

A Health Survey of Japanese Americans in Seattle

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For the past three decades a number of studies have been conducted to examine etiologic factors which affect coronary heart disease and malignant neoplasms by comparing Japanese-Americans with the native Japanese. Most of these study populations were from Hawaii and California. We chose Japanese-Americans in the Seattle area as our study population. There are several reasons for this. (1) No comprehensive health survey had been conducted; (2) Nikkei Concerns, a Japanese community organization, has been cooperative and provided volunteers to carry out the survey; (3) There are a large number of Japanese-Americans in the Seattle area, and (4) Because Japanese immigrated to the Seattle area as early as the 1890s, there are now many 2nd and 3rd generations who can participate in our study.

Currently The Life Planning Center in Tokyo agreed to conduct the same survey as ours in Shirahama, located 100 miles south of Tokyo in the Boso Peninsula. It is our hope that we can continue to follow-up both the Seattle and Shirahama populations for the next ten to twenty years to examine how changes in life habits and traditional Japanese life-style can affect their health and disease.

Because the initial survey in Shirahama has not been completed yet, today I'll present the preliminary results of the Seattle Survey.

According to the 1980 U.S. Census, there are 16,391 Japanese-Americans in King County Washington (Table 1), 60% of them are in the city of Seattle. Since there is no comprehensive directory to

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Table 1 Survey Population in Seattle

| | Number of Households | Number of Persons |
|---|----------------------|-------------------|
| Japanese-Americans Directory | 4,402 | 10,697 |
| Agreed to Participate | 600 | 1,250 |
| Questionnaires Returned as of October, 1985 | | 744 |

Table 2 Health Surveys in Seattle, U.S.A. and in Shirahama, Japan

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|---|
| • Personal Background |
| • Medical History |
| • Life Habits and Behavioral Risk Factors |
| • Clinical Tests |

Table 3 Distribution of Study Sample by Age and Sex

| Age in Years | Total (%) | Males | Females |
|--------------|------------|------------|------------|
| 24 | 37 (5.0) | 13 (3.7) | 24 (6.2) |
| 25 - 44 | 205 (27.6) | 84 (23.7) | 121 (31.0) |
| 45 - 54 | 93 (12.5) | 41 (11.6) | 52 (13.3) |
| 55 - 64 | 222 (29.8) | 109 (30.8) | 113 (29.0) |
| 65 - 74 | 150 (20.2) | 86 (24.3) | 64 (16.4) |
| 75+ | 37 (5.0) | 21 (5.9) | 16 (4.1) |
| Total | 744 (100) | 354 (100) | 390 (100) |

Table 4 Current Health Status

| Health Status | Males | Females | Total | (%) |
|---------------|-------|---------|-------|---------|
| Excellent | 87 | 108 | 195 | (26.5) |
| Very Good | 125 | 176 | 301 | (40.9) |
| Good | 112 | 86 | 198 | (26.9) |
| Fair | 23 | 13 | 36 | (4.9) |
| Poor | 4 | 2 | 6 | (0.8) |
| Total | 351 | 385 | 736 | (100.0) |

include all of these Japanese-Americans, we asked the Nikkei Concerns to allow us to use their Japanese Americans' household mailing list. This contains 4,402 households representing about 10,700 Japanese-Americans in King County. Letters of request for participation in the survey were sent in April, 1985 to all of the households. Responses were received from 600 households who agreed to participate in the study. Survey questionnaires were sent to 1,250 household members. As of October, 1985, 744 people had responded. We have been following up those who did not return questionnaires in order to get a total of 1,000 questionnaires back.

The survey consists of four parts (Table 2). Personal background contains demographic information, generation and education. Questions on medical history include current and past illness experience.

