CANCER DISPARITIES IN ASIAN AMERICANS: PUBLIC POLICY VS PUBLIC HEALTH

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Conflict of Interest

- NCI P20-South Side Cancer Disparities Initiative
- AHRQ R24: Partnership for Healthier Asians
- NCI: Community Health Educator supplement
- CDC U54: Hepatitis B Education and Prevention
- President: Asian Health Coalition
- VP: National Council of Asian American Pacific Island Physicians
- Steering committee-National Viral Hepatitis Roundtable
- Executive board: American Cancer Society
Objectives

- Asian American Demographics and Immigration History
- Cancer among Asian Americans
- Colorectal cancer: Public health and public policy partnership
Who Lives In the Global Village?

If Only 100 people Lived In the World, There Would Be......

61 Asians
13 Africans
12 Europeans
9 Latin Americans
5 North Americans
Asian American Immigration History

- 1763 - Filipinos in US - escapees from Spanish ships
- Early 1850’s California Gold rush
- 1882 - Chinese Exclusion Act
- 1922 - Japanese made ineligible for citizenship
- 1942-46 - Executive Order 9066 - Japanese internment (> 2/3 were US citizens)
- 1965 - Hart Cellar Act - abolished national origin quotas (Japan 185, China 105, other Asian 100)
- 1990 - Immigration Act
In the first discharge of emotions touched off by the Japanese assaults on their nation, U. S. citizens have been demonstrating a distressing ignorance on the delicate question of how to tell a Chinese from a Jap. Innocent victims in cities all over the country are many of the 75,000 U. S. Chinese, whose homeland is our staunch ally. So serious were the consequences threatened, that the Chinese consulates last week prepared to tag their nationals with identification buttons. To dispel some of this confusion, LIFE here adduces a rule-of-thumb from the anthropometric conformations that distinguish friendly Chinese from enemy alien Japs.

To physical anthropologists, devoted debunkers of race myths, the difference between Chinese and Japs is measurable in millimeters. Both are related to the Eskimo and North American Indian. The modern Jap is the descendant of Mongoloids who invaded the Japanese archipelago back in the mists of prehistory, and of the native aborigines who possessed the islands before them. Physical anthropology, in consequence, finds Japs and Chinese as closely related as Germans and English. It can, however, set apart the special types of each national group.
**CHINESE**
Parchment yellow
More epicanthic folds
Higher bridge
Never rosy cheeks
Lighter facial bones
Longer face

**JAPANESE**
Earthy yellow
Less epicanthic folds
Flatter nose
Sometimes rosy cheeks
Heavy beard
Shorter face

*Life* magazine of December 1941
Asian American Immigration History

- 1763 - Filipinos in US - escapees from Spanish ships
- Early 1850’s California Gold rush
- 1882 - Chinese Exclusion Act
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- 1965 - Hart Cellar Act - abolished national origin quotas (Japan 185, China 105, other Asian 100)
- 1990 - Immigration Act
Percent Population Growth
by Race and Hispanic Origin, United States 2000 to 2010

- Asian American: 46%
- Hispanic: 43%
- NHPI: 40%
- AIAN: 27%
- African American: 15%
- Total Population: 10%
- White: 1%

Source: U.S. Census Bureau, 2000 and 2010 Censuses,
Health Care Goals

- Healthy People 2015 → 50% reduction in cancer mortality; 25% reduction in cancer incidence
- DHHS → Eliminate health disparities by year 2010

Problems for AAPI

- Paucity of Data for AAPI subgroups
- Marginal funding for AAPI
- Health care system
- Model minority status
Marginal funding for AAPI

- **MEDLINE database-1966-2000**
  - 10 million articles
  - 1499 (0.01%) directly involve AAPI health

- **CRISP database-1986-2000**
  - 150,369 federal health related grants
  - 342 (0.2%) for AAPI health

How do we translate ‘evidence based’ medicine into communities?
Journal of Asian American Health (JAAH)
Demographic Trends

