



Interplay of Politics and Law to Promote Health

Improving Economic Equality and Health: The Case of Postwar Japan

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The health situation in Japan after World War II was extremely poor. However, in less than 35 years the country's life expectancy was the highest in the world. Japan's continuing health gains are linked to policies established at the end of World War II by the Allied occupation force that established a democratic government. The Confucian principles that existed in Japan long before the occupation but were preempted during the war years were reestablished after the war, facilitating subsequent health improvements. Japan's good health status today is not primarily the result of individual health behaviors or the country's health care system; rather, it is the result of the continuing economic equality that is the legacy of dismantling the prewar hierarchy. (*Am J Public Health*. 2008;98:589–594. doi: 10.2105/AJPH.2007.116012)

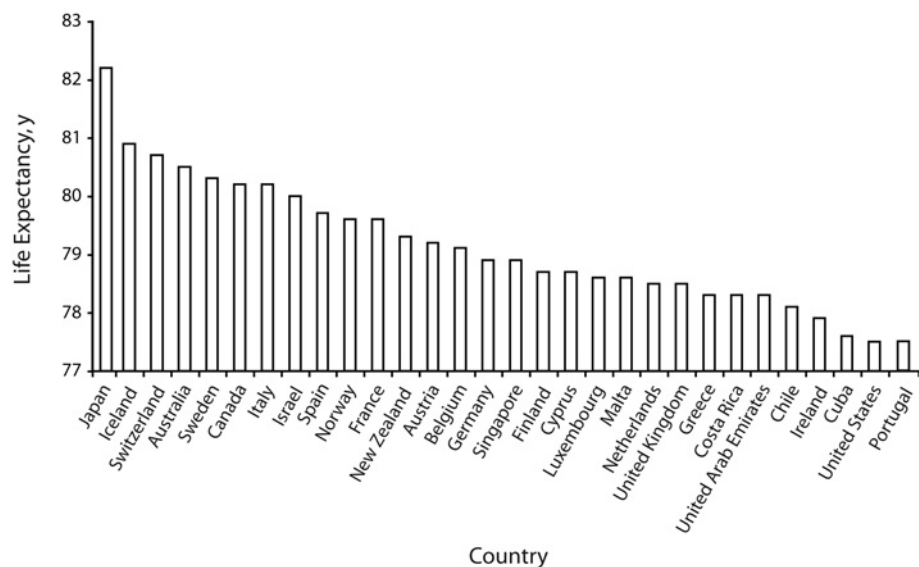
JAPAN ENJOYS THE HIGHEST life expectancy of any nation and thus currently stands as the leader in what can be termed the “health Olympics”: the rankings of country life expectancies published in the United Nations human development reports each

year (Figure 1).¹ By contrast, at the end of World War II, the health status of Japan's population was very poor. We used life expectancy as a measure of national health to examine explanations for Japan's rapid improvement in health status from the postwar years to the present day.

Preston pointed out that countries' income levels are related to mortality but that, over time, only a minimal portion of life expectancy gains can be attributed

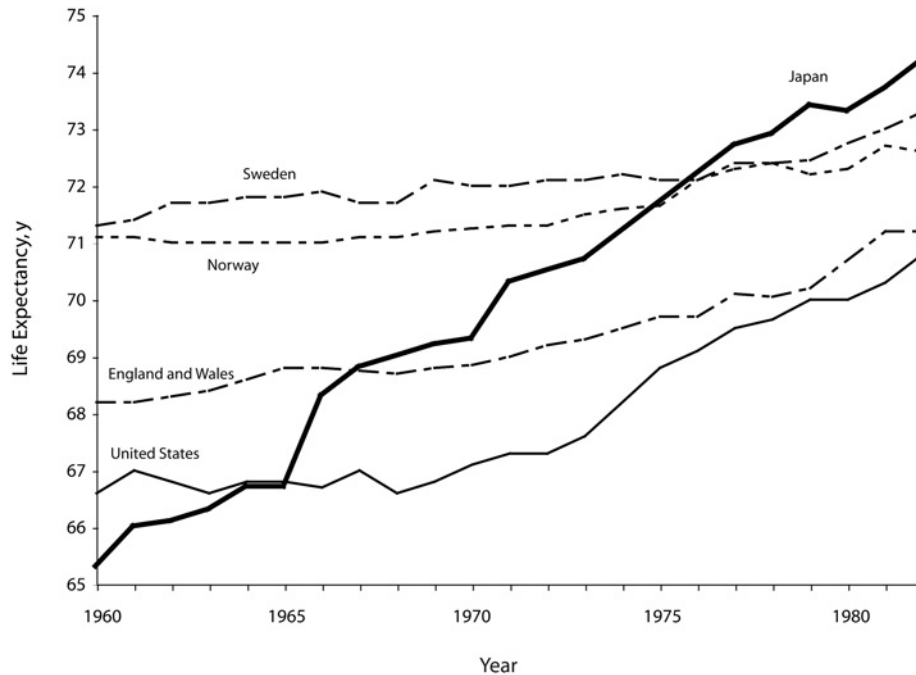
to increases in income.² What explains the upward shift described by Preston for Japan, a country that started far behind in the “health Olympics” at the end of World War II? Murray and Chen³ suggested 3 interdependent factors that modulate the income–longevity relationship: level and distribution of national income, effectiveness of public policies, and efficiency and effectiveness of expenditures directed toward control of mortality.

