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Monitoring Motherhood: Sociocultural and Historical Aspects of Maternal and Child Health in Japan

INTRODUCTION

STATISTICS ABOUT INFANT MORTALITY, namely the Infant Mortality Rate (IMR), the number of deaths within one year after birth (per thousand births), are usually taken to be one of the most reliable indicators of health in any given society. Consequently, public health activities in most parts of the world have targeted the prevention of infant deaths, and researchers have put serious efforts into assessing how this goal can be achieved. Recent investigations have demonstrated the significance of sociocultural factors in the reduction of IMR.[1] Perhaps the most significant factor is the wealth of the nation. In principle, the higher the per capita gross national product (GNP), the lower the IMR; the IMR of so-called developing countries is estimated at more than ten times that of developed countries. A recent study on significant infant mortality reductions in several regions showed the importance of the following factors: female autonomy, education (especially female), access to health-care services and mechanisms to guarantee their efficient operation, an adequate minimal standard of nutrition, universal immunization, and a commitment to the establishment of effective perinatal services.[2] Other studies in North America have shown that the distribution of wealth across social class, access to prenatal care,

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teenage pregnancy, out-of-wedlock birth, the presence of minorities who experience discrimination, immigrant and refugee status, and low educational level of parents also influence the IMR.[3]

For those researchers interested in health demographics, Japan has attracted attention. Since 1984, the Japanese IMR has been the lowest in the world.[4] In 1992, the IMR was 4.5 (as opposed to 6.8 in Canada in 1991 and 9.2 in the United States in 1993), and the Perinatal Mortality Rate was 5.2 (3.5 late fetal death rate plus 1.8 early neonatal death rate) (as opposed to 8.0 in Canada in 1989 and 10.1 in the United States in 1988). Japan also boasts the longest life expectancy at birth: 76.25 years for men and 82.51 years for women (1993).

PREGNANCY AND CHILDBIRTH IN JAPAN: CURRENT ATTITUDES AND PRACTICES

Reproductive Histories and Cultural Expectations

Demographic figures in Japan show a strikingly uniform pattern of reproduction. Almost all children are born after marriage; the majority of women stop working once pregnant for the first time; and most women have had two children, all they plan to have, by the age of thirty-five. This trend indicates the existence of shared expectations among the public about the correct conditions for childbirth and the raising of children, and, at the same time, makes it easier for the government to manage maternal and child care.

The average age of marriage is 26 for women and 28.4 for men. The divorce rate is increasing, but remains low at 1.45 per thousand, much lower than in America (4.7 per thousand). The average interval between marriage and the birth of the first child is two years. Ninety-nine percent of women who gave birth in 1992 were married, a figure which has been stable for three decades. In Japan, 89.9 percent of babies are born to mothers between the ages of twenty and thirty-five. The numbers of births by teenage mothers have been increasing slightly but remain low at 1.5 percent of all births. Delivery by women aged thirty-five to forty is 7.6 percent of all births, and 1 percent by women aged forty or older. The age distribution for giving birth has not changed significantly for over a decade. A well recognized risk factor for infant mortality is low

birth weight. The rate of low birth weight babies (less than 2,500 grams) is 6.2 percent for boys and 7.5 percent for girls, not a particularly impressive statistic (in the United States the rate was 7 percent in 1990).

Japanese women have a low fertility rate: the birth rate is 9.8 per thousand and the total fertility rate (the average number of children a woman is expected to produce during her reproductive period) is 1.5 (in the United States it is 2.01). Only 3.1 percent of Japanese babies are fourth or lower in the birth order. The three major causes of infant deaths are congenital anomalies (37.2 percent), birth trauma (17.9 percent), and accidents (6 percent). Overall, neonatal deaths comprise 53 percent of all infant deaths in Japan.

Monitoring and Preventive Care

In Japan pregnancy is carefully monitored both as part of the medical system and in the privacy of the home, and there is a comprehensive system of preventive care. Public Health Centers (*hokensho*) organize most preventive services in cooperation with hospitals and clinics, and almost all women comply with this monitoring system. Monitoring starts with the registration of the pregnancy with the local government, which is required by the Maternal and Child Health Act. More than 90 percent of pregnancy registration is done before the twentieth week of pregnancy,[5] which means that most women learn of the pregnancy soon after conception, visit a doctor, and then comply with professional supervision while receiving support from public health services.

One important device for careful monitoring is the Maternal and Child Health Handbook (*Boshitecho*), which is handed out after registration of the pregnancy. This small book becomes the child's official health record from the prenatal period until he or she enters primary school at age six. Pregnancy and delivery status, the developmental curve of the child, vaccinations, and results of health checkups are recorded and referred to at follow-up examinations. One other purpose of the Handbook is to provide information to women about normal pregnancy, dangerous symptoms during pregnancy, developmental stages of children, and information on clinics and available services at public health centers near their places of residence. The Handbook also has symbolic meaning, stimulating an awareness in the woman that she will shortly become a mother.

