

Mortality Experience Among the Japanese in the United States, Hawaii, and Japan

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MORTALITY among the Japanese in continental United States is similar in many respects to that among the white population. However, mortality from the chronic diseases, particularly the cardiovascular diseases, presents some striking contrasts. In comparison with the white population, the death rates for diseases of the heart are quite low, while those for vascular lesions affecting the central nervous system are rather high. The same differential, but in a more exaggerated form, is evident among the Japanese in Hawaii and for Japan itself.

A more complete description of mortality among Americans of Japanese birth or descent in continental United States follows. This description is based on unpublished data for the years 1949-52 from the National Office of Vital Statistics of the Public Health Service. For comparison, data are also presented for the Japanese in Hawaii (1-3) and for Japan (4, 5), as well as for the white population of continental United States (6). In addition, some historical and demographic material, enough, it is hoped, to place the main body of data in perspective, is included.

The data described in this paper are not, of course, appropriate for disentangling the various genetic and cultural factors that may affect the mortality experience of these various groups, and they should not be taken as doing that. Furthermore, there is usually some uncertainty about the certification of cause of

death, especially for the chronic diseases. When the mortality data of different groups are compared, as in this paper, the shadow of doubt may be rather large. Nevertheless, mortality data can provide a groundwork for a more direct inquiry into causative factors. In any event, they are of interest in themselves.

Demographic Characteristics

In the United States in 1950, the Japanese were primarily city dwellers (7). Some 71 percent of all Japanese in this country were urban residents, most of them living within a few metropolitan areas. Yet, almost a third of all employed Japanese men (some of them nominally urban residents of the Los Angeles metropolitan area) were classified to the major occupation groups of farmers, farm managers, farm laborers, or farm foremen.

Geographically, the Japanese were concentrated on the west coast. Nearly 60 percent lived in California and 27 percent lived in the Los Angeles metropolitan area in 1950.

The level of education among the Japanese in the United States, in terms of number of school years completed, was above average. In comparison with the white population, their median income was low, they tended to marry later, and a larger proportion were single. There were more Japanese men than Japanese women in the United States, especially at the older ages. More than one-fourth of all Japanese Americans were born in Japan.

General Mortality

The mortality experience of the Japanese in the United States may be described as favorable.

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Specifically, that means that death rates among the Japanese are lower than among the white population. This may be seen from table 1, which gives death rates by age and sex for the two populations. With two minor exceptions, for boys 5-14 years and women 35-44 years, age-specific death rates are lower among the Japanese of both sexes than among the whites.

Missing from this picture is the infant mortality rate, a historic index of public hygiene and medical care. In 1950, 19.1 Japanese infants died for every 1,000 born, a rate found only in well-favored white groups. The rate for the white population as a whole was 26.8.

These comparisons are between the white population and the Japanese population throughout the continental United States. It will be recognized, however, that the Japanese population tends to concentrate in certain local-

ities and in certain occupation groups, and, indeed, that it differs from the white population in a number of demographic characteristics. If the comparisons could be restricted to the specific areas where the Japanese reside or to a white population with demographic characteristics similar to the Japanese, the mortality differentials might possibly be somewhat reduced. It is unlikely, however, that they would be reduced very much. Actually, it is possible that the specific differentials are understated: The age-specific death rates for the white population of California, the State where the largest proportion of the Japanese American population is concentrated, were in general above those for the white population of all the States in 1950.

There is one demographic factor that warrants special mention. This is the tendency, especially in earlier decades, for the Japanese

Table 1. Number of deaths and death rates for white and Japanese populations of continental United States, Japanese of Hawaii, and Japan, by age and sex, for specified years

Age group (years)	Males				Females			
	Japanese			White, United States, 1950	Japanese			White, United States, 1950
	United States, 1949-52	Hawaii, 1949-51	Japan, 1951		United States, 1949-52	Hawaii, 1949-51	Japan, 1951	
	Number of deaths							
All ages -----	2, 749	1, 828	432, 517	731, 366	916	1, 070	406, 449	544, 719
0-4 -----	183	171	107, 800	55, 516	151	126	94, 699	40, 705
5-14 -----	29	26	13, 327	7, 298	14	25	12, 200	4, 704
15-24 -----	45	47	22, 972	14, 769	35	32	20, 979	7, 024
25-34 -----	95	73	23, 139	19, 323	61	54	25, 533	12, 235
35-44 -----	80	63	25, 828	36, 293	56	61	24, 743	22, 915
45-54 -----	182	141	39, 877	77, 150	133	114	29, 695	42, 994
55-64 -----	482	321	62, 285	142, 419	212	179	44, 532	79, 803
65 and over -----	1, 653	986	137, 289	378, 003	254	479	154, 068	334, 016
	Death rate per 100,000 population							
All ages -----	898. 9	653. 5	1, 042. 4	1, 089. 5	352. 8	390. 4	943. 5	803. 3
0-4 -----	626. 0	503. 8	1, 805. 7	766. 3	524. 6	389. 3	1, 651. 5	586. 5
5-14 -----	73. 8	51. 0	146. 6	67. 2	38. 2	50. 8	137. 6	45. 1
15-24 -----	86. 9	88. 6	276. 9	152. 4	70. 3	55. 3	254. 0	71. 5
25-34 -----	132. 7	135. 4	429. 8	185. 3	94. 9	94. 8	401. 0	112. 8
35-44 -----	293. 0	199. 3	555. 9	380. 9	250. 6	213. 1	483. 7	235. 8
45-54 -----	711. 5	695. 8	1, 055. 8	984. 5	487. 1	535. 2	803. 4	546. 4
55-64 -----	1, 760. 9	1, 890. 1	2, 428. 3	2, 304. 4	985. 5	1, 126. 4	1, 695. 2	1, 293. 8
65 and over -----	4, 912. 6	5, 207. 8	7, 791. 7	7, 051. 9	2, 804. 8	4, 060. 7	6, 379. 6	5, 554. 6

