Promoting Hepatitis B Screening for Vietnamese American Adults

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Vietnamese Community Health Promotion Project
University of California, San Francisco
Background

- Funded by the National Cancer Institute
- Part of 3 research projects in a P01 mechanism led by Moon Chen at UC Davis
  - Project 1: Vietnamese in Northern California
  - Project 2: Hmong in Sacramento
  - Project 3: Koreans in Los Angeles
- 5 years funding starting July 2006
- Build on previous work by Suc Khoe La Vang
Specific Aims

- To raise awareness among Vietnamese Americans in Northern California about hepatitis B and hepatitis-B-related liver cancer.

- To increase rates of hepatitis B screening among Northern California Vietnamese ages 18 and older through a Media Education (ME) campaign.
Vietnamese rates of liver cancer are particularly high, especially among men.
Chronic hepatitis B infection is associated with liver cancer
Screening for hepatitis B can lead to:
- Treatment to prevent progression to liver cancer
- Monitoring for liver cancer
- Screening and vaccination of contacts
Low screening rates are documented among Vietnamese
Rationale for Scientific Aims

Prior Study Results

In a controlled trial to increase hepatitis B vaccination in Texas, Media Education was effective:

- Parents’ knowledge increased significantly
  - Heard of hepatitis B: 21.5% vs. 9% control
  - Heard off free hepatitis B vaccine: 31.9% vs. 4.7%
  - Knew hepatitis B is sexually transmitted: 14.0% vs. 5.2%

- Children’s receipt of hepatitis B vaccination
  - Receipt of 3 shots: 9.5% vs. -3.3% in control

(McPhee et al, 2003; Zhou et al, 2003)
Overview of Study Design

Pre-Intervention Survey

**Intervention:**
Northern California

**Media Education**

**Control:**
Washington, D.C., Virginia, Maryland, Pennsylvania, Delaware

None

Post-Intervention Survey

Short media campaign
Interventions

3.25 years of intervention

Media Education (ME) Campaign:

- **Print Media**
  - *Viem Gan B* booklet
  - Newspaper ads, articles
  - Calendars, info-cards, postcards

- **Electronic Media**
  - Radio, TV, theater ads
  - CDs, e-cards
  - Website: [www.123hepBfree](http://www.123hepBfree)

- **Linkage to low-cost or free clinics, county clinics**
Intervention Development

- Strategies to reach young bilingual bicultural Vietnamese Americans
  - Focus groups to discuss media sources and techniques that are effective
  - Targeted advertisements
  - Others
    - CDs
    - E-cards
    - Postcards
    - Website
Intervention Content Guided by the Health Behavior Framework

**Individual Variables**
- Knowledge
- Communication & rapport with provider
- Health Beliefs
- Social Support/Norms
- Cultural Factors

**Physicians & Health Care Systems Variables**
- Inform about hepatitis B and screening
- Media and community spokespersons are Vietnamese
- Mailings to members of the Vietnamese Physician Association of Northern CA
Evaluation Methods

Surveys

- Pre- and post-intervention
- Cross-sectional CATI surveys
- Vietnamese surnames
- N = 800 each site each survey
- Survey instrument from previous hepatitis B studies
Baseline Rates

- **Screened for hepatitis B**
  - Vietnamese men in Seattle: 66% (Taylor CDP 2004)

- **Heard of hepatitis B**
  - Vietnamese parents in Washington, D.C.: 49.9-58.9% (McPhee, Peds, 2003)
  - Vietnamese parents in Texas: 46.2-76.4% (McPhee, Peds 2003)
  - Vietnamese men in Seattle: 76% (Taylor, CDP 2004)
Evaluation Methods

Outcome measures

- **Primary outcome:**
  - Self-reported receipt of hepatitis B screening

- **Secondary outcomes:**
  - Awareness of hepatitis B and liver cancer
  - Knowledge of hepatitis B and liver cancer
  - Self-reported receipt of hepatitis B vaccination
Evaluation Methods

Process measures

- Number of brochures, calendars, referral lists distributed
- Number of newspaper ads and articles and airing of radio spots and television ads
- Number of Web site “hits”
- Attendance lists for CME seminars
Community Advisory Board

- Funded through this project
- Will be the community input into the media development for this project
- Roles for subcommittees through CAB or other groups to represent targeted audience
  - College and graduate students?
  - Art and media students and leaders?
  - Working young adults?
Strengths of Project 1

- Established investigators, including bilingual and bicultural staff of *Suc Khoe La Vang!* (Health is Gold!)
- UCSF Vietnamese Community Health Promotion Project, working in, trusted by community since 1986
- Prior intervention, survey experience in targeted communities
- Prior experience with promotion of hepatitis B vaccinations among Vietnamese
- Media expertise
- Broad-based Vietnamese coalition experiences
Project 1 Interactions with Other Projects & Cores
Project 1 Interactions with Other Projects & Cores

- **With Core A (Administration):**
  Vietnamese voice on Advisory Board

- **With Core B (Biostatistics):**
  Statistical analyses

- **With Core C (Methodology):**
  Standardization of formative phase, surveys, process measures
  Modification of existing survey questionnaire, utilizing Health Behavior Framework
Changes and Responses to Reviewer Comments

- Impact of vaccination on liver cancer: no longer the primary outcome
- Parental information for those 18 and under: no longer looking at them
- Media campaign contamination: cite prior work
- Demographic comparability of intervention vs. control community:
  - look at sociodemographics
  - controlled in analyses
- Catchment rate in DC too high (27%): expand control community
- Is screening required for entry INS/when did it start? No
- Reliance on self-report: sub-group validation of tested and untested in each community?
- Telephone listing and problem with cell phone: ?
Comparison of Sites: Year of Immigration to U.S.

Source: U.S. Census, 2000
Comparison of Sites: English Proficiency

Source: U.S. Census, 2000
Comparison of Sites: Annual Household Income

Source: U.S. Census, 2000
## Power Calculations

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Data Analysis

- Comparison of sites:
  Chi-squared tests to assess pre-intervention differences among 2 sites.

- Evaluation of the intervention:
  Z-tests to assess pre- to post-intervention changes in proportions of respondents screened (aware; knowledgeable).
Evaluation of the intervention (continued):
Multiple logistic regression analysis utilizing HBF to identify factors associated with screening vs. not, such as:

- Site x Time
- Residence in intervention/control area
- Respondent’s age
- Parents’ marital status
- Years in U.S.
- Household income
- Health insurance type (Medi-Cal)
- Knows someone with liver disease
- Heard of hepatitis B
- Knowledge about hepatitis B (index)
- Exposure to intervention (process measures)
Validation

Pros
- Validation is “more valid” than self-report

Cons
- Have to set a time period on the time since last test
- Have to obtain written consent in cross-sectional telephone survey
- Have to locate providers in a mobile population
- In practice, physicians don’t usually validate (if patient states he has never had test, physician doesn’t track it down but just orders; if patient states he has had test, physician may not order test)