Women report that they feel both joy and anxiety and become sensitive about future maternal responsibilities once they receive the Handbook.[6] The Handbook is often passed on to the adult child, becoming a valued childhood memento.

Much information is also available from commercial guidebooks and magazines. Currently, two monthly magazines deal with pregnancy and childbirth, one of which sells about 270,000 copies every month. The number of magazines about parenting are more numerous, and each one specializes in children of a certain age. Magazines encourage a positive attitude toward pregnant life and are packed with visual images. Although medical authorities often criticize these magazines as biased and scientifically unsound, they cover topics of interest to women which are rarely dealt with by professionals: unusual methods for delivery, prior experiences of other women, sex during pregnancy, maintenance of weight, education about fetal development, financial plans for delivery, introduction of popular obstetrical clinics, and so on. These magazines also provide medical information about such things as hepatitis B and rubella, delivery in mid-life, medication during pregnancy, and explication of medical terms.[7]

A prenatal checkup is recommended monthly until twenty-seven weeks of pregnancy, biweekly to thirty-five weeks, and weekly after that. Ultrasound is used routinely to monitor the development of the fetus. Other invasive tests such as amniocentesis are rarely used. Before and after birth, public health center activities include regular checkups, vaccinations, home visits, and group guidance. Public health nurses are the major resource for these activities. Maternity classes (*hahaoka kyōshitsu*) and child-care classes (*ikuji kyōshitsu*) are designed not only to provide practical knowledge but also to facilitate mutual support among mothers. Home visits are available for high-risk pregnancies and for families with neonates and low birth weight babies.

Almost 100 percent of deliveries are carried out in medical institutions including hospitals, clinics, and maternity homes, and 98 percent are under a doctor's supervision. Delivery rooms usually have a full range of medical technology on hand: a fetal monitor is used during birth in the majority of cases, ostensibly to reduce fetal death and malformation. Making individual choices in connection with birth is attracting the attention of increasing numbers of

mothers, but still there is little variation in delivery methods; neither childbirth with full anesthesia nor "natural" childbirth with only the assistance of a midwife is common. The rate of cesarean sections (10 to 20 percent of all births depending on the institution) is significantly lower than in North America. Hospital stay after delivery is usually one week—longer than in North America. New mothers usually stay in the hospital in rooms apart from their babies and midwives are on hand to give advice. Since 1975, breast-feeding has been promoted nationwide; 43 percent of mothers breast-feed while another 43 percent use both breast milk and artificial milk. Since 1958, low birth weight babies are registered, and the cost of inpatient care is publicly financed. Neonatal Intensive Care Units and Perinatal Intensive Care Units are distributed throughout the country. A comprehensive vaccination program exists, and preventive measures against the transmission of hepatitis B have been implemented since 1985. A system of screening was also developed for treatable congenital diseases, including phenylketonuria, maple syrup disease, homocystinuria, hystizinemia, galactosemia, hypothyroid disease, hyperadrenal disease, and neuroblastoma. The start of this program was later than in many other countries, but the coverage is virtually universal. Participation is, in theory, voluntary, but it is assumed that no one will refuse, and since 1984 the participation rate has been over 99 percent. Besides frequent health and developmental checks in clinics during the first year, special development checks are required by law for all children at eighteen months of age (since 1977), and again when the child is three years old (since 1961).

Once a child is enrolled in school, the school health-care system provides comprehensive health education, an exercise program, nutritional management through a school lunch program, yearly checkups, and other care. There are also public services, including clinics and telephone counseling services, for adolescents and young adults and their parents which are designed to raise the consciousness of young people about the importance of correct reproductive practices.

Public Support for Birth and Infant Health Care

Researchers outside Japan are often perplexed by the combination of excellent health indicators and relatively low health-care costs in

Japan. This is partly explained by the fact that normal pregnancy and delivery are excluded from the National Medical Expenditures. Maternal and child health (MCH) activities are covered under various laws by several ministries and at different levels of organization (national, prefectural, city). Thus, the extent of expenses for MCH is not easily established.

Japan has an obligatory universal medical insurance system. Although expenses for normal delivery (around $30,000-$34,000, calculated at $1/¥100) are not covered by this system, there is a system of reimbursement. A monthly allowance is given to a family with a child under three years of age ($50 for the first and second child, $100 for the third child and subsequent children). In addition to the coverage for group support and home visits by *hokensho,* two health checks during pregnancy and further checks in connection with the child's development are publicly supported. Inpatient care for low birth weight babies and treatment of children with disabilities and chronic diseases are also publicly covered. Financial assistance is available for the treatment of pregnant women with gestosis and other medical complications. If a mother is economically disadvantaged, pregnancy and delivery are financially covered by the Child Welfare Act. A third act, the Livelihood Protection Act, also pays medical fees for low income households. This assistance minimizes the influence of poverty on the health of mothers and children. However, because wealth is distributed relatively equally nationwide, few families find themselves in great need of assistance.

