
Cancer Screening Among Vietnamese in Hawaii

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Abstract

Objectives: To determine the extent of utilization of cancer screening services by Vietnamese in Hawaii, who had sought medical care from 1996 through 2000.

Methods: A chart review of 952 adult Vietnamese patients was performed.

Results: Of all eligible women, 52% and 26% had Papanicolaou test and mammogram, respectively. Among men age 45 and over, 8.4% had prostate-specific antigen test and 3.4% had digital rectal exam. Flexible sigmoidoscopy and colonoscopy were not utilized by patients.

Conclusions: This is the first study to examine the use of cancer screening tests by Vietnamese immigrants in Hawaii. Our findings of lower utilization rates in cancer screening by both male and female strongly support efforts to educate and promote preventive health for this population.

Introduction

Vietnamese are one of the fastest growing Asian minority groups in the United States, projected to reach four million by the year 2030.^{1,2} Breast and cervical cancer are the most common cancers occurring in Vietnamese women in the United States. Vietnamese women are about one third as likely to develop invasive breast cancer, but nearly five times as likely to develop cervical cancer in comparison to white women in the United States.³ According to the Surveillance, Epidemiology, and End Results (SEER) data for the year 1988-1992, the average-age adjusted incidence rate for breast cancer is 37.5 per 100,000 for Vietnamese, compared with 111.8 per 100,000 for white women.^{3,4} Although Vietnamese women have low incidence of breast cancer, acculturation studies indicate that cancer rates for Asian-American Pacific Islanders will increase and begin to mirror the rates of their host country within 10 years of immigration.⁵

The incidence of cervical cancer in Vietnamese women is four to five times that of white women. The average age-adjusted incidence rate for cervical cancer is 43.0 per 100,000 for Vietnamese, compared with 8.7 per 100,000 for white women.⁴ Yet, Vietnamese women have the lowest cancer screening and early detection rates of

all ethnic groups.³ In addition, they tend to present later with more advanced disease compared to Caucasian women. A study of cancer patterns in Los Angeles County revealed that proportional incidence ratios for cancers of the lung and rectum were higher for Vietnamese men than any other racial/ethnic groups.⁶ The authors were unable to find any other published epidemiological studies on cancer in Vietnamese men.

There are no published studies regarding rates of cancer screening such as Papanicolaou (Pap) smear, mammograms, digital rectal exam (DRE), prostate-specific antigen (PSA), flexible sigmoidoscopy, or colonoscopy for Vietnamese men and women in Hawaii. The goals of the present study are to determine the extent of preventive care utilization by Vietnamese in Hawaii and to examine factors that may influence screening practices. The study findings may provide insights to assist health care professionals to effectively promote preventive health for this growing population.

Methods

The study was determined to be exempt from Department of Health and Human Services regulations in October 1999 by the University of Hawaii Committee on Human Studies. The study was conducted at a private internal medicine office in Honolulu, Hawaii, selected because one of the physicians is of Vietnamese ethnicity, fluent in the language and culture, and attracts a large part of the Vietnamese population of Honolulu to his practice. Data were collected between January and February of 2000. Two thousand medical charts of Vietnamese patients were screened for eligibility. The charts of all patients, born on or before 1982 (over 18 years of age) in either Vietnam or United States with confirmed Vietnamese ethnicity, were included in the study. The first author trained and supervised three medical students and one graduate student from the University of Hawaii in the data collection process.

A data collection form was developed, based on the 1997 National Ambulatory Medical Care Survey of the 20 most common diagnoses in ambulatory care, recent literature, and Vital Statistics Report.⁷⁻⁸ The following information was recorded: Age, gender, address, profession, years in the U.S., type of medical insurance, year of last doctor visit, and health screening procedures/tests (Papanicolaou, mammogram, digital rectal exam, prostate-specific antigen, flexible sigmoidoscopy, and colonoscopy). Patient names were not recorded, patients were not contacted, and all information was collected from patients' paper charts. Study data were analyzed using the SPSS (Statistical Program for Social Services) program.

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Results

The demographic characteristics of the Vietnamese study population are shown in Table 1. The study population consisted of 470 males (49.4%), 468 females (49.1%), and 14 subjects of unknown gender (1.5%). The mean age of the study population was 57 years old (range 18-82 years). The study participants arrived in the U.S. between 1970-1999, with a mean of 9.5 years ago (range 1-30 years). Approximately 48% of the study participants were employed, 26% of whom worked as food handlers, equipment cleaners, helpers, and/or laborers. The majority of the patients lived in the Honolulu area (86%). Fewer than half (43%) of the Vietnamese patients had Medicare or Medicaid insurance, and approximately 32% had private insurance.

