden to family, and beliefs of health and disease (e.g., not seeking care until symptoms present)
  - “If I have no symptoms for CRC now, I am not going spend my time and money to get screening in the U.S.”

- Korean specific: embarrassment due to procedure and physician mistrust

- Cultural Facilitators: Linguistically appropriate services, use of ethnic media to promote screening, and respect for authority such as physicians
  - “We have to go to a doctor, but due to communication issues we seek Korean offices.”

CONCLUSIONS & PUBLIC HEALTH IMPLICATIONS

- Findings from this study can inform the development of culturally tailored awareness and education programs to increase CRC screening among Chinese and Korean Americans.

- Strategies that address the identified facilitators and barriers can also potentially reduce CRC related morbidity and mortality in these populations through early detection and treatment.

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