- In 2010, > 70% of Asian Americans are foreign born*
- >35% are linguistically isolated

* Highest percentage for any racial/ethnic group
Health Care System and AAPI

- AAPI stand out as being one of the least well-served
- Asian Americans are least likely to:
  - Feel that their providers understand them
  - Be involved in medical decision making
  - Have confidence in their providers
Model Minority

- African American - sick, poor, diabetes, cancer, disenfranchised, obese, violence, can’t understand

- Asian American - healthy, bird flu, smart, listens, skinny
Cancer 2013

- 1.66 million new cancer diagnosed in 2013
- 580,350 cancer deaths
- 1600 deaths/day
- 1 in 4 deaths
- 226 billion – cost of cancer
WHO IS MOST AT RISK?

Increase in Cancer Incidence by 2030

- 31%
- 64%
- 76%
- 101%
- 132%
- 142%
WHO IS MOST AT RISK?

Increase in Cancer Incidence by 2030

- White: 31%
- Black: 64%
- American Indian: 76%
- Multirace Hispanic: 101%
- Asian: 132%
- Hispanic: 142%
Cancer and Asian Americans

1980’s-Asian Americans were the first population to die from cancer as the #1 cause of death

In 2009

<table>
<thead>
<tr>
<th>US-Born AAPI males</th>
<th>Foreign-born AAPI males</th>
<th>US-Born AAPI females</th>
<th>Foreign born AAPI females</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heart dz</td>
<td>Cancer</td>
<td>Cancer</td>
<td>Cancer</td>
</tr>
<tr>
<td>Cancer</td>
<td>Heart dz</td>
<td>Heart dz</td>
<td>Heart dz</td>
</tr>
</tbody>
</table>
Asian Americans and Cancer Risk Factors

- Chronic Hepatitis B Infection → LIVER CANCER
- H pylori infection and diet → STOMACH CANCER
- Epstein Barr (EB) virus → NASOPHARYNGEAL CANCER
- Human papilloma virus (HPV) → CERVICAL CANCER
- Lifestyle factors (Migration effect) → BREAST CANCER, COLORECTAL CANCER
Estimated New Cancer Cases* in the US in 2013

<table>
<thead>
<tr>
<th></th>
<th>Men</th>
<th>Women</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prostate</td>
<td>28%</td>
<td>29%</td>
</tr>
<tr>
<td>Lung &amp; bronchus</td>
<td>14%</td>
<td>14%</td>
</tr>
<tr>
<td>Colon &amp; rectum</td>
<td>9%</td>
<td>9%</td>
</tr>
<tr>
<td>Urinary bladder</td>
<td>6%</td>
<td>6%</td>
</tr>
<tr>
<td>Melanoma of skin</td>
<td>5%</td>
<td>6%</td>
</tr>
<tr>
<td>Kidney &amp; renal pelvis</td>
<td>5%</td>
<td>4%</td>
</tr>
<tr>
<td>Non-Hodgkin lymphoma</td>
<td>4%</td>
<td>4%</td>
</tr>
<tr>
<td>Oral cavity</td>
<td>3%</td>
<td>3%</td>
</tr>
<tr>
<td>Leukemia</td>
<td>3%</td>
<td>3%</td>
</tr>
<tr>
<td>Pancreas</td>
<td>3%</td>
<td>3%</td>
</tr>
<tr>
<td>All Other Sites</td>
<td>20%</td>
<td>19%</td>
</tr>
</tbody>
</table>

*Excludes basal cell and squamous cell skin cancers and in situ carcinoma except urinary bladder.
Cancer Screening for Asian Americans

How do we participate in public health?