Patients in this study were seen by their physician between 1996 and 2000. The percentage of the study group who received cancer screening tests are summarized in Table 2. Of the 468 eligible females in the study population, more than half (51.7%) received a Papanicolaou test. Less than one-third (26%) of the eligible females over age 40 had a mammogram done. Among men over the age of 45, 8.4% received PSA and 3.4% had DRE. Flexible sigmoidoscopy and colonoscopy were not utilized by either gender.

The frequency of screening tests were higher in patients in the younger age group, 35.0% in the 18-44 years old, 34.5% in the 45-64 years old, compared to 30.6% in the 65+ age group. Similarly, patients who worked as handler/equipment cleaners and unemployed/students had higher rates of preventive care use (29% and 20% respectively) compared to those with other occupations (less than 10%). Also, patients who had Medicare and or Medicaid insurance were more likely to obtain at least one screening test (46%) compared to 34% in patients with private insurance. The utilization of screening services was not associated with the year of arrival in the U.S.

Discussion

In our study, Vietnamese in Hawaii generally had a lower utilization rate of cancer screening compared to Vietnamese in California, compared to Hawaii Asian/Pacific Islander populations, and compared to the general U.S. population. Healthy People 2000, objectives published by the U.S. Department of Health and Human Services, indicate that 95% of women 18 years and older should be screened annually for cervical carcinoma.⁵ According to our study, the rate of cervical cancer screening for Vietnamese women in Hawaii is 51.7%, well below the Healthy People 2000 guideline. This rate is lower than that for Hawaii Asian/Pacific Islander population (84.2%) and the general U.S. population (84.8%).⁹ Vietnamese women in Hawaii, however, have a similar rate of receiving the Papanicolaou test to that of Vietnamese women in California (53%).¹⁰

Healthy People 2000 also established a goal of 80% for mammography for all women over 40 years of age.⁵ Breast cancer screening received by Vietnamese women fall short of this national goal. Vietnamese women in Hawaii have lower rates of breast screening (26%) than Vietnamese women in California (30%).¹⁰ In addition, their mammography utilization rate is low compared to Hawaii Asian/Pacific Islander (80.7%) and the general U.S. population (73.7%).⁹

In 2001, the American Cancer Society recommended that the PSA test and the DRE should be offered annually to men beginning at age 50 who have a life expectancy of at least 10 years.¹¹ Vietnamese men in Hawaii have a very low utilization rate of the PSA test, only 8.4% in men over the age of 45. The utilization rate of DRE in Vietnamese men in Hawaii was 3.4% compared to Hawaii Asian/Pacific Islander (23.8%) and the U.S. general population (18.1%).⁹

Table 1. — Sociodemographic Characteristics of Vietnamese Patients

Characteristics	Total (%)
Sex	
Male	470 (50.1)
Female	468 (49.9)
No entry	14 (1.5)
Age Group	
18-44	236 (24.9)
45-64	356 (37.6)
65+	355 (37.5)
Mean Years in U.S.	9.5
Employed	
Yes	455 (47.8)
No	497 (52.2)
Occupation	
Exec/Admin/Mgr	13 (2.3)
Professional Spec	11 (1.9)
Tech Support	20 (3.5)
Sales	48 (8.4)
Admin Supp/Clerical	14 (2.4)
Private household	6 (1.0)
Service	42 (7.3)
Farm/Forest/Fish	15 (2.6)
Prec Prod/Craft/Rep	47 (8.2)
Mach Op/Assem/Insp	8 (1.4)
Trans/Moving	82 (14)
Hand/Clean/Labor	146 (25.5)
Unemployed/Stud/Housewife	106 (18.5)
Retired	11 (1.9)
Other (not specified)	3 (0.5)
Residence	
Downtown Honolulu	99 (10.6)
East Honolulu	453 (48.5)
West Honolulu	282 (30.2)
Other Oahu	100 (10.7)
Health Insurance	
Private	280 (32.0)
Medicare/Medicaid	379 (43.3)
Other/Unspecified	169 (19.3)
None/Don't know	48 (5.5)

Table 2. — Cancer Screening Tests by Gender

Screening Tests	No. of Female (%)	No. of Male (%)
Papanicolaou	242 (51.7)	
Mammogram	90 (26)	
Prostate-specific antigen		30 (8.4)
Digital rectal exam		12 (3.4)
Flexible sigmoidoscopy	0	0
Colonoscopy	0	0

Table 3.— Comparison of Screening Rate By Ethnic Groups (%)