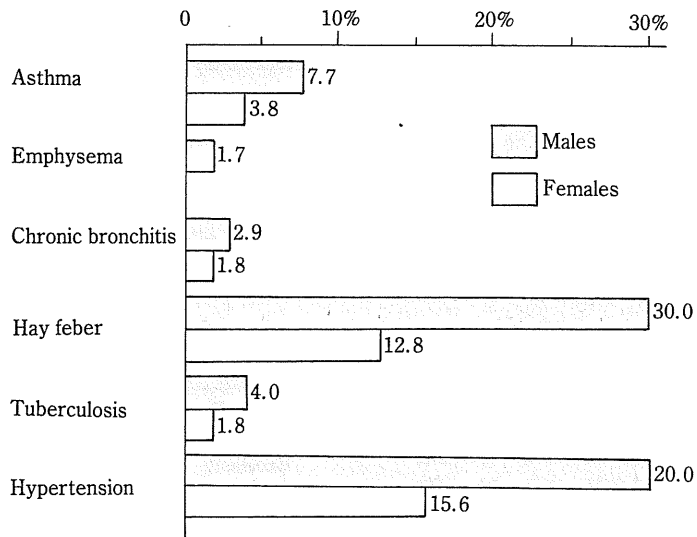


Figure 1 Percent of Japanese who had the following conditions

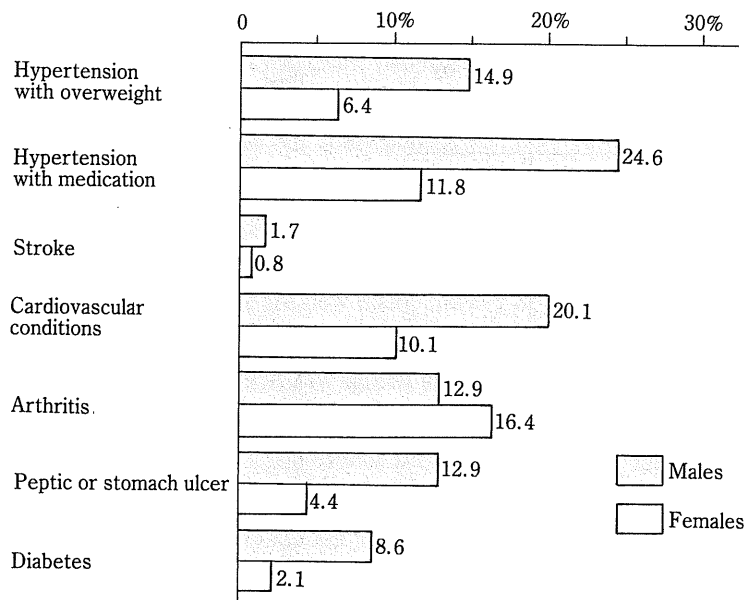


Figure 2 Percent of Japanese who had the following conditions

Questions on life habits and behavioral risk factors consist of detailed conventional risk factor information, particularly diet, in addition to the information on personality and role and function in their community.

We are planning to conduct clinical tests in the near future.

This table (Table 3) shows age distribution of the study sample as of October 1985. The reason for the small number of participants in the 24-years-old and younger and in the 75-years-old and older

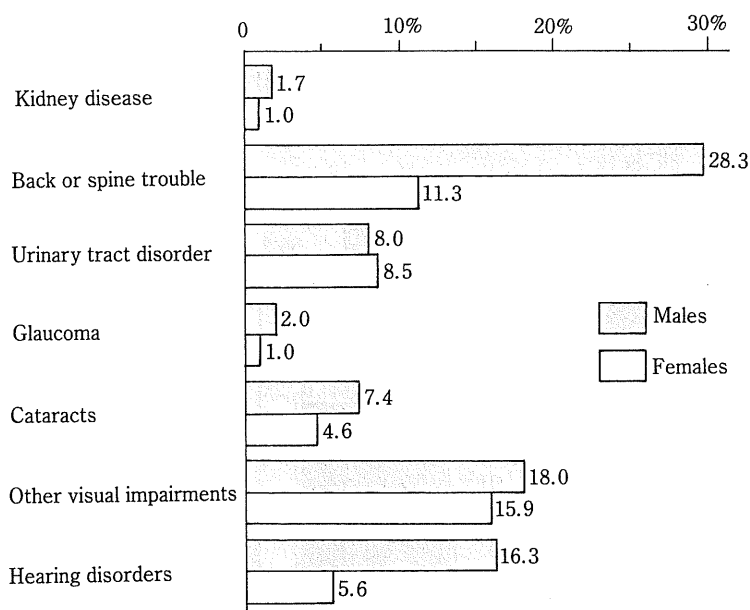


Figure 3 Percent of Japanese who had the following conditions

categories is that the survey was originally targeted for married couples and 2nd and 3rd generations. It is not known why fewer persons from 45- to 54-years-old participated. The sample is fairly evenly divided between males and females. Their age distribution is quite similar.

With regard to generations, 95% of our sample are 2nd and 3rd generations, another 5% are first and 4th generations.

Educational background of the sample is very impressive. Percent of graduates from highest levels are 0.9% from elementary and junior high schools, 25.3% from senior high school, 14.2% from junior college and 57.8% from 4-year colleges or post-graduate school in Seattle Japanese, as compared with 26.9%, 30.5%, 17.8% and 24.8% respectively in U.S. white population.

Regarding the question of self-evaluation of health status, we asked them whether they were in excellent, very good, good, fair, or poor health (Table 4). The response was 26.5% are in excellent, 40.9% in very good, 26.9% in fair, and only 0.8% in poor health. Thus, we may consider that our study sample consists of a group of healthy Japanese-Americans.