- Nasopharyngeal cancer – no screening
- Liver cancer – no screening coverage in US
- Stomach cancer – no screening guidelines in US

- Breast cancer – 64%
- Cervical cancer – 75%
- Colorectal cancer – 47%
LEP and cancer screening

[Bar chart showing the percentage of individuals with and without English proficiency who underwent PAP, CBE, and Mammo screening.]
Public Health vs Public Policy
Public Health Interventions to Policy

- **Downstream** - individuals, communities
- **Midstream** - organizations
- **Upstream** - regulations, access, economic incentives (policy)

![Bar chart showing percentages for Total, Downstream, Midstream, and Upstream interventions.]

- Total: 66%
- Downstream: 28%
- Midstream: 6%
- Upstream: 6%

*Brownson et al. Prev Chronic Dis 2010*
Gastric Cancer

- 2nd most common Worldwide
  - 10% all cancers, 12.1% cancer deaths
- Koreans have the highest prevalence worldwide
- Ranks in the top 10 cancers among Koreans, Vietnamese, Japanese
- Early detection decreases mortality
In the US, less than 10-20% of all gastric cancers are found in the early stages → 15% survival
The Affordable Care Act requires health plans and encourages state-based Medicaid programs to cover those clinical preventive services recommended by the U.S. Preventive Services Task Force (USPSTF) graded ‘A’ or ‘B’.

- Gastric cancer screening
  - No current recommendations
  - Will this become a covered service?
Barriers to Screening for Gastric Cancer: Evidence of Benefit

- No randomized controlled trials reported showing a decrease in mortality.

- Failure to identify early gastric cancer in the US is most likely due to:
  - Low incidence (in majority population)
  - Lack of risk stratification
  - Lack of aggressive screening
Gastric Screening Guidelines
The future?

ASGE 2010

‘suggest screening EGD for new US immigrants from high-risk regions-especially with a family history’
Public Health Interventions/Outcomes

- **Downstream** - individuals, communities
- **Midstream** - organizations
- **Upstream** - regulations, access, economic incentives (policy)

![Bar chart showing distribution of interventions/outcomes]

- Total: 66%
- Downstream: 28%
- Midstream: 6%
- Upstream: 6%

Prev Chronic Dis 2010
# Chronic Hepatitis B (CHB) & Asians

<table>
<thead>
<tr>
<th>~400 million infected worldwide</th>
<th>75% are from Asia</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt;1.3 million infected in US</td>
<td>&gt; 50% are AAPI</td>
</tr>
<tr>
<td>Prevalence is 0.3% for the general population in US</td>
<td>Prevalence is 5-15% among AAPI in US (up to 30% in some groups)</td>
</tr>
<tr>
<td>Liver cancer rates increasing in US</td>
<td>Liver cancer is 3rd leading cause of cancer in Asians</td>
</tr>
</tbody>
</table>


Estimated New Chronic HBV Infections by Place of Acquisition, United States, 1990-2005

United States Immigrants from other countries

CDC, 2006
Policies and hepatitis B
The Affordable Care Act requires health plans and encourages state-based Medicaid programs to cover those clinical preventive services recommended by the U.S. Preventive Services Task Force (USPSTF) graded ‘A’ or ‘B’. 

Strongly recommends screening for hepatitis B virus (HBV) infection in pregnant women at their first prenatal visit.

‘A’ Recommendation
## Estimated Births to HBsAg-Positive Mothers, United States, 2003

<table>
<thead>
<tr>
<th>Race/Ethnicity</th>
<th>2003 Births</th>
<th>CDC Point Estimate</th>
<th>Pooled Estimate*</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>%</td>
<td>N</td>
</tr>
<tr>
<td>White</td>
<td>2,321,904</td>
<td>0.11</td>
<td>2,554</td>
</tr>
<tr>
<td>African American</td>
<td>576,033</td>
<td>0.5</td>
<td>2,880</td>
</tr>
<tr>
<td>API- US Born</td>
<td>37,384</td>
<td>1.4</td>
<td>523</td>
</tr>
<tr>
<td>API- Foreign Born</td>
<td>182,862</td>
<td>8.9</td>
<td>16,275</td>
</tr>
<tr>
<td>Hispanic</td>
<td>912,329</td>
<td>.09</td>
<td>821</td>
</tr>
<tr>
<td>American Indian</td>
<td>43,052</td>
<td>.5</td>
<td>215</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>4,073,564</strong></td>
<td><strong>23,269</strong></td>
<td><strong>19,735</strong></td>
</tr>
</tbody>
</table>

* Prevalence studies in 18 states since 1990
Recommends against routinely screening the general asymptomatic population for chronic hepatitis B virus infection.