Table 2. Average death rates¹ for selected causes by sex for specified age groups: Japanese in continental United States, 1949-1952

Cause of death ²	Males, by age group ³				Females, by age group ⁴			
	35-44	45-54	55-64	65-74	35-44	45-54	55-64	65-74
All causes.....	293.0	711.5	1,760.9	4,077.2	250.6	487.1	985.5	2,536.2
Tuberculosis, all forms (001-019).....	29.3	70.4	142.5	253.9	35.8	22.0	13.9	40.3
Infective and parasitic diseases (020-138).....	0	7.8	32.9	50.1	0	3.7	4.6	26.8
Malignant neoplasms (140-205).....	43.9	160.3	427.4	976.4	71.6	124.5	357.9	469.7
Diabetes mellitus (260).....	0	3.9	40.2	57.2	0	7.3	4.6	53.7
Vascular lesions affecting CNS (330-334).....	22.0	54.7	230.2	579.4	22.4	106.2	199.9	496.5
Diseases of heart (410-443).....	73.2	199.4	562.6	1,291.1	22.4	106.2	237.1	1,006.4
Chronic rheumatic heart disease (410-416).....	3.7	7.8	3.7	32.2	0	7.3	13.9	26.8
Arteriosclerotic and degenerative heart disease (420-422).....	51.3	152.5	464.0	1,083.7	17.9	47.6	153.4	711.2
Other diseases of heart (430-434).....	7.3	7.8	11.0	21.5	0	7.3	0	26.8
Hypertension with heart disease (440-443).....	11.0	31.3	84.0	153.8	4.5	43.9	69.7	241.5
Hypertension without mention of heart (444-447).....	0	3.9	3.7	28.6	4.5	3.7	9.3	13.4
Influenza and pneumonia (480-493).....	3.7	3.9	43.8	107.3	0	11.0	27.9	67.1
Bronchitis (500-502).....	0	0	0	7.2	0	0	0	0
Ulcer of stomach and duodenum (540,541).....	0	15.6	7.3	89.4	0	3.7	9.3	26.8
Gastritis, etc. (543, 571, 572).....	3.7	0	7.3	10.7	0	0	0	0
Cirrhosis of liver (581).....	7.3	23.5	14.6	60.8	4.5	0	4.6	13.4
Nephritis and nephrosis (590-594).....	14.6	27.4	14.6	25.0	4.5	22.0	27.9	26.8
Symptoms, senility, and ill-defined conditions (780-795).....	0	0	3.7	17.9	4.5	0	0	0
Accidents and violence (E810-E999).....	69.6	97.7	142.5	225.3	49.2	43.9	41.8	93.9
All other.....	25.6	43.0	87.7	296.8	31.3	33.0	46.5	201.3

¹ Rates per 100,000 population in each specified group as of April 1, 1950.

² Numbers after causes are category numbers of the sixth revision of the International Lists, 1948.

³ Total numbers of deaths for specified age groups were: 80, 182, 482, 1,140.

⁴ Total numbers of deaths for specified age groups were: 56, 133, 212, 189.

NOTE: For more detailed data on causes of death, see Documentation Note at end of the paper.

born in Japan to return home to pass their later years. It is conceivable that this is a selective process that would affect death rates in the United States, either raising them or lowering them. Lacking data on this score, it is impossible to be certain, but, in any event, this process would probably have less effect on the rates around 1950 than at earlier periods.

It is worth noting that the generally favorable mortality experience for the Japanese in the United States is nothing new. Although there were naturally some differences in detail, mortality for this group was relatively low in 1940 and in 1930. Were this not the case, the small size of the Japanese population in the United States, and consequently the small number of deaths reported, might raise some doubts, on grounds of the variability of small numbers, with respect to the reported death rates. As it is, there is little question that the death rates

give a generally reliable indication of the force of mortality in the Japanese population.

Deaths by Cause

For some causes of death, experience among the Japanese in the United States (table 2) is similar to that among the white population. Maternal mortality is low: There were only 11 deaths from maternal causes among the Japanese in 1949-52 while births in that period numbered 15,224. Few deaths were reported for the infectious diseases, with the exception of tuberculosis. Mortality from influenza and pneumonia was very similar to the mortality from those causes reported for the white population. Syphilis mortality is apparently comparable, although the number of deaths reported for the Japanese was too low for precise comparison.

For other causes of death, mortality among the Japanese of the United States differs significantly from that for the white population. The Japanese have a somewhat lower accident mortality, except in childhood. Homicide is a negligible cause of death; only 4 Japanese died from this cause during 1949-52. Suicide, on the other hand, looms larger among the Japanese. While suicide rates for Japanese men are very like those for white men, the rates for Japanese women are well above those for white women, especially in the age groups 35 and over.