MCH in Everyday Life

In Japan, pregnancy and childbirth are considered family events and not only experiences for the young couple. The new baby is the successor to the extended family heritage and bloodline. Parents (especially the mothers) of both new parents are deeply involved in the process of pregnancy and early socialization, and pregnancy is understood as a rather precarious and special time by all family members.

A woman's sense of responsibility is facilitated by various traditional customs, usually initiated by the extended family. *Omiyamairi* is the custom of going to pray at a Shinto shrine which "specializes" in safe childbirth, where a special *obi,* a pregnancy sash, is pur-

chased and wrapped around the abdomen of a pregnant woman. This sash is believed to protect the uterus from the cold, keep the fetus stable, and prevent it from becoming too big.[8] Through these rituals a maternal identity is established. At the same time both material and nonmaterial resources, such as emotional support, are mobilized for the mother and baby by family members.

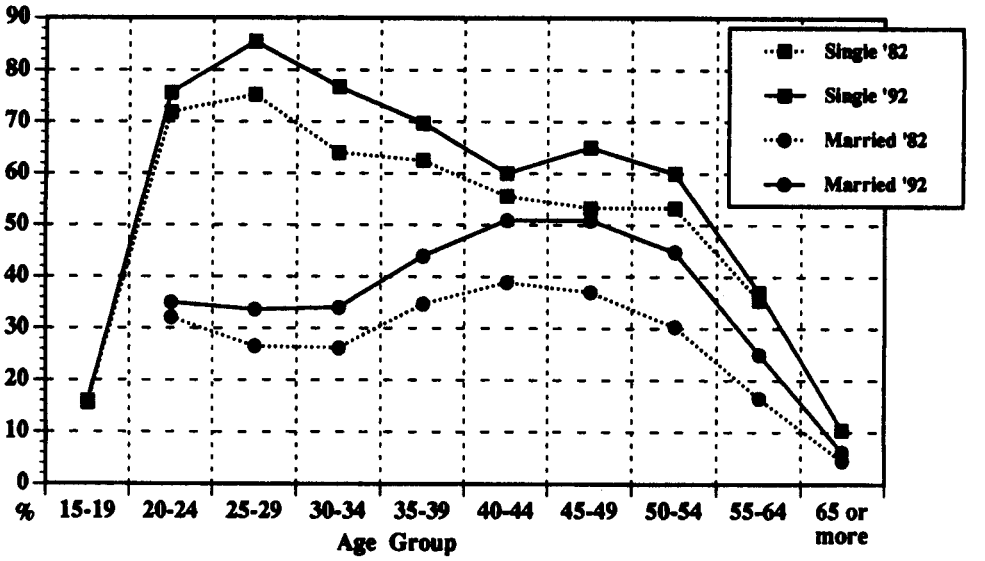
Mothers and Work

The work environment of pregnant women is considered to be very important, and regulations about maternal leave (fourteen weeks) and prohibition of dangerous and harmful work come under the Labor Standard Law.[9] In 1992, a law about child-care leave was enacted. As a result, a leave of up to one year is allowed for both women and men, though men very rarely take a leave. Usually child-care leaves go unpaid or are given with only very limited pay, but social security and health insurance are covered by about half of the major Japanese enterprises. In 1992, 34.5 percent of mothers took child-care leave, and 61 percent of them took up to six months.[10]

The occupational health of mothers has not been seriously considered until recently because the majority of women were expected to stop working once they became pregnant with their first child. As shown in *Figure 1,* the employment rate of women, particularly married women between the ages of twenty-five and thirty-five, is low. The majority of women give priority to their "duty" to produce and raise a healthy child. This may be the result of social pressure or an internalized ideal about "correct" behavior. According to a 1991 survey, 31.2 percent of women leave their jobs once they are pregnant. A survey conducted in 1992 showed that only 26.3 percent of women and 19.8 percent of men think it is better for women to continue to work once pregnant; 2.8 percent of women and 5.7 percent of men think women should not work at all; 21.9 percent of women and 29.9 percent of men think women should quit working for good once they get married or become pregnant; and 45.4 percent of women and 39.2 percent of men think women should stop working at least until their children reach primary school age. Enrollment for nursery care is low for the first three years: 2 percent of infants under the age of one, 9 percent of one year olds, 15.5 percent of two year olds, and 51 percent of three

year olds. Enrollment jumps to 90.3 percent for four year olds because by this age children begin to receive education which will prepare them for the competitive Japanese school system. Because child-care facilities for younger children are very limited, working women often rely on their parents for assistance. Ministry of Labor surveys show that 67.2 percent of working women who have children under one year of age turn to grandparents for child care, and 28.3 percent opt for nursery care.

FIGURE 1. Rate of Working Women by Age Group



Although the younger generation tends to be positive about female employment, the shared value that prohibits mothers with small children from working remains strong. Not only pregnancy and childbirth, but also child care and all other housework are still usually considered to fall entirely into the woman's domain. In the survey mentioned above, 55.6 percent of women and 65.7 percent of men agreed that "men's priority is work and women's priority is the family." Eighty-three and nine-tenths percent of women and 87.7 percent of men agreed that "it is acceptable for women to work but they should be responsible for the housework and child care." Another survey showed that whereas women spend on average 3 hours and 52 minutes on housework, men spend on average only 24 minutes per day, and the time is even shorter (19 minutes)

for men whose wives work outside the home. *Satogaeri shussan,* a custom that pregnant women return to their natal homes for childbirth, not only indicates strong family ties but also a practical need because the help of a husband cannot be relied on. Today, however, more women stay in their own homes and are looked after by their mothers or mothers-in-law.