Screening Tests	Vietnamese in Hawaii	Asian/Pacific Islander in Hawaii	US General Population
Papanicolaou	51.7	84.2	84.8
Mammogram	26	80.7	73.7
Prostate-specific antigen	8.4	N/A	N/A
Digital rectal exam	3.4	23.8	18.1
Flexible sigmoidoscopy	0	40.7	30.1

N/A = no available data

The American Cancer Society also recommends colorectal cancer screening for men and women age 50 or older. Screening can consist of performing a fecal occult blood test annually with or without another associated test, flexible sigmoidoscopy every 5 years, or colonoscopy every 10 years.¹¹ However, none of the Vietnamese men and women in this study received sigmoidoscopy or colonoscopy as screening tests compared to 40.7% of Asian/Pacific Islander in Hawaii and 30.1% of the U.S. general population.⁹

Our results concur with other studies in showing that Vietnamese have lower cancer screening rates compared to Asian/Pacific Islanders, the U.S. general population, and Vietnamese in California. A number of studies have examined behavioral factors influencing preventive service utilization. According to Kagawa-Singer and Pourat, education is a significant predictor of screening among Caucasian women.¹² For the Papanicolaou test, 15% of Caucasian women with an elementary education never have the test compared with 5% with a high school education and 4% with a college education.¹² Education also has similar effect on mammography utilization rate.¹²

According to McPhee et. al., a factor that contributes to lack of medical awareness is age of the patient.¹⁰ Older Vietnamese immigrants are accustomed to episodic care for acute symptoms, a pattern that is common in Viet Nam.¹⁰ Their attitudes and knowledge about medical care are based on their previous experience in Viet Nam. As such, Vietnamese women have a history of lower rates of cancer screening because physicians in Viet Nam traditionally have not recommended the screening.¹⁰ Other barriers to receiving preventive care are long working hours, costs of the tests, unemployment, lack of medical insurance, and not having a regular primary care doctor. The lack of health insurance has a great effect on screening. Kagawa-Singer and Pourat showed that 24% of insured Asian-American Pacific Islander women never had a mammogram compared to 72% of uninsured; 20% of insured Caucasian women have never had a mammogram compared to 42% of uninsured Caucasian women.¹² They also pointed out that the lack of access to or use of primary care also affects screening rates. Among Asian-American Pacific Islander women without a regular primary care physician, 50% never had a Papanicolaou test and 46% never underwent mammography compared with 14% and 19%, respectively, of those who have a regular primary care physician.¹²

The data presented here should alert the public health community to the cancer screening needs of the Vietnamese population living in Hawaii. In order to increase rate of screening tests performed, Vietnamese patients and physicians must be targeted. High priori-

ties for the Vietnamese patients should include education about cancer risks and prevention. Physicians must also discuss the availability and use of screening tests. Cheek et. al. interviewed 199 Vietnamese women and found that the family doctor is the most important source of information about Pap smears.¹³ The majority of the Vietnamese women reported that they would have Papanicolaou test if recommended by their physician.¹³

There are several limitations to this study. First, the study group was drawn from patients seen at a single primary care provider's medical office. Therefore, the data are not representative of all Vietnamese adults living in Hawaii or in other areas of the country. However, the provider was chosen for his large population of Vietnamese patients, and in fact the study group represents almost one-third of the total Vietnamese population of Hawaii (7,867) as reported in the 2000 Census.¹⁴ This study is also limited by the assumption that all screening procedures were accurately recorded in the medical charts and were up-to-date. In addition, many disadvantaged Vietnamese patients may not purchase or qualify for medical insurance and therefore may not have visited this or any other primary care physician. Therefore, there may be a significant population of Vietnamese that do not receive any screening at all, leading us to overestimate the screening rate. Conversely, since this doctor is Vietnamese-speaking, he may be attracting a patient population of immigrants with poor English language skills. Other Vietnamese with adequate language skills being seen by other practitioners may have more positive attitudes toward screening and have higher rates. Lastly, recommendations for screening practices are always in flux, while our methods accessed data from a specific past period of time.

In light of these limitations, this is the first study on preventive screening practices by Vietnamese in Hawaii. Vietnamese men and women have very low screening rates for colon, prostate, breast, and cervical cancer, which may increase their risk of presenting at later stages of disease, with its attendant morbidity and mortality. Culturally sensitive educational interventions to increase screening test utilization should be implemented. Socioeconomic and barriers to access should be addressed in order to facilitate the early detection of cancers. Future research may include qualitative research to delineate the barriers to screening and intervention studies to determine if addressing the barriers will improve utilization rates. Furthermore, primary care physicians should play a vital role in increasing screening test utilization among Vietnamese patients. The importance of primary care physicians in initiating discussions with their Vietnamese patients regarding effective cancer screening measures cannot be emphasized enough.

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