It is in the area of the chronic diseases, however, that the contrast between mortality for the Japanese of the United States and for the white population is most striking. Deaths from diabetes are uncommon among Japanese women in the United States in contrast to mortality from this cause among white women. On the other hand, tuberculosis mortality is higher among the Japanese than the white population, although not nearly so high as for Negroes. Although death rates for malignant neoplasms are similar in the white and Japanese groups,

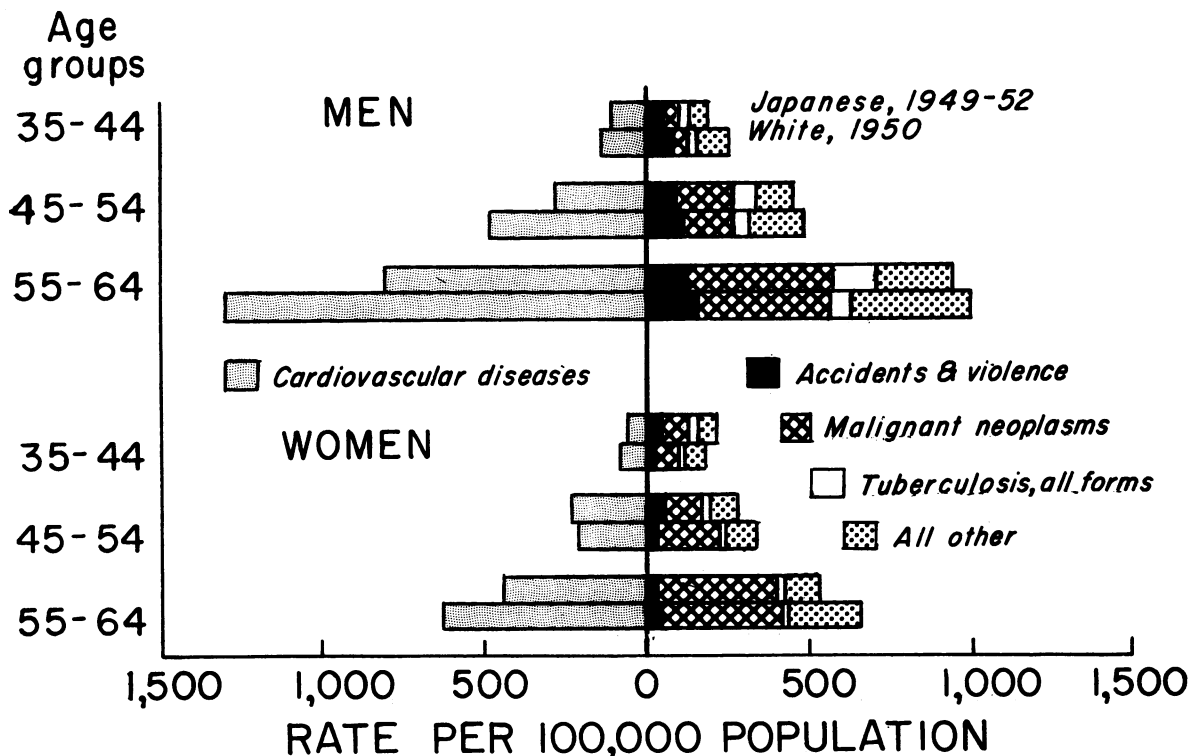
there are differences in rates for the various sites (8).

Cardiovascular Diseases

Among the chronic diseases, the cardiovascular diseases provide the most dramatic contrast. Figures 1 and 7 show the large differentials between the Japanese and white populations of the United States in mortality from diseases of the cardiovascular system. In these graphs cardiovascular mortality is presented in the context of the total mortality for each of the specific age groups. Death rates for the cardiovascular diseases are presented to the left of the origin, and death rates for other causes, divided into tuberculosis (all forms), malignant neoplasms, accidents and violence, and "all other," are presented to the right.

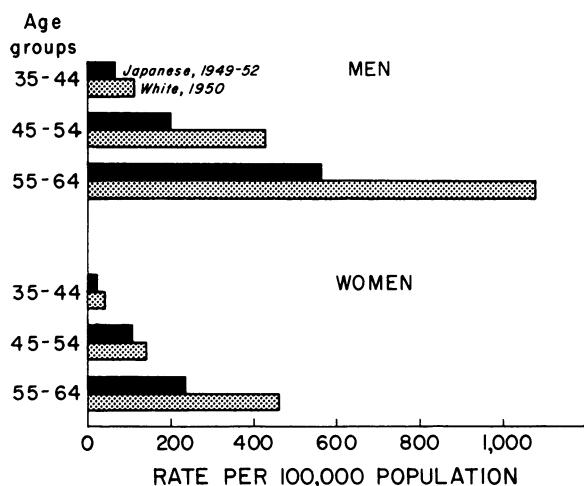
Death rates for the noncardiovascular causes as a whole tend to be a little lower for the Japanese than for the white population of the United States. For men aged 45 through 74, the excess of the cardiovascular death rate for

Figure 1. Death rates by age and sex for major components of mortality: adult Japanese and white populations of continental United States.



the white population over the rate for the Japanese is larger than the reported rate for malignant neoplasms, which are the major non-cardiovascular cause of death in these age groups. The excess is also larger than the rate for the large group of causes classified as "all other" in figures 1 and 7.