However, when we examine their medical history, Seattle Japanese-Americans may have potential health problems in the future, particularly men.

In the questionnaire, we asked "Has a doctor ever told you that you had the following diseases?" Prevalence rates of those diseases by sex are shown in Figure 1. More men suffered from respiratory disease conditions: For asthma 7.7% of men and 3.8% of women: and for hay fever 30.0% of men and 12.8% of women.

Hypertension was more prevalent in men than women (Figure 2): 30.6% versus 15.6%; 14.9% of men and 6.4% of women had hypertension with overweight problems; 24.6% of men and 11.8% of women had taken medication to lower blood pressure. Prevalence of stroke is very low, compared with

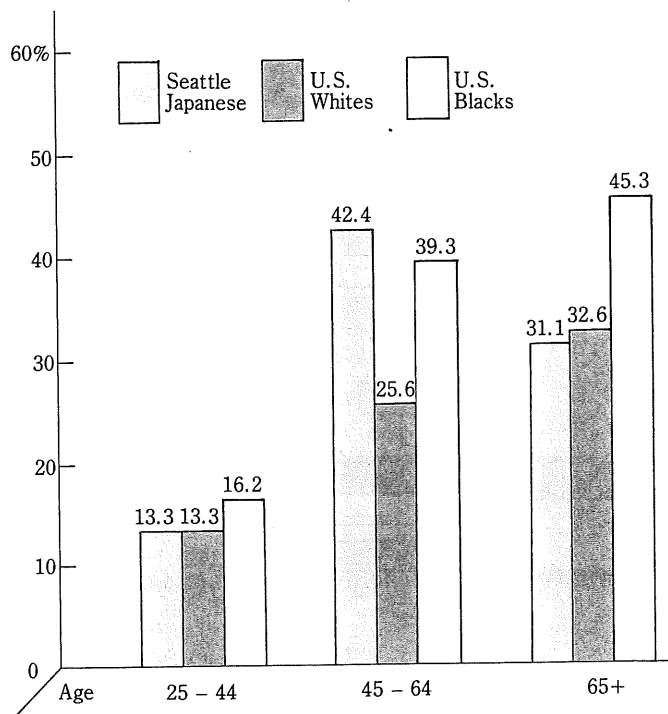


Figure 4 Adults ever having hypertension: males

prevalence of hypertension. This implies that hypertension may be effectively controlled by medication, diet and other methods. For cardiovascular disease conditions including rheumatic heart disease, congestive heart failure, coronary heart disease, heart murmur and other conditions, prevalence rate in men is twice as high as in women; 20.1% versus 10.1%.

Arthritis is one exception in that its prevalence rate in women is higher than in men; 16.4% of women versus 12.9% of men.

Great differences in prevalence rates of peptic or stomach ulcer and diabetes between men and women are observed (Figure 3).

More men suffered from backaches than women: 28.3% of men versus 11.3% of women.

Hard hearing was more common among men than among women: 16.3% versus 5.6%.

Sex differences in kidney disease, urinary tract disorder, glaucoma, cataracts and other visual impairments are small.

It is striking that all of the disease conditions except arthritis and urinary tract disorder were more common among men than among women. Then, a question we must ask is whether or not our observed sex differences are unusual (Figure 4).

Let us compare percentages of adults ever having hypertension among Seattle Japanese, U.S. whites and U.S. blacks by using the recent survey results from the National Center for Health Statistics.

This figure shows those for males. A lightly shaded bar indicates Seattle Japanese, a white bar for U.S. whites and a black bar for U.S. blacks. Seattle Japanese's prevalence is the same as that of the