Extensive research now points to measures of equality and economically democratic forms of governance as major factors affecting societal health.⁴ The cross-sectional association between income distribution and health is compelling evidence of this relationship⁵ but does not illuminate policies and structures that produce the desired effects. Siddiqi and Hertzman⁶ showed that below a certain threshold gross domestic product economic growth,



Source. Data were derived from the United Nations Development Programme.⁴⁹

FIGURE 1—Top 30 countries in the United Nations rankings of life expectancy for 2004.



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FIGURE 2—Life expectancy trends of selected countries: 1960–1982.

HEALTH TRENDS IN JAPAN BEFORE AND AFTER WORLD WAR II

In the late 1860s, the Meiji Restoration in Japan dismantled the feudal Tokugawa Empire. A reasonable standard of living existed in the country from the 17th through the 19th centuries, with relatively small disparities between the ruling Samurai class and commoners.^{14,15} There was a focus on education during the Tokugawa period, when Japan's literacy rates were comparable to those of many European countries.¹⁵ Fertility declined,¹⁶ with Confucian traditions (based on original virtue rather than original sin and valuing duty rather than individualism) playing a role. Toward the end of the Tokugawa period, more land began to be held by residents than by absentee landlords,¹⁷ and an entitlement system existed between workers and their supervisors.¹⁶

As Japan industrialized beginning in the late 1890s, powerful families called *zaibatsu* (including the Mitsubishi, Mitsui, and Sumitomo families) established themselves as corporate-like entities. They amassed great wealth and political control and dominated Japanese society. Income inequality increased dramatically leading up to World War II.¹⁸ The *zaibatsu* influenced political and military leaders, creating fear of United States hegemony in the region and pushing for militarism in the Pacific. Entitlements declined and the central government did not attempt to redistribute resources.¹⁶

together with conditions of income equality, affects health outcomes.

In 1989, Marmot and Davey Smith speculated on reasons for Japanese longevity improvements.⁷ They noted an impressive reduction in mortality during the 1980s that could not be attributed to medical care (Figure 2). They found that population mortality was substantially reduced for conditions not amenable to medical intervention. Potential explanations for the continuing remarkable gains in Japanese longevity included low levels of income disparity, greater security and control in the workplace, and the psychosocial benefits of loyalty and group commitment.

A common way of looking at national health changes is to

consider disease-specific mortality rates over time.⁸ Johansson and Mosk⁹ conceptualized protection from exposures to disease and resistance to or recovery from such exposures as key elements in a biological analysis of mortality change. However, the health of nations is increasingly seen to be related to upstream factors such as a nation's political system and its influences on the economy and on the nature of social relations.¹⁰ Policies that produce more-egalitarian societies may explain profound health improvements.¹¹ These improvements are probably associated with biological mechanisms related to reductions in chronic stress,¹² and they may be more

dependent on political changes than on specific public health programs.

Wilkinson highlighted the fact that Japan has low levels of inequality and equitably shared economic growth.^{4,13} Japan's situation is unique in that the country had an opportunity (albeit forced) to reestablish its governing and social systems after World War II. We examine how population health improvements followed the establishment of more-egalitarian social structures, political systems, and resource redistribution after World War II, mandated by the Allied occupation as part of the reconstruction of Japanese society and government.



Japanese health and longevity suffered greatly during the *zaibatsu* reign and the war years subsequent to the Meiji renaissance¹⁹ according to vital statistics records from the period, which are widely believed to be accurate. The humiliating defeat of Japan had devastating consequences for the country's health. Johansson and Mosk⁹ reported that life expectancy at birth among men had dropped to 24 years in 1945 as a result of the large numbers of war deaths.