Figure 2. Death rates by age and sex for diseases of the heart: Japanese and white populations of continental United States.



There does not appear to be any way of closing the large gap between the cardiovascular rates for the two groups by shifting assignments of cause of death. Such reassignment would either result in reducing death rates for the noncardiovascular causes to implausible levels for the Japanese or in increasing the rates for the noncardiovascular causes to equally implausible levels for the whites. It seems clear that cardiovascular mortality, especially for adult men, is really substantially lower among the Japanese population of the United States than among the white.

When the cardiovascular diseases are examined in detail, the differences are seen to arise from diseases of the heart, with death rates for this cause much lower for Japanese than for whites (fig. 2). Death rates for vascular lesions affecting the central nervous system are actually somewhat higher among the Japanese (fig. 3). Indeed, for Japanese women aged 45-54 the death rate for this cause more than compensates for the low death rate for diseases of the heart so that the total cardiovascular

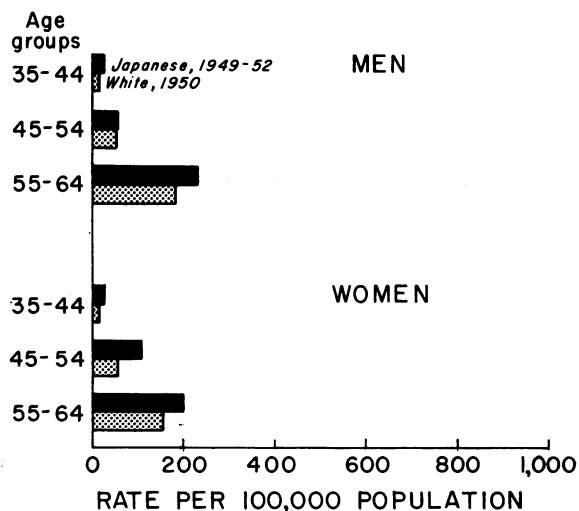
death rate is slightly higher than for white women of this age group.

Again, it is conceivable that there is a difference in medical certification between the two groups; but if there is, the corollary evidence would suggest an understatement in the death rate for vascular lesions affecting the central nervous system for the white population, since the death rates for the residual cause groups are larger in the white population than in the Japanese. It may be noted in this connection that the white American has higher death rates for "symptoms, senility, ill-defined conditions" (a cause group into which a fair number of cardiovascular deaths might be classified if certification is poor) than does the Japanese American. However, the death rate for these causes is not high enough in either group to affect seriously the comparisons.

Japanese in Hawaii and Japan

Some of the characteristics of mortality that distinguish the Japanese population from the white population in the continental United States are paralleled in Hawaii and in Japan (table 3 and figs. 4, 5, 6, and 7). The death rates among Japanese men for diseases of the heart are low in the United States, even lower in Hawaii, and much lower in Japan. For

Figure 3. Death rates by age and sex for vascular lesions affecting the central nervous system: adult Japanese and white populations of continental United States.



Japanese women the picture is less neat, but in general it is one of low death rates for this cause. On the other hand, the death rates for vascular lesions affecting the central nervous system are high among the Japanese of either sex in the United States, are slightly higher in Hawaii, and are much higher in Japan. These antithetic differences pretty well balance out for men, so that the death rates for diseases of the cardiovascular system are very similar for Japanese men in the United States, Hawaii, and Japan; in all instances, they are lower than the rates for white men in the United States.

To put the mortality data for Japan in a historical perspective, death rates for vascular lesions affecting the central nervous system, which were at an exceptionally high level between 1918 and 1942, took an abrupt drop after World War II to about the level they had temporarily assumed between 1910 and 1915 (5). Thus, in 1951, the year we are using for com-

parison, the rates were relatively low. Death rates for diseases of the heart, on the other hand, while they have shown some large fluctuations since 1910, with the expected peak in 1918 during the influenza pandemic, have not shown such abrupt changes as have the rates for vascular lesions affecting the central nervous system and have evidenced little long-term trend. If anything, there has been a slight tendency for the death rates for diseases of the heart in Japan to decline over the years.

Total mortality in Japan itself tends to be rather high. This is due, in part, to the very high death rate for tuberculosis in Japan, a rate which may be regarded as an exaggeration of the high rates for the Japanese in the United States and in Hawaii. To a larger degree, however, the high total mortality in Japan is due to high death rates for some causes that exhibit relatively low death rates among the Japanese in Hawaii and in the United States, in particular to a high mortality from influ-

Table 3. Average death rates¹ for selected causes by sex for specified age groups: Japanese in Hawaii, 1949-1951