The Socioeconomic Situation

Let us now turn to more general socioeconomic conditions. Factors such as a nation's wealth, high educational levels, a low rate of unemployment, a relatively equitable distribution of wealth, and little ethnic conflict facilitate a generous investment into maternal and child health on the part of both the government and the family and make these public health activities more effective.

The gross national product per capita (GNPpc) in Japan has increased for four decades and is now the second highest in the world. The unemployment rate has been stable at around 1 to 3 percent for four decades. In Japan the lowest earning fifth of all households has a higher share of total household income than comparable households in all other countries reporting to the World Bank (8.7 percent in 1979, 10 percent in 1989); the highest earning fifth of Japanese households has the third lowest share, comparatively speaking, of total household income (37.5 percent in 1979, 34 percent in 1989).[11]

Compared to North America, where ethnic minorities, immigrants, and refugees make up a large percentage of the population, ethnic uniformity remains high in Japan. Although the number of foreigners is increasing, the percentage of births among non-Japanese couples is 0.69 percent of all births, and births among Japanese married to non-Japanese is 1.5 percent. This goes far to explain why it is possible to have a widely shared value system in connection with reproduction.

THE ESTABLISHMENT OF MATERNAL AND CHILD HEALTH AS A GOVERNMENT CONCERN

It is generally accepted that improvement in the health of the Japanese population started after World War II and was made possible by advances in medical knowledge and practice. However,

health indicators, including the IMR, had started to improve much earlier. An analysis by Nishida showed that the contribution of medical technology to the decline of the death rate between 1920 and 1980 was less than 30 percent for infectious diseases, and at most 20 percent for infant-specific noninfectious diseases.[12] This study replicates Thomas McKeown's well-known analysis which showed the greater importance of socioeconomic changes for improvement in health.

Figure 2 shows that the IMR was about 160 per thousand births in the Meiji period (1868–1912), and that it decreased to under 100 in 1940 and continued to drop despite the war. In the postwar years the IMR dropped from 76.7 in 1947 to 10 in 1975, and became the lowest in the world in 1984.

FIGURE 2. Trends of IMR in Japan (1899–1992)

Improvements in general health status in Japan occurred concurrently with other social changes. In the past one hundred years Japan has experienced extremely rapid economic growth. At the same time, the political structure, family life, educational system, and status of women have changed significantly, particularly fol-

lowing the Meiji Restoration and again after defeat in World War II. Public health policies and hygiene and nutritional practices were all modified as well. To what extent each factor has contributed to the actual improvement of health is difficult to estimate.

Hygiene campaigns, provision of universal education, and support of the patriarchal family system were central to the modernization policy of the Meiji government. Later, a protective policy for MCH was initiated to produce a strong military force early in the Showa period (1926–1988). Drastic reforms were carried out at this time, based on innovative ideas about the importance of a healthy population. Later the foundation for the current health system was laid down by the American Occupational Force in the postwar era.

Although each of these policies was created for a specific purpose and was colored with the dominant ideologies of the time, they also demonstrated a long-term vision which emphasized human development and well-being. Most importantly, the implementation of policies was systematically carried out from the beginning of the Meiji era by means of campaigns to reform the "habits" of the people through "moral suasion" (*kyôka*).[13] The "masses" were educated to "rationalize" their lives, and women's groups and public health workers ensured that women in their locality cooperated in the name of progress, a situation which continues today, although the nationalistic underpinnings are no longer visible.

The Meiji Restoration

The Meiji Restoration of 1868 ensued upon a 250 year closure of Japan to the outside world. The new government was anxious to bring Japanese standards up to the level of the West through increased industrialization and an imitation of what was understood as a "western" way of life. The ideas of democracy and of Enlightenment philosophy were advocated by the Meiji leaders. The occupational caste system of the Edo period was abolished, and all citizens were recognized for the first time as equals. The writings of John Stuart Mill and Rousseau and the French Declaration of Human Rights were introduced, but for ordinary people in the villages the reform of daily life had a more immediate impact. Both the central and local governments made detailed regulations about community practices, including the prohibition of costly wedding

ceremonies, marriages at an early age, easy divorce, and remarriage. Some reforms were designed to liberate women.[14] For example, the government abolished the prohibition of entry of women to areas designated as sacred and allowed them to pass through certain travel checkpoints for the first time.