General Douglas MacArthur, the supreme commander of the Allied Powers, had unprecedented control of the occupying forces in Japan from August 1945 to April 1951. His top priority was to dismember the Japanese empire, promote democracy, and “blast apart the concentrations of wealth and power claimed by Japan’s wartime elites, dismantle the structures through which they worked their supposedly evil ways, and encourage the growth of new constituencies.”^{15(p543)}

MacArthur recognized the importance of the country’s citizens regaining self-respect. Removing the traces of Japan’s feudal structure, developing an economic foundation based on social justice, instituting land reform policies, and giving voice to women and labor unions were largely accomplished through the establishment of a new constitution and attendant legislation.²⁰ Historians characterize the accomplishments of the MacArthur period as the “3 Ds”¹⁵: demilitarization of Japanese society, democratization of the political

process, and decentralization of wealth and power.

Demilitarization was achieved through abolishing the Japanese army. The Japanese were forced to screen and remove from public life all “active exponents of militarism and militant nationalism.”^{15(p534)} According to the “peace clause” (article 9) in the Japanese Constitution, “the Japanese people forever renounce war as a sovereign right of the nation and the threat or use of force as a means of settling international disputes.” It further pledged that “land, sea, and air forces as well as other war potential . . . will never be maintained.”^{15(p540)}

Democratization was carried out through the drafting of the new constitution, which MacArthur assembled from a review of the constitutions of other democracies, including the United States. The resulting document²¹ was arguably more liberal than the US Constitution, providing for academic freedom, free universal education, and the right of workers to organize and bargain collectively. The emperor was left as the symbolic head of the country, but the Shinto religion was disestablished, thus separating church and state.

An important difference between the Japanese and US constitutions is that Japan’s details the “rights and duties of the people” in 31 clauses. Three of these clauses have the important impact of forcing the Japanese government to reduce economic disparity and improve the health status of citizens. For example, according to article 11, “the people shall

not be prevented from enjoying any of the fundamental human rights”; article 14 declares that “all of the people are equal under the law and there shall be no discrimination in political, economic or social relations because of race, creed, sex, social status or family origin”; and, finally, article 25 gives all people a “right to maintain the minimum standards of wholesome and cultured living. In all spheres of life, the State shall use its endeavors for the promotion and extension of social welfare and security, and of public health.”¹⁵ The Japanese government has, with the exception of several interpretations of the peace clause, followed these constitution-defined articles.²²

MacArthur saw centralization of wealth and power in Japan as antithetical to the growth of democracy. Corwin Edwards, the head of the State Department mission, reported that the

concentration of economic control enabled the *zaibatsu* to continue a semi-feudal relationship with employees, to suppress wages, and to hinder the development of independent political ideologies. Thus the formation of the middle class, which was useful in opposing the militarist group in other democratic countries, was retarded.^{15(p543)}

To bring about conditions conducive to the establishment of a middle class, MacArthur enforced the breakup of *zaibatsu* business conglomerates, fostered the growth of labor unions, removed control over education from the hands of the central bureaucracy, and rewrote the civil code. In addition, a maximum wage was legislated.²¹

At the end of the war, although more than half of Japan’s residents lived in agricultural villages, these individuals owned less than 10% of the land they cultivated. The land reforms that were instituted after the war allowed tenants, called *kosakumin*, to purchase their land from the country’s roughly 36 000 landowners at a fixed price based on a complicated formula involving rice prices and production costs. The land was sold to the *kosakumin*, and they were granted 30-year low-interest loans to pay for it. More than 90% of the country’s land was redistributed among the *kosakumin* during this period. Most tenants paid for the land in cash or had repaid the loans by 1948. There were minimal incidents of violence between landlords and tenants, and no loss of life was reported. Historians term this the most successful land reform program in world history. Its success can be attributed to the cultural values of reciprocity inherent in Japan that were a carryover from the late Tokugawa period and the Meiji Restoration.²³

Japan’s labor unions were organized at an individual business level rather than at the occupational level, producing cooperative agreements between management and labor. Large firms incorporated labor into management and cultivated loyalty among workers by offering long-term employment as well as wage increases tied to seniority.²⁴ Such an organizational model for labor contrasts with a market model in which workers are viewed as commodities.²⁵