Cause of death ²	Males, by age group ³				Females, by age group ⁴			
	35-44	45-54	55-64	65-74	35-44	45-54	55-64	65-74
All causes.....	199.3	695.8	1,890.1	3,987.5	213.1	535.2	1,126.4	3,020.9
Tuberculosis, all forms (001-019).....	15.8	49.3	106.0	133.7	3.5	23.5	25.2	46.1
Infective and parasitic diseases (020-138).....	3.2	0	29.4	59.4	0	23.5	0	11.5
Malignant neoplasms (140-205).....	28.5	177.6	571.2	1,113.8	55.9	93.9	258.0	611.1
Diabetes mellitus (260).....	6.3	14.8	29.4	96.5	0	14.1	56.6	207.5
Vascular lesions affecting CNS (330-334).....	12.7	64.2	300.3	653.4	21.0	122.1	220.3	576.5
Diseases of heart (410-443).....	47.5	157.9	471.1	1,240.1	31.4	145.5	358.7	1,118.4
Chronic rheumatic heart disease (410-416).....	6.3	9.9	5.9	14.9	10.5	14.1	25.2	23.1
Arteriosclerotic and degenerative heart disease (420-422).....	31.6	88.8	300.3	802.0	3.5	46.9	144.7	576.5
Other diseases of heart (430-434).....	0	0	0	7.4	0	9.4	6.3	23.1
Hypertension with heart disease (440-443).....	9.5	59.2	164.9	415.8	17.5	75.1	182.5	495.8
Hypertension without mention of heart (444-447).....	0	4.9	11.8	37.1	10.5	4.7	6.3	23.1
Influenza and pneumonia (480-493).....	0	4.9	11.8	89.1	0	4.7	6.3	46.1
Bronchitis (500-502).....	0	0	0	7.4	0	0	0	0
Ulcer of stomach and duodenum (540, 541).....	6.3	19.7	17.7	52.0	0	0	6.3	0
Gastritis, etc. (543, 571, 572).....	0	0	0	14.9	3.5	9.4	0	11.5
Cirrhosis of liver (581).....	6.3	9.9	58.9	37.1	3.5	4.7	6.3	34.6
Nephritis and nephrosis (590-594).....	9.5	39.5	94.2	52.0	34.9	37.6	50.3	57.7
Symptoms, senility, and ill-defined conditions (780-795).....	3.2	4.9	11.8	29.7	3.5	0	0	23.1
Accidents and violence (E810-E999).....	28.5	98.7	70.7	155.9	14.0	18.8	62.9	69.2
All other.....	31.6	49.3	106.0	215.3	31.4	32.9	69.2	184.5

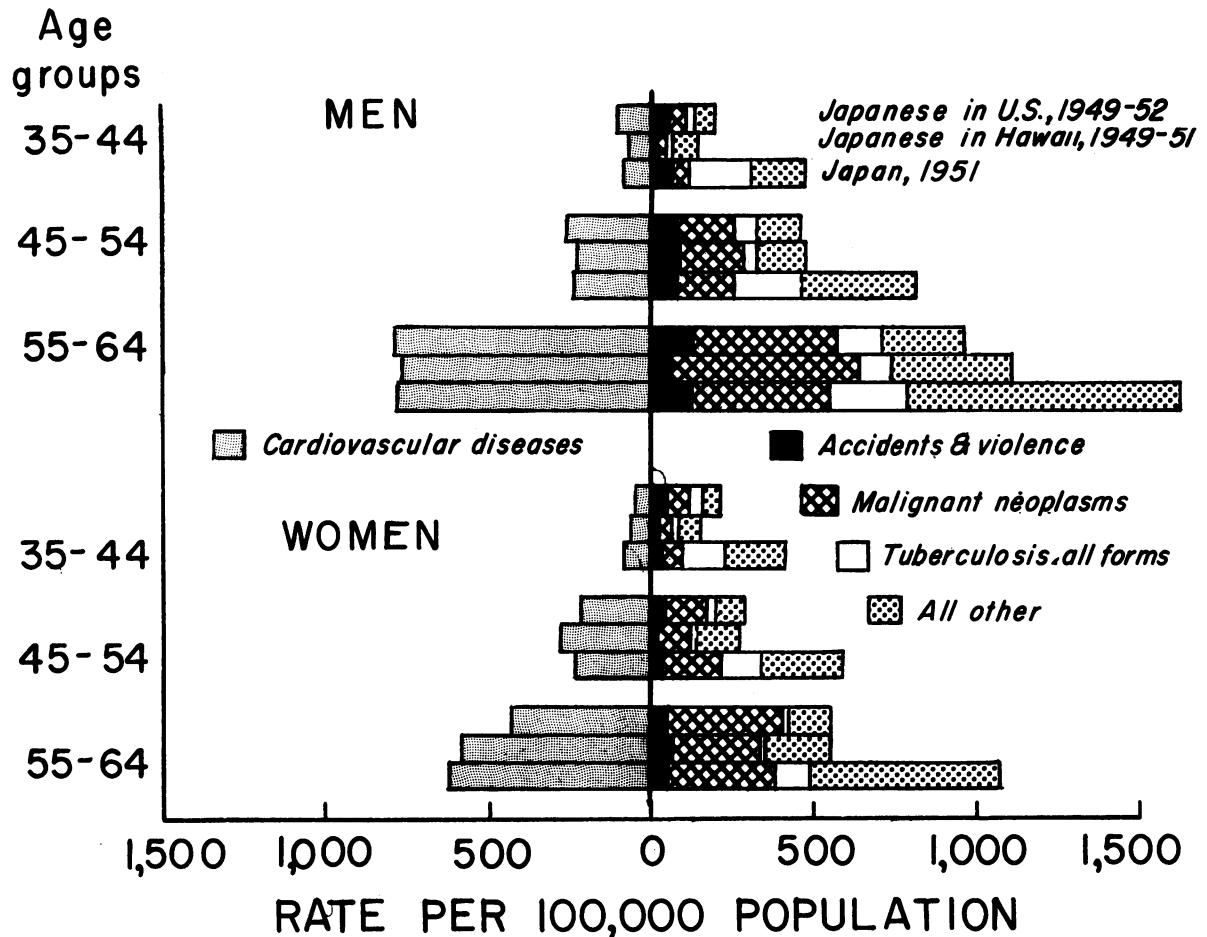
¹ Rates per 100,000 population in each specified group as of April 1, 1950.