From the outset an explicitly scientific approach to health was advocated, including an emphasis on improved hygiene, and preliminary experiments with vaccination were carried out. Abortion by nonlicensed birth attendants (*sanba*) and sales of abortion-inducing drugs were banned, and registration of pregnancies was started. This regulation was designed to abolish the practice of *mabiki* (infanticide—literally "thinning-out"), resorted to particularly in times of famine or when an infant was born with an obvious defect.[15] Hygiene campaigns were organized by voluntary community groups and the importance of women's participation in hygiene improvement was emphasized in magazines. Women's groups were organized to incite a change of practices in connection with bathing, dress, menstruation, child raising, water use, infant safety, and the education of children at home. By 1913, there were more than two thousand such groups in Japan.

Education

The Meiji government was conscious that "human development," that is, improvement in the health and abilities of citizens, was important in order to compete with imperialist countries in the West. Investment in education at this time provided an essential base for implementing subsequent changes. If, for example, the general educational level had not been improved in the Meiji period, the Taisho democracy, the women's movement, and economic recovery after the war may have been hampered. And, in all probability, public health activities would not have been so effective.

The first state school system, educating both men and women, was established in 1873. At first more than half of eligible boys but only about one-fifth of girls were enrolled in primary school. A change in the school ordinance in 1900 made tuition essentially free, and a stronger obligation was placed on parents and employers to guarantee school attendance for children. Female education was emphasized because it was understood that "women are the educators of children." Primary school enrollment was 90 percent

for boys and 72 percent for girls in 1900, and by the end of the Meiji era (1912) it had reached 97.6 percent for girls and 98.8 percent for boys. In all schools, hygienic practices and moral education were considered central to the production of mature adults who would make a contribution to the State. The Emperor was symbolic of national unity, not political and legal unity, but patriotic and civic. Loyalty to the Emperor, and by implication the State, was associated with progress, an ideology which was taught in school.[16]

The actual enrollment rate in schools varied according to region and social class. However, the idea that all children needed an education became widely accepted at this time. Higher education, too, became popular following mass migrations from villages to cities during the early part of this century.

The Meiji Family System and the Position of Women

Prior to the Meiji period, family relationships had been remarkably flexible in Japan. In seeking to create a centralized state, the Meiji government instituted the formal extended family (*ie*) system which until then had only been in use among the samurai class (4 percent of the population). In line with the Civil Code promulgated in 1899, all marriages were formally arranged by the extended family. Once married, a woman left her natal family and was incorporated into that of her husband. A woman's most important duty was to produce a son who would be the family successor, and if she did not do so within three years of marriage, divorce was usual. Although the code required monogamy, the custom of men to keep mistresses was socially acceptable. Extramarital affairs were considered adultery only in the case of wives, and women could not initiate divorce. In fact, without consent of a father or husband, women could not take legal action of any kind.

The Emperor was designated by the government as the pinnacle of the formal family system, thus making obedience to the government a moral issue. Order and stability were secured primarily by an authoritarian regime established in the home, and, because the head of the family had a duty to support family members, the government felt little obligation to establish a welfare system. This patriarchal ideology was promoted through the formal education system. The moral teaching known as "*ryôsai kenbo*" (good wife

and wise mother) emphasized the importance of chastity, obedience, and patience, as well as a woman's devotion to her husband, his parents, and her children.

Counter to the official code, women's rights were explicitly advocated from the early Meiji period, and arguments against the authoritarian family system were widely voiced. Certain women became active in the Women's Movement, and the focal point of the heated debate in 1918 about the "protection of motherhood" (*bosei hogo ronsō*) was the relationship of women's economic independence to their maternal "duty," a theme still relevant today. A movement toward women's suffrage was also active at this time. But political oppression by the government intensified with militaristic expansion, thus keeping women firmly in a position of subordination.

Nationalism and Imperialism

In the Meiji period, virtually no preventive measures were taken in connection with MCH, with the exception of several hygiene campaigns. In Taisho (1912–1926), however, the systematic collection of vital statistics was first carried out, including surveys which revealed the dismal health of the Japanese by international standards.[17] Despite the existence of a widespread belief that prevention of infant mortality was contradictory to natural selection and preventive measures would simply increase the presence of weak people in society, public health officials began to advocate the reduction of the IMR and started relevant epidemiological investigations. By 1926, the government had recommended the establishment of child health-care centers, which was partly realized when the Public Health Center Act (*Hokensho Ho*) was enacted in 1937. Relevant research and practices in rural areas, a traveling midwifery system, and pediatric clinics (*jidō sōdansho and nyūyōji sōdansho*) were institutionalized at this time. In addition, educational activities focusing on the impact of poverty on health were organized by socialist groups. Responding to the grave condition of workers' health in factories, the Factory Act (*Kōjō Hō*) was passed in 1911 and enacted in 1916, although the actual application of the law was not very effective for many years. This act regulated working hours for women and young people in industry and prohibited the employment of children under the age of ten.