The Fundamental Law of Education, passed in 1947, declared that the primary goal of the education system was to “esteem individual dignity and endeavor to bring up people who love truth and peace.”¹⁵(p549) Textbooks were rewritten to emphasize the virtues of democracy and pacifism. The most radical change was that students were required to complete 9 years of public education as opposed to 6 years. In addition, because MacArthur recognized the important role of women in society, women were ensured educational opportunities equivalent to those of men.²¹

HEALTH GAINS IN JAPAN IMMEDIATELY FOLLOWING THE WAR

Crawford F. Sams, director of the Public Health and Welfare Section under MacArthur, noted Japan’s astounding health gains during and after the period of the Allied occupation:

Between the years 1895 and 1946, the life expectancy of Japanese men remained stationary at 42.8 years. The life expectancy for women during the same period was increased only from 44.3 to 51.1 years. But between the years 1946 and 1951 the life expectancy at birth for males took an astounding jump from 42.8 to 60.8 years, and that for women increased from 51.1 to 64.8. This constituted a gift of life of 18 additional years for men and 13.7 for women.¹⁹(p345)

He went on to describe this phenomenon as “unequaled in any country in the world in medical history in a comparable period of time.”¹⁹(p345) Early improvements

in the longevity of Japan’s population certainly came from the provision of basic needs, including food, water, sanitation, and shelter, immediately after the war. Strict price controls were instituted to ensure equal distribution of rice, the main source of food in the country’s households. Child growth did not falter.¹⁶

Collective cooperation efforts ensured the collection of waste and the distribution of disinfectants.²⁶

Johansson and Mosk⁹ reported that after the war life expectancy rose at a pace unprecedented in both Japanese and world history. This increase occurred “*despite the fact that income per head had not yet returned to pre-war levels* [italics in original].”⁹(p232) Johansson and Mosk attributed these gains to drugs such as antibiotics, public health expenditures, and urbanization and did not consider the Allied occupation.

Mosk wrote of Japan’s remarkably rapid transition from a balkanized system of entitlements rooted in feudalism to a successful adoption of Western technology subsequent to the country’s development of “population quality” (i.e., improvements in nutritional intake leading to increased work capacity) coupled with advances made through political protest movements during the late Tokugawa period. This situation led to a period of balanced economic growth during 1880 and 1920.¹⁶ Siddiqi and Hertzman⁶ stressed the importance of equity policies directed toward education, especially of women; maintenance of the agricultural sector; and an orientation toward an export economy focusing on

domestic labor that allowed lower-income segments of the population to benefit economically.

It can be proposed that the “3 Ds”—dismantling the prewar and war period economic and social hierarchy and restoring supportive elements of Japanese society—in combination were directly responsible for the improvements in health and longevity in Japan, the most rapid such improvements ever seen in the country; however, a national desire to carry out reforms was present in the liberal wing of the government before the war.¹⁶ The occupation was a historical tipping point, but public opinion leaders had advocated for many social justice concepts decades earlier.²⁶ The prewar tension “between capitalism and a Confucian-tinged socialism” helped make postwar changes possible.²⁷(p189) Land reform was effective partly because of the indigenous social forces the occupation had unlocked.

Translation from English of Article 25 of the constitution, with its public health clause, resulted in confusion among the Japanese population. In Japan there is no indigenous concept of “natural rights” and their assertion²⁶; Japanese culture, with its Confucian ideals, stresses the importance of duties rather than reciprocal rights. Caring is a duty rather than a policy. The country’s business model, based on historical values, evolved to include productivity elements that Western nations strived to duplicate. A system of flexible rigidities governed Japan’s economy and business climate, producing rapid

economic growth that benefited all. Americans were demonized in the prelude to the war; after the war, however, Japan became the United States’ greatest friend, with Japanese citizens turning their rage against militarists, ultranationalists, and feudal elements as they embraced defeat and worked toward job security and elimination of gross economic disparities.²²

Hierarchies in Japan reside in social relationships encompassing all spheres of life, and the strict norms that govern behaviors between superiors and subordinates in an organization are more rigidly observed than in Western societies. In addition, Japanese companies differ from those in the West in that there is more flow of information from below, more consensus decisionmaking, and more concern for the personal welfare of all members of a group. Outsiders view Japan’s lack of individualism as a lack of rights, but the country’s hierarchy can be better thought of as the enemy of individualism because deference to those of higher status is such a well-respected principle in Japan that superiors do not have to behave in an authoritarian way.¹⁷