² Numbers after causes are category numbers of the sixth revision of the International Lists, 1948.

³ Total numbers of deaths for specified age groups were: 63, 141, 321, 537.

⁴ Total numbers of deaths for specified age groups were: 61, 114, 179, 262.

Figure 4. Death rates by age and sex for major components of mortality: adult Japanese in continental United States, Hawaii, and Japan.



enza and pneumonia, bronchitis, cirrhosis of the liver, and nephritis and nephrosis. There are, in short, a number of diseases tending to raise mortality among adults to a higher level in Japan than in the United States or in Hawaii. Nevertheless, the total death rates for men 45-54 and 55-64, unlike the death rates for men 35-44 or 65-74 and unlike the death rates for adult women at any age, are nearly as high in the white population of the United States as in Japan. This presumably reflects the unusual hazard from heart disease encountered by the white, male, middle-aged American.

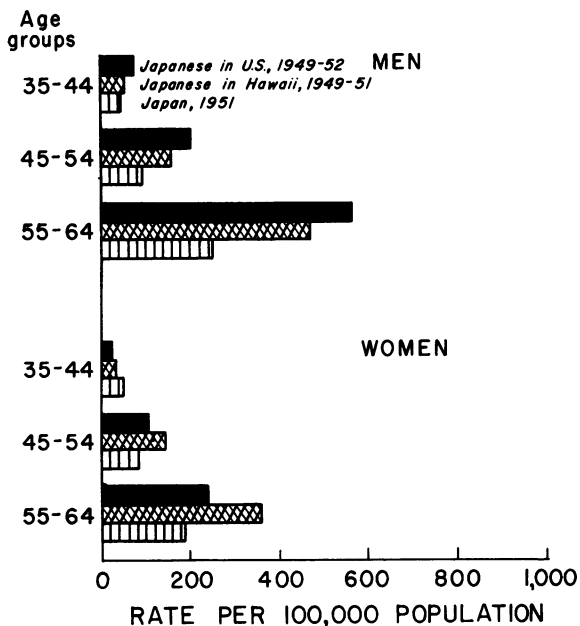
It ought to be noted at this point that a relatively few areas in Japan supplied the bulk of the migrants to Hawaii and to the United States. Exact data on this subject are not available, but it appears that the main sources of migration, notably Hiroshima prefecture,

were the same for Hawaii and for the United States. (This conclusion is based on personal communications from the Japanese consulate general of Hawaii, the Japanese American Citizens League, and Professor Andrew W. Lind, University of Hawaii.) While detailed mortality was not examined for the Japanese prefectures, the prefectures that are reputed to have supplied the largest number of immigrants to the United States and Hawaii differed little from Japan as a whole either in crude death rates or in total death rates for the cardiovascular causes.

Nativity

Insofar as cardiovascular mortality among the Japanese of the United States expresses a cultural difference, the death rate from diseases

Figure 5. Death rates by age and sex for diseases of the heart: adult Japanese in continental United States, Hawaii, and Japan.



of the cardiovascular system should probably be lower among the foreign-born than among the nisei. Deaths for the Japanese have not been tabulated by nativity, so this possibility cannot be examined directly. An indirect approach is available, however, because of the character of Japanese immigration to the United States. The period of free immigration to the United States was brought to a close in 1911, when the Japanese Government agreed to restrict immigration to the United States and its Territories. (All Asian immigration was stopped in 1924 by an act of Congress and, while Japanese immigration has recently been resumed, it is under very small quotas.)

The effect of this can be seen from the 1950 census data, which give the following percentages of foreign-born Japanese:

	Age			
	25-34	35-44	45-54	55-64
United States---	3.2	20.1	85.8	94.7
Hawaii-----	1.2	7.3	59.0	93.7

Thus, one would expect the Japanese population of the United States aged 45-54 to shift from a preponderantly foreign-born one in 1950 to a preponderantly native-born one in 1960. If this is accompanied by a large rise in cardio-

vascular mortality for Japanese men in this age group, and especially by a marked increase in the death rate for diseases of the heart, the inclination will be to attribute the present differentials to cultural factors. If a rise does not occur, it will be much more difficult to reach any kind of conclusion concerning the present differentials. Unfortunately, it is impossible to predict the picture for 1960 even from mortality data for the years since 1952.

Discussion

One interesting feature of these data is the tendency for the Japanese in Hawaii, especially the men, to exhibit an intermediate position with respect to cardiovascular mortality between the Japanese of the United States and Japan. This is true both for diseases of the heart, with the low death rate for the Japanese more marked in Hawaii than in the United States, and for vascular lesions affecting the central nervous system, with higher death rates in Hawaii than in the United States.

The Japanese of Hawaii are apparently closer to the Japanese of Japan than are the Japanese of the United States in something more than a

Figure 6. Death rates by age and sex for vascular lesions affecting the central nervous system: adult Japanese in continental United States, Hawaii, and Japan.