‘D’ Recommendation
USPSTF 2004: Rationale

- The prevalence of HBV infection is low; the majority of infected individuals do not develop chronic infection, cirrhosis, or HBV-related liver disease. Potential harms of screening include labeling, although there is limited evidence to determine the magnitude of this harm.
- Evidence-based
## Policy: FUNDING

<table>
<thead>
<tr>
<th>VIRUS</th>
<th>Prevalence (millions)</th>
<th>% unaware</th>
<th>Deaths 2006</th>
<th>Vaccine</th>
<th>CDC budget 2010</th>
<th>$ per pt</th>
</tr>
</thead>
<tbody>
<tr>
<td>HBV</td>
<td>0.8-1.4</td>
<td>65%</td>
<td>3,000</td>
<td>YES</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HCV</td>
<td>2.7-3.9</td>
<td>75%</td>
<td>12,000</td>
<td>NO</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HBV/HCV</td>
<td>3.5-5.3</td>
<td></td>
<td>15,000</td>
<td></td>
<td>24 Million</td>
<td>$4/pt</td>
</tr>
<tr>
<td>HIV</td>
<td>1.1</td>
<td>21%</td>
<td>14,016</td>
<td>NO</td>
<td>1.2 Billion</td>
<td>$1000/pt</td>
</tr>
</tbody>
</table>
Liver Cancer Has the Fastest Growing Death Rate in the United States

DISSEMINATION

SCIENCE

DISCOVERY  DEVELOPMENT  DELIVERY

CRITICAL DISCONNECT
# Five-year Relative Survival Rates of Major Cancers in Various Countries

<table>
<thead>
<tr>
<th>Site</th>
<th>Korea ('96-'00)</th>
<th>Korea ('01-'05)</th>
<th>Korea ('05-'09)</th>
<th>USA(^1) ('99-'06')</th>
<th>Canada(^2) ('04-'06)</th>
<th>Japan(^3) ('97-'99)</th>
</tr>
</thead>
<tbody>
<tr>
<td>All cancers</td>
<td>44.0</td>
<td>53.7</td>
<td>62.0</td>
<td>66.0</td>
<td>62</td>
<td>54.3</td>
</tr>
<tr>
<td>Stomach</td>
<td>46.6</td>
<td>57.7</td>
<td>65.3</td>
<td>26.0</td>
<td>22</td>
<td>62.1</td>
</tr>
<tr>
<td>Liver</td>
<td>13.2</td>
<td>20.1</td>
<td>25.1</td>
<td>13.8</td>
<td>15</td>
<td>23.1</td>
</tr>
<tr>
<td>Cervix uteri</td>
<td>80.0</td>
<td>81.2</td>
<td>80.3</td>
<td>70.2</td>
<td>70</td>
<td>71.5</td>
</tr>
<tr>
<td>Colon and rectum</td>
<td>58.0</td>
<td>66.6</td>
<td>71.3</td>
<td>65.0</td>
<td>61</td>
<td>65.2</td>
</tr>
<tr>
<td>Thyroid</td>
<td>94.9</td>
<td>98.3</td>
<td>99.7</td>
<td>97.3</td>
<td>97</td>
<td>92.4</td>
</tr>
<tr>
<td>Breast</td>
<td>83.2</td>
<td>88.4</td>
<td>90.6</td>
<td>89.0</td>
<td>82</td>
<td>85.5</td>
</tr>
<tr>
<td>Lung</td>
<td>12.7</td>
<td>16.1</td>
<td>19.0</td>
<td>15.8</td>
<td>12</td>
<td>25.6</td>
</tr>
<tr>
<td>Pancreas</td>
<td>7.6</td>
<td>8.0</td>
<td>8.0</td>
<td>5.6</td>
<td>6</td>
<td>6.7</td>
</tr>
<tr>
<td>Prostate</td>
<td>67.2</td>
<td>79.9</td>
<td>87.6</td>
<td>99.1</td>
<td>95</td>
<td>75.5</td>
</tr>
</tbody>
</table>
Colorectal cancer prevention
Colorectal Cancer Screening* (%)  
Adults 50 Years and Older by State, 2006-2008