HEALTH GAINS IN THE POSTWAR DECADES

In 1979, Japan’s life expectancy became the highest of any country, and it continues to be the highest today.^{8,28} Crime and violence are very low as opposed to the increases seen in other nations. By the end of the 1980s,



Japan had the lowest income-distribution gap of any country reporting to the World Bank.¹³ Income inequality is again increasing in Japan,¹⁸ as in much of the world, but the health gains made half a century ago coupled with the Japanese cultural concept of social harmony²⁹ may insulate the country's population from the adverse outcomes observed elsewhere.³⁰ Countries respond in different ways to the call for market capitalism. Japan advocates its model, which values social solidarity.³¹

Today the world is seeing profound changes in disparities both among nations and within nations, a situation partly attributable to the forces of corporate-centered trade and globalization.³² An economic egalitarian ethos continues in Japan, with a productive focus on outcomes rather than market opportunities as well as a focus on societal rather than individual gain.

The effectiveness of political and policy changes depends on a nation's history, culture, and values. Japan has a higher tax threshold and much higher levies for high incomes than the United States. CEOs and managers are known to take pay cuts rather than lay off workers, and the wage ratio between CEOs and entry-level workers remains very low, especially in comparison with that of the United States.³³ Whereas participatory work structures and managerial paternalism characterize Japanese manufacturing plants,^{24,25,34} the tendency in the United States is to lay off workers, with attendant adverse health effects.³⁵

OTHER EXPLANATIONS FOR JAPAN'S POSTWAR HEALTH GAINS

Three influences often suggested to explain Japan's remarkable health gains are the country's health care system, the genetic makeup of its people, and factors related to health behaviors. However, it is generally agreed that care provision has at best only a limited effect on health at the population level,^{36,37} and Japan's health care system was not and is not exemplary.^{38,39} Marmot and Davey Smith argued that the mortality declines observed in Japan were not caused by improvements in medical care.⁷ The public health infrastructure leaves much to be desired. Measles is common, and immunization rates are low.⁴⁰ Half of Japan's residents did not have piped water and sanitation in the mid-1990s.¹⁴ In addition, studies of migrants from Japan to the United States have shown that their health tends to decline after they leave home, implying that their genetic makeup is not the reason for their superior health.^{41,42}

The male smoking prevalence rate in Japan is among the highest in any wealthy country, yet the country's male population still has the highest life expectancy in the world, suggesting that this personal health behavior is not a key factor. Male smoking rates in the United States are among the lowest of all developed countries, but life expectancy among male US residents is very low for a wealthy country.⁴³

A diet high in fish and low in meat also has been proposed as

a reason for Japan's impressive longevity. The Japanese diet, however, has changed radically since World War II, with gains in longevity continuing apace despite the population's much more common consumption of Westernized diets of meat and dairy products.⁴⁴ Finally, Japan's homogeneous population is not the reason for its good health.⁴⁵

Japan's example of rapid improvement in mortality exemplifies two interdependent factors defined by Murray and Chen³: equitable distribution of national income and effective public policies directed toward reductions in mortality. Wilkinson's gearing factor between income and health—according to which, over time, the same amount of income “buys” progressively better health—is relevant as well. Wilkinson considered related but unmeasured salutary psychosocial changes that piggy-backed on economic growth as the most important benefit. In this process societies become less harsh materially, but also less repressive and cruel toward one another, as the quality of social relations softens.⁴⁶

CONCLUSION

Today's huge health gap between Japan and the United States could not be bridged even by eradicating heart disease, the leading cause of death in the United States.⁴⁷ Moreover, the United States continues to fall further behind, ranking 21st in life expectancy in the 1992 United Nations report⁴⁸ and 30th in 2004.⁴⁹ The discrepancy between the two countries

may result from Japan not experiencing the levels of income inequality and wealth polarization found in the United States in recent decades.¹⁸

Changes in a society's economic hierarchy can have profound health effects, and Japan's example is remarkable. The Allied occupation provided Japan with the opportunity to establish a democratic, peaceful, and relatively economically egalitarian society. The country's economic recovery was aided by a new constitution facilitated by Japanese values. These structural changes produced social conditions conducive to health and longevity, and the benefits of an increasing life span continue. Although few nations experience forcible reconstitution of their societies and governing structures, much can be learned from the effects of such restructuring in Japan on the country's health. ■

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S. Bezruchka originated the article idea and led the writing. T. Namekata provided



important details. S.G. Siström wrote an initial draft. All of the authors reviewed drafts of the article.

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