As Japan entered into an imperialist and expansionist era, the creation of a strong defense force became very important to the government. The army's survey of draft-age men in 1936 revealed that a high percentage of men did not qualify for military service because of malnutrition, infectious diseases, or job-related disabilities. Their poor physical condition in comparison to their Western counterparts motivated the government to pay attention to the health of its citizens. The government explicitly stated that children are the source of the future success of a nation and that women should devote their energies to producing many healthy children. Accordingly, awards were given to those couples who raised more than ten healthy children. In 1937, the Mother and Child Protection Law (*Boshi Hogo Hō*) was formalized, and the training of birth attendants (*sanba*) was facilitated during the 1930s to improve the number of healthy births. The Ministry of Health and Welfare was created in 1938 to focus on health and population issues. That same year, medical insurance coverage was expanded. In 1941, a National Eugenics Law passed which prohibited abortion, and, in 1942, the Maternal Handbook was created. Protection of pregnancy was emphasized by the provision of rations for pregnant women.

As the war dragged on and military expenses increased, financial resources for the promotion of health and hygiene diminished. Military expenses consumed more than half of the total national budget in 1935, and more than 80 percent in 1938.[18] To keep the economy from crumbling, women were mobilized as part of the work force, in addition to managing the family.

The start of a serious MCH policy in Japan was part of a national interest in progress (especially economic development) and in the continuity of the extended family system with its associated moral foundation. Women were easily subjugated by the government for these purposes because most women were eager to cooperate with policies which they believed contributed to their own health and that of their families.

Postwar Reforms

After Japan's defeat in World War II, the Army of Occupation, almost entirely American, came into power. Its aim was to demolish the social structures which had nurtured militarism in Japan and to

democratize Japanese society. America intended to reconstruct Japan as an ally to act as a political buffer in Asia. The reforms were all encompassing: land reform enabled more than 80 percent of farmers to own their land, the wealthy nepotistic business conglomerates (*zaibatsu*) were destroyed, and labor laws were introduced.

Various health programs were implemented to deal as rapidly as possible with starvation and the many diseases associated with poverty. Control of infectious and sexually transmitted diseases was given priority. School lunch programs were instituted, and supplementary rations were again supplied to pregnant women. Other programs were designed to produce long-term benefits: a centralized system for the collection and monitoring of health statistics, the retraining of health professionals, and educational reform in schools of medicine and nursing. Changes in nutritional habits were also strongly encouraged. Public Health Centers were reestablished all over Japan as the central basis for primary care. The Child Welfare Law was enacted in 1947, and the Ministry of Health and Welfare created an MCH division at that time to deal with the many war orphans.

As a result of the shortage of resources after the war, rapid population growth became a serious concern for the government. Abortion was made legal in 1948. Under the Eugenics Protection Law, women could abort if the fetus was physically deformed, for economic reasons, or if continuance of pregnancy or childbirth might cause serious harm to the health of the mother. This law is still in effect today, with the result that almost any request for an abortion can be met. Between 1948 and 1955, more than a million abortions were performed each year,[19] the highest rate ever. At that time, a vigorous family planning campaign was introduced, but people were not educated about new methods of contraception.

The majority of health-care reforms implemented by the Occupation forces remain in the current health-care system. Although certain actions ordered by the Occupation caused resentment among many Japanese, as when everyone was sprayed with DDT, the reforms themselves were carefully and systematically planned with long-term vision.

Technological and Social Changes of Late Modernity

After the Occupation ended, the Japanese economy began to develop very rapidly. The gross national income doubled every five years

between 1955 and 1980. Refrigerators, washing machines, and television sets were present in almost all households by the 1960s. High school enrollment rose to 69.6 percent for women and 76.7 percent for men in 1965. University (including two year college) enrollment also increased: from 5 percent to 32.4 percent for women, and from 15 percent to 42.7 percent for men between 1955 and 1975.

The new Constitution proclaimed the fundamental rights of individuals, equality of men and women, and marriage based only on the voluntary consent of couples. In 1947, women's suffrage was approved. Also in that year the Civil Code was fundamentally reformed: equal rights for men and women were assumed for property, inheritance, custody of children, divorce, and other issues. The extended family system was legally abolished, and a democratic nuclear family was advocated. The average number of children per family decreased from four to two between 1950 and 1955. The Maternal and Child Health Act was promulgated in order to extend the scope of government involvement from simple child welfare to a systematic provision of a supportive environment for mothers and children. Between 1955 and 1965 the percentage of home deliveries dropped from 82.4 percent (93.4 percent in rural areas) to 16 percent (32.2 percent in rural areas). In 1950, 5.2 percent of all births took place under a doctor's supervision. By 1975, that number had risen to more than 90 percent, although changes in rural areas were slower. After the 1950s, medical technology, including antibiotics and the fetal monitor, became available. The neonatal intensive care unit was established in the late 1970s, followed by the perinatal intensive care unit in the mid 1980s.[20]

Although these institutional and technological changes certainly contributed to a reduction in the IMR, their overall effect has probably been considerably less than the socioeconomic changes which took place over the same time span. Perhaps most important has been the persistence of a widely shared value system, the belief that an investment by both the government and families in infant and child health and well-being is of vital importance.