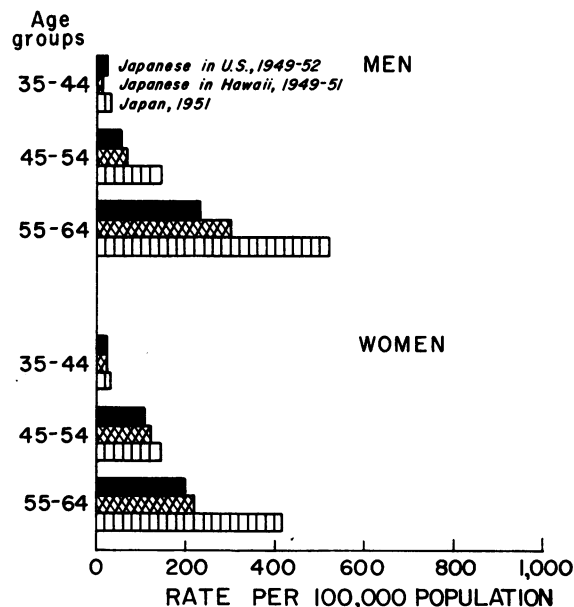
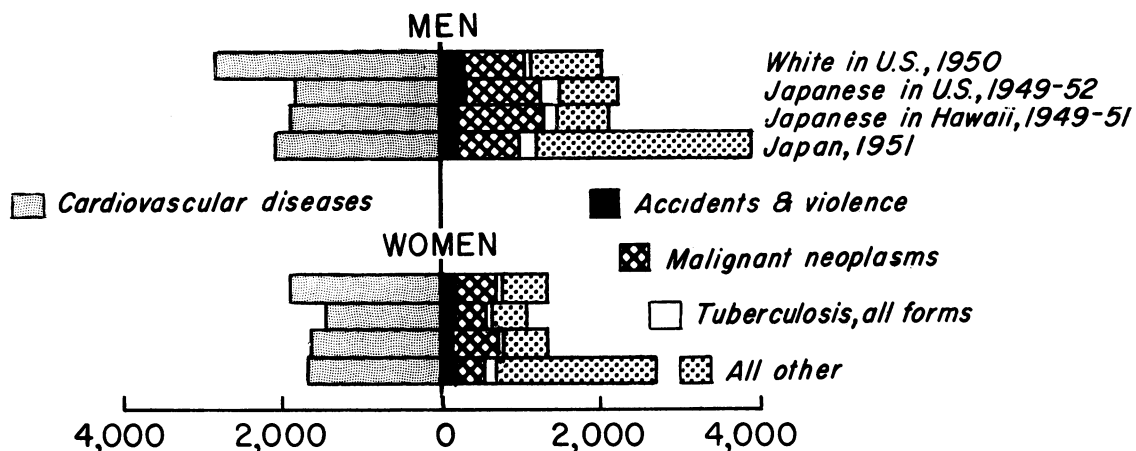
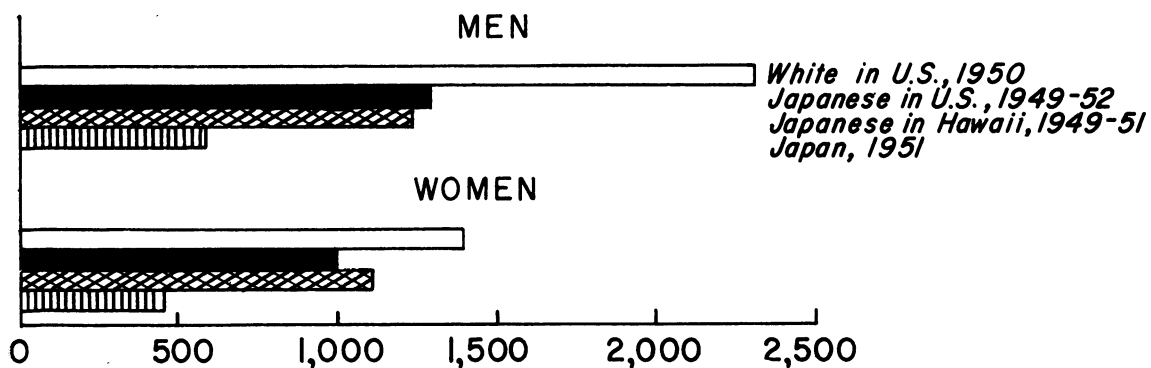


Figure 7. Death rates for major components of mortality for age group 65–74 years: white and Japanese populations of continental United States, Japanese of Hawaii, and Japan.

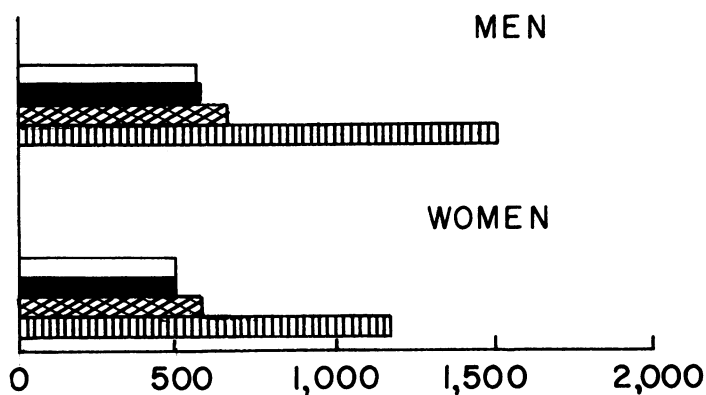
Major Components of Mortality



Diseases of Heart



Vascular Lesions of Central Nervous System



geographic sense. It is almost as if some historical process were expressing itself in spatial terms, a common enough phenomenon in the evolution of both cultural and biological forms. It is possible that the changes from Japan to Hawaii to the United States in mortality from diseases of the heart and from vascular lesions affecting the central nervous system represent a parallel to the historic changes in mortality that have apparently taken place within the United States during the 20th century.