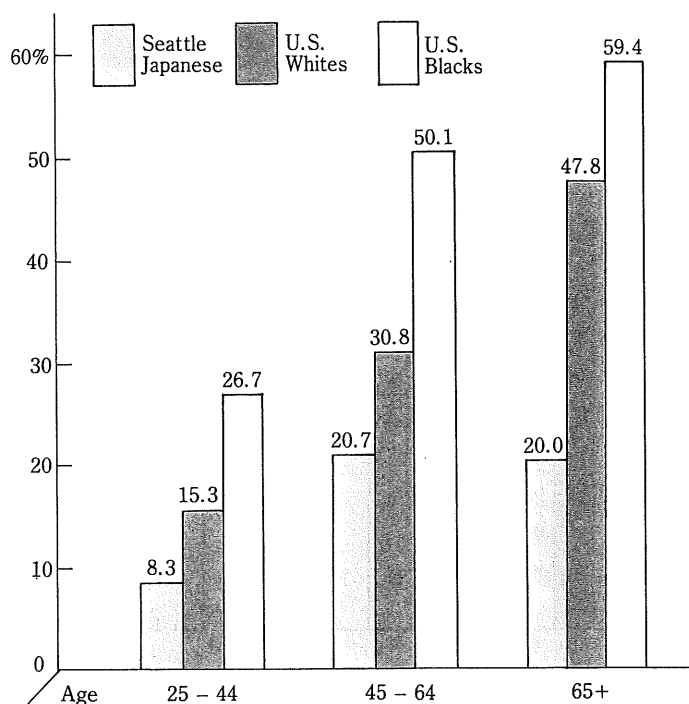


Figure 5 Adults ever having hypertension: females

U.S. whites for 25 to 44-years-old and 65 and over, but their prevalence for 45- to 64-years-old is highest, 42.4%.

This figure shows females (Figure 5). For each age group there is a consistent order: Lowest for Seattle Japanese, medium for U.S. whites, and highest for U.S. blacks. While the prevalence of hypertension increases in a linear fashion among both whites and blacks, Seattle Japanese women's prevalence for 65 and over was the same as that for 45- to 64-years-old.

Prevalence of diabetes is compared between Seattle Japanese and U.S. population by using data from the National Center for Health Statistics (Figure 6). Please keep in mind that the prevalence rate of diabetes among the native Japanese in Japan has been consistently low, between 1% and 2% depending upon location. Thus, both male's and female's prevalence rates among Seattle Japanese were higher than the native Japanese.

It is astonishing that their male's prevalence rates are two times that of U.S. population for both 45-64 and 65 and over.

With regard to their life habits, they are not worse than the U.S. white population. Percent of current smokers among the Seattle Japanese is 18% for males and 9% for females, as compared to 34% for U.S. white males and 30% for U.S. females.

Participation in regular exercise may be another important factor to affect their health. 82% of men said that they participate in moderate or much exercise on a regular basis, compared to 73% of women.

So far we could not find any tremendously negative aspect of life habits among Seattle Japanese men.

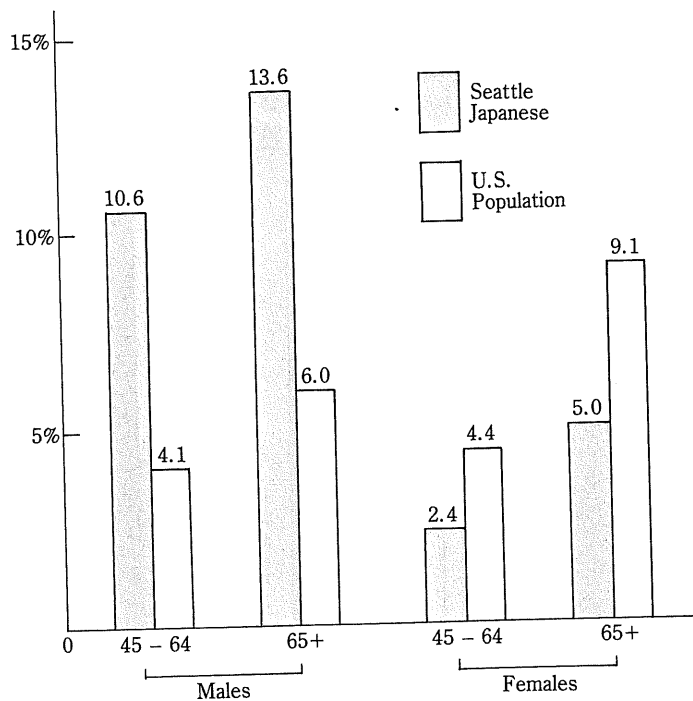


Figure 6 Prevalence of diabetes

Although dietary information is in the process of analysis, it is likely that men and women have been eating the same food in our sample because most of them are from the same households.

Our future study plan includes: (1) comparison of disease prevalence between Seattle Japanese and the U.S. whites by using the data from the second Health and Nutrition Examination Survey (HAMES II) because our medical history questions were adopted from those of HANES II; (2) completion of the questionnaire survey in Shirahama, Japan, to compare with Seattle Japanese; (3) examination of roles of behavioral risk factors, nutrition intake, and personality and cultured factors in etiology of chronic diseases; (4) conducting clinical tests to measure blood pressure, cholesterol and glucose levels, etc., for information of clinical or subclinical status of our study sample; and (5) examination of factors making differences in disease manifestation between Seattle Japanese and the native Japanese in Japan.

Finally, I'd like to express our sincere appreciation to Nikkei Concerns and The Life Planning Center for their continuous support and collaboration.