THE DARK SIDE OF IDEOLOGY

Historical analysis reveals that both the extended, patriarchal family system of the Meiji era and the militaristic nationalism of early

Showa affected the health of children in a positive way because high quality human capital was essential for the survival of these systems. Under the democratic mood of postwar Japan, the modern system of the welfare state was constructed; although modifications were made, prewar thinking continues to shape many current ideas and practices, including an ideology of motherhood, a social order in which the family system, and not the individual, is recognized as the basic unit, and a type of "nationalistic paternalism." The idea that a woman and her child are very close and cannot be conceptualized as independent individuals is commonly accepted. A mother bears the total responsibility for the well-being of her child. However, children are understood as belonging not only to their mothers but also to the family and society. In theory, mothers are protected and supported by society and by their own families as long as they stay in their maternal role. This situation probably contributed to the improvement of infant mortality rates in Japan, but not without some cost to certain individuals.

An Ideology of Motherhood

Perhaps the most striking feature of Japanese culture which affects attitudes towards MCH is the special emphasis given to "motherhood."[21] With the recognition of the importance of the social position of women for health improvement, some researchers have questioned why infant mortality is low in Japan despite women's subordinate position in society. The percentage of women who are diet members (6.8 percent), executives (3.6 percent), tenured professors (6.2 percent), or public officials in management positions (0.7 percent) remains significantly lower than in other countries. However, while the social status of women may be low, the status of "mother" is very high. As long as a woman becomes a mother she is valued and respected in society.[22] One survey showed that 65.2 percent of women and 69 percent of men think that "women should put their immediate families before themselves," and that women who put their own interests first are morally weak. Furthermore, MCH support has been organized on the assumption that mothers do not work outside the home.

In early modern Japan, women were expected to produce a successor for the family. Even today, childless women are regarded as less than full adults.[23] Adoption of unwanted children of relatives

was once common, but this is not usually an acceptable alternative today, nor is adoption of orphaned children; continuity of the bloodline is still valued and women feel anxious about raising children with whom they have no "natural" biological bond. Extensive use is therefore made of reproductive technologies such as in vitro fertilization.

The gender roles imposed by the state in the Meiji period intensified in postwar Japan when rapid economic development became the major goal of the nation. Japanese husbands have an international reputation for being "corporate soldiers," devoting all their time to work. Long hours and competition among colleagues, culminating at times in *karōshi* (death from overwork), make it almost impossible for husbands to assist a pregnant wife or to participate in child care. Family finances are managed by women in 70 percent of households, and women make most of the choices in connection with daily life. However, "important" decisions, such as the buying and selling of real estate, are still made mainly by the husband.

Another reason for the persistence of gender roles is discrimination against women in the workplace. On average, women earn only 61.5 percent of the wages of men, and with age the discrepancy becomes worse. Lower pay for women may be justified by the disruption of work due to childbirth and care, but a disparity exists even if an adjustment is made for educational level and type of work. An Equal Opportunity Law enacted in 1986 is rarely properly enforced.

If women continue to work after having children, they face many problems. It is very difficult to find reliable child-care facilities. Financial security during maternity leave and child-care leave, flexibility of working hours, understanding colleagues in the workplace, and paternal help are also recognized as being in short supply.

It is assumed by virtually everyone that husbands provide the financial support for their families. An allowance for dependents, including wives, is paid by most companies and many factories. This allowance will be made even if the wife is working, unless she earns an annual salary of one million yen or more. Women are thus indirectly encouraged to be "full time" or "professional" housewives (*sengyô shufu*), or else to be content with part-time and poorly paid work with no social security. These working women

who are the first to be fired when the economy goes into decline are an essential part of the Japanese labor force that remains hidden behind the dominant Japanese system of lifelong employment.[24]

An Ideology of the Family

Japan's very low rate of out-of-wedlock births is easily explained.[25] When an unmarried woman becomes pregnant, the family pressures her to abort.[26] Alternatively, marriage is arranged before the birth, or the baby may be secretly adopted, institutionalized, or even registered as belonging to another family member. To most Japanese, raising a child without a father is an immoral act that disrupts the social order, brings shame to the family, and provides a bad environment for the child. There is also institutionalized discrimination against illegitimate children. Illegitimacy appears on official identity records (*koseki* and *jūminhyō*), which are used, for example, when seeking employment. Until recently, when it was recognized to be unconstitutional, the law which regulates inheritance deemed that an illegitimate child was only entitled to half what a legitimate child was entitled to.

The income of a family composed of a mother and her dependent children is about half the income of the average nuclear family. Although there is a specific law (*boshi oyobi kafu fukushi hō*) to support them, the majority of single mothers live in very poor financial situations, and, as we have seen, finding employment is not easy.

The idea of motherhood in Japan is socially constructed. Japan's population policy regulates the number of abortions performed and shapes values regulating which pregnancies should be terminated. A significant number of abortions are "*socially* high risk pregnancies," including out-of-wedlock and teenage pregnancies. Whereas the number of abortions among married women has declined, that among teenagers has increased quite significantly over the past few years. Abortion is described as a woman's "choice." Therefore the moral responsibility for terminating a pregnancy is placed entirely on her. Use of the Pill as a method of birth control remains illegal in Japan, partly due to the fact that the gynecological profession profits from doing abortions. It must be pointed out that many Japanese women profess a reluctance to take the Pill because they fear unwanted side effects. Legalization of the Pill in conjunction

with better sex education could reduce teenage pregnancies, but this problem is so stigmatized that it remains, as does AIDS, largely hidden and poorly managed.