Perhaps the most notable characteristic of Japanese mortality is the association of a low death rate for diseases of the heart with a high death rate for vascular lesions affecting the central nervous system. This is not unknown in other mortality statistics; in particular, it is one of the most noteworthy differentials between many of the States of the United States. The first instinct of experts in vital statistics is to appeal to a difference in medical certification in such a case, the classic "reporting artifact." This is a possibility, of course, but against it must be weighed the frequency with which a "stroke" can be recognized and described quite unequivocally. It is difficult to see how, in such instances, a death from a cerebrovascular accident could be confused with a death, especially a sudden death, from coronary artery disease.

This is not to read out the possibility of confusing deaths from the two causes, especially when there has not been a physician in attendance during the illness or at death. In some instances cerebrovascular accidents or symptomatology may occur in the terminal stage of heart disease. Such deaths should be classified to diseases of the heart, but if the preexisting heart disease were unknown or overlooked by the physician, they would be classified to vascular lesions affecting the central nervous system. However, in 1940, the last year for which such data have been compiled, only 7.9 percent of all deaths certified to diseases of the heart in the United States had as an associated cause mentioned on the death certificate "intracranial lesions of vascular origin." This is a minor quantity in relation to the differences between the Japanese of Japan and the white American (or, for that matter, between Japanese American and white American men in the age groups

between 45 and 74) with respect to mortality from either vascular lesions affecting the central nervous system or diseases of the heart. Even if it were assumed that all deaths with cerebrovascular symptomatology in the terminal stage were classified to vascular lesions affecting the central nervous system for the Japanese, the order of magnitude suggested by the 1940 data on associated causes would account for only a small part of the reported difference between white American and Japanese mortality experience.

On the other hand, if we accept as a fact that the Japanese have higher mortality from vascular lesions of the central nervous system and lower mortality from diseases of the heart than does the white population of the United States, we are faced with a serious medical puzzle. The present consensus seems to be that atherosclerosis is an important factor in both diseases. What mechanism would diminish the effect of atherosclerosis on the coronary artery while increasing its effect on the cerebrovascular system? It might be postulated that hypertension, not atherosclerosis, is the differential factor here, on the assumption that hypertension, as such, is more likely to lead to vascular lesions affecting the central nervous system than to heart disease. (Hypertension, with or without atherosclerosis, is considered by some authorities to be the major cause of vascular lesions affecting the central nervous system, whereas the role of hypertension in heart disease is generally considered less important than the atherosclerotic process.) There is, however, nothing in the mortality data for the hypertensive diseases to support the assumption that hypertension is more common among the Japanese of the United States or Hawaii than among white Americans.

Whatever the explanation advanced, it must account for a lower mortality from heart diseases in association with a higher mortality from cerebrovascular accidents. Present research in the cardiovascular diseases, on the other hand, strongly implies that the causes raising mortality from diseases of the heart, whether atherosclerotic or hypertensive, should also raise mortality from vascular lesions affecting the central nervous system. Clearly, then,

reconciling the mortality data with the medical research data is a major problem for the future.

Summary

In comparison with the death rates among the white population of the United States (1950), the death rates among the Japanese in the United States (1949-52) and in Hawaii (1949-51) are low. Death rates in Japan, however, tend to be higher than those for the white population of the United States.

Death rates for diseases of the heart are quite low among the Japanese, especially the men, in comparison with those for white Americans, whereas rates for vascular lesions affecting the central nervous system are high. For both cause categories, the Japanese of Hawaii tend to occupy an intermediate position between the Japanese of the United States and Japan. The association of a low death rate for diseases of the heart with a high death rate for vascular lesions affecting the central nervous system raises some interesting questions.

DOCUMENTATION NOTE

A tabulation of total deaths and average death rates by age and sex for 64 selected causes among the Japanese population of continental United States, 1949-52, has been deposited as document No. 5203 with the American Documentation Institute, Photoduplication Service, Library of Congress, Washington 25, D. C. A

photoprint copy may be obtained by remitting \$1.25; a 35-mm. microfilm copy by remitting \$1.25. Advance payment is required. Make check or money order payable to Chief, Photoduplication Service, Library of Congress.

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Institute in Social Gerontology

The University of Michigan has recently received a grant of \$203,940 from the National Institutes of Health, Public Health Service, to set up a Training Institute in Social Gerontology. Seventeen universities are cooperating in the project; they are California, Chicago, Connecticut, Cornell, Duke, Florida, Harvard, Illinois, Iowa, Michigan, Minnesota, Pennsylvania State, Pittsburgh, Purdue, Syracuse, Washington (St. Louis), and Wisconsin.

As the first activity, publications will summarize all that is currently known about personal and social problems of human aging. The second phase involves a 1-month training seminar for about 40 faculty members selected by the Inter-University Council from applications submitted through universities and colleges.