*A fecal occult blood test within the past year or a sigmoidoscopy or colonoscopy within the past 10 years. These estimates do not distinguish between screening and diagnostic exams.

Prevalence of Screening Behaviors and Health Care Access By Sex and Asian American Ethnic Group, 2003 California Health Interview Survey

<table>
<thead>
<tr>
<th></th>
<th>Chinese</th>
<th>Filipino</th>
<th>Vietnamese</th>
<th>Korean</th>
<th>Japanese</th>
<th>White</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Males</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FOBT Screening</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&gt;1 year or never</td>
<td>81.1</td>
<td>92.3</td>
<td>85.6</td>
<td>93.1</td>
<td>89.6</td>
<td>79.6</td>
</tr>
<tr>
<td>Within past year</td>
<td>19.0</td>
<td>7.7</td>
<td>14.4</td>
<td>7.0</td>
<td>10.4</td>
<td>20.4</td>
</tr>
<tr>
<td><strong>Females</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&gt;1 year or never</td>
<td>85.4</td>
<td>86.8</td>
<td>79.4</td>
<td>92.1</td>
<td>78.2</td>
<td>79.8</td>
</tr>
<tr>
<td>Within past year</td>
<td>14.7</td>
<td>13.2</td>
<td>20.6</td>
<td>7.9</td>
<td>21.8</td>
<td>20.2</td>
</tr>
</tbody>
</table>
NHIS 2010, CRS

- White: 59.8%
- African American: 55%
- Hispanic: 46.6%
- Asian: 46.9%
- Chinese: 41.3%
- Other Asian*: 44.3%

Race/Ethnicity
SCREEN ACT

- Supporting Colorectal Examination and Education Now (SCREEN) Act (S.608/H.R. 1320)
  - Waives all Medicare beneficiary cost-sharing for CRS with polyps
  - Medicare will cover pre colon cancer screening visits
  - Supports quality service initiatives
  - CRS is covered under ACA
Total Number of Cancer Deaths Avoided from 1991 to 2008 in Men and 1992 to 2008 in Women

The blue line represents the actual number of cancer deaths recorded each year and the red line represents the expected number of cancer deaths if cancer death rates had remained the same since 1990/1991.
Affordable Care Act

- Ultimate public policy
- 15.7% uninsured
- AAPI-over 30% did not see an MD within past year-least among R/E
- 2 million AAPI projected to become insured
- Legal Permanent residents status
- 2.7 million AAPIs will have access to preventative services-greatest cancer prevention intervention
Opportunities for Asian American Health

- **Affordable Care Act**
  - From least insured → covered services
  - Medical homes

- **Electronic Medical Record**
  - Place of birth
  - Language preference
  - National database/registry

- 2013 CLAS
Opportunities for APAMSA to Reduce Disparities

- Public Awareness Campaign
  - Community, Physician, Public Health
- Partnership with other National Organizations (AMA, NMA, NCAPIP)
- Support the Pipeline
  - Cultural competency
  - Asian health disparities
Pritzker School of Medicine: Student language capacity
PSOM

- 93% (n=82)
- 28% speak on Asian language

- 1 in 5 graduating medical students are Asian American
Opportunities for APAMSA as a leadership organization

- POLICY, POLICY, POLICY
- Let the science drive public policy
- Policies reflect populations with disproportionate disease burden
- Create system change