Nationalism and the Low Birth Rate

From the Meiji period until World War II, children were thought of as the nation's treasure. However, in postwar Japan, the rhetoric about MCH has become democratic and humanistic. The well-being of mother and child is respected in its own right. When the total fertility rate dropped to 1.57 in 1989, shock and concern were expressed by politicians and leaders of business and industry. They were concerned about how the aging society would be supported by the decreasing number of young people. The Ministry of Health and Welfare started a "welcome baby campaign" highlighted by a song performed by musicians popular with younger women, and local governments planned similar events. A Child Care Leave Act was passed hastily in 1992, but the birth rate is still declining: 1.54 in 1990, and 1.45 in 1993. Currently the Ministry is planning a ten year project, known as the "Angel Plan," to establish a support system to improve child care.

The main cause of this decline in birth rate is postponement of marriage by women (the percentage of unmarried women in their late twenties increased from 20 percent to 40.2 percent between 1975 and 1990), although the average number of children produced by a married couple has not declined. Nevertheless, the somewhat emotional response to this "crisis" revealed the extent of nationalistic thinking about reproduction. Needless to say, the target for criticism was women. The leader of *Keidanren* (Federation of Economic Organizations), for example, has accused women of being selfish and simply enjoying their lives instead of having children. The mass media recently portrayed the low birth rate as "women's rebellion" or "*Shussan sutoraiki*" (childbirth strike). In addition, criticism was frequently expressed about women obtaining higher education.

Foreigners and the Ideology of Blood

Another dimension of nationalism is a rejection of "foreign blood" and an effort to maintain social stability by keeping a homogenous population. Children born in Japan do not receive Japanese nation-

ality if both parents are non-Japanese or if a Japanese father refuses to acknowledge paternity of a child born to a non-Japanese woman. The number of foreigners in Japan has increased significantly in the past five years due mainly to the shrinking local work force and to the demands of the entertainment industry. Health problems of foreigners have become a cause for concern, especially since the Ministry of Health and Welfare limited foreigners' rights under the Livelihood Protection Law in 1990. So far, the IMR of non-Japanese remains low (5.78 in 1991, 6.58 in 1992), but this figure includes only officially accepted foreigners. Considering the influence of both socioeconomic factors and lack of preventive care, a higher IMR can be expected among illegal immigrants. Concern about the low birth rate apparently does not encourage the idea of accepting more immigrants or protecting the children of immigrants, even when born in Japan. The welcome baby campaign is not for all babies.

Authority and Dependency

Major changes in the Japanese social system were brought about either from the top down or from the outside. Individual initiative has rarely been encouraged in Japan, and citizens are accustomed to, and even expect, protective management from above. Paternalistic policies have been justified through an emphasis on risk and early intervention; various health checks and a comprehensive screening program have been implemented without concern for cost-utility assessment.[27]

Control of sexuality and reproduction by those in power is rarely examined critically. During the war, women were encouraged to produce as many children as possible, but shortly after the war women were urged to have only two or three children, and the number of abortions rose accordingly. Today, concerned about the population not replacing itself, the government is again actively encouraging women to have children. A recent official excuse for not putting the Pill on the market is that people will make less use of condoms, leading to an increase in AIDS.

Japan has often been described by social scientists as a culture which promotes dependence, particularly in situations where power is clearly unequally distributed. However, dependence does not imply, as North Americans might surmise, passivity. In Japan,

human relationships are usually understood as ongoing, reciprocal, mutually beneficial engagements. Even when power is unequally distributed, self-discipline and cooperation are expected on both sides. Care of mothers and children is particularly suited to this kind of societal arrangement. The government and families provide care for pregnant women provided that the women take care of their own health and that of their children in the prescribed manner.

CONCLUSION

Good health indicators, evidence of prosperity, a good social system, a sound economy, and a wise government have been a source of pride in Japan. The health-care system in Japan is, by all measures, effective, but if widely shared values, including a rejection of "foreign blood" and pressures on women for conformity with respect to motherhood, are integral to health-care policies, is this a good model for other countries? Should the IMR of a nation be reduced and kept low largely by means of policies which are nationalistic and which severely constrain the ways in which women can shape their own lives? If not, then it can no longer be assumed that women are "naturally" destined to devote their lives entirely to motherhood and family nurturance, nor should it be assumed that the family, extended or nuclear, will necessarily survive as a stable unit. The big questions now are how much longer women will allow their reproductive function to be monitored, how much longer they will provide the intense devotion and extensive time required to get their children through the Japanese school systems, and how much longer they will care for ailing elderly relatives. Many middle-aged and older Japanese women believe that younger generations have neither the stamina nor political commitