



Sampling Cancer Cases in Local Racial Subgroups



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"Ethnic misclassification" distorts cancer incidence in subgroups of the Sacramento Region - and the problem is worst with the largest subgroup, non-

Hispanic whites.

WE HAVE LONG KNOWN that cancer incidence varies by race and ethnicity. We also know that race and ethnic categories define large heterogeneous populations who may vary as much within their own group as between race or ethnic groups. Differences in subgroups stem from their diverse nationalities, genetics and culture. Culture drives lifestyle, which is considered the strongest determinant of cancer risk in our society. Lifestyle influences health-related behavior such as diet, exercise, tobacco and alcohol use as well as cancer screening utilization. An excellent example of cancer incidence variation by ethnic subgroup is cancer among Asians and Pacific Islanders (API).

Cancer is the number one cause of death for API in the Sacramento region, and they are the only race/ethnic group with that distinction. APIs in the Sacramento region have a higher incidence of liver cancer than any other race or ethnic group with an annual average age-adjusted incidence rate (AAIR) of 12.3 per 100,000 cases. When we compared liver cancer incidence among API subgroups to that of non-Hispanic whites (AAIR 4.6 per 100,000 cases), we learned that the Hmong, Korean and Vietnamese have the highest proportional incidence while Filipino, Asian Indian and Japanese have the lowest (see chart on the next page).

Analysis of cancer incidence by race and ethnic subgroups could be important for targeted cancer control activities. Unfortunately, we cannot conduct subgroup analyses on every race and ethnic group.

The worst example is cancer among non-Hispanic whites (NHW). They are the largest proportion of our population and therefore have the greatest number of cancers. The category of NHW includes many subgroups: those of European descent and those from the Middle-East and northern Africa. As with other race and ethnic groups, both native and foreign-born are included.

The California Cancer Registry (CCR), as well as most healthcare data systems and organizations, can only provide sparse and thus unreliable data on NHW subgroups. The reason is a phenomenon known as "ethnic misclassification."

Ethnic misclassification is the incorrect classification or absence of documentation of an individual's race, ethnicity and/or birthplace. In a state as ethnically diverse as California, the impact of ethnic misclassification is immense and leads to an underestimation of the

cancer burden for immigrants and ethnic minorities.

How ethnic misclassification affects the state's cancer statistics is simple. Usually, upon admittance into a healthcare institution, the patient is not asked to identify his or her race, ethnicity or birthplace, even though this information is required by a number of hospital and healthcare agencies.

We believe that often the admissions personnel will "guess" the patient's group based on surname or physical appearance. Missing race, ethnicity and/or birthplace data is recorded as "unknown" in the patient's medical record.

The CCR, a population-based registry, includes all cases of cancer diagnosed in the state since 1988. Details of the patient's diagnosis, treatment and demographics are abstracted from the medical record. Therefore, cancer-specific information of individuals is recorded in the CCR, but appropriate race, ethnicity and place of birth information is not.

When the Sacramento regional office of the CCR was asked for information on breast cancer incidence and stage at diagnosis among Russian immigrant women by a Slavic community-based organization, we were unable to provide the requested statistics.

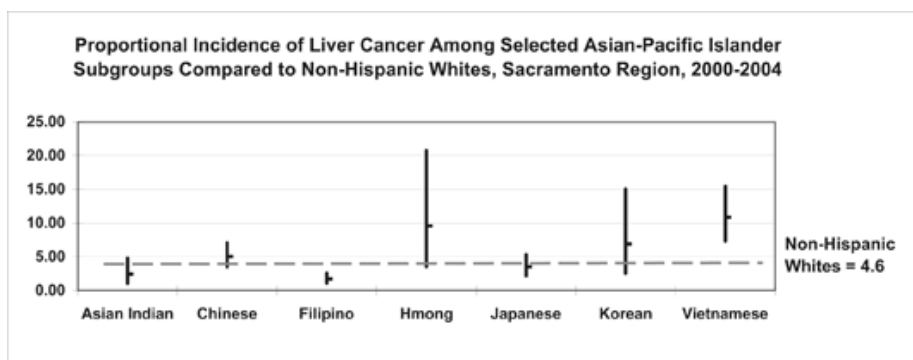
The Sacramento region has the largest population of Slavs (which includes immigrants from the former Soviet Union, Ukraine, and Romania among others) in the nation. Therefore, statistics on breast cancer could potentially affect a significant and important portion of the population and could provide the basis for targeted education, screening and health care outreach.

What can physicians do about ethnic misclassification? You can document and encourage your staff and healthcare institutions to document your patient's race, ethnicity and birthplace. Will patients be offended or suspicious of your questions about their birthplace, national origins, race and ethnic backgrounds? Maybe.

But research by the American Hospital Association tells us that the majority of the patients don't mind being asked as long as they understand how the information will be used. Our newest annual report of cancer incidence in the region will be available in this month at www.ccrca.org, under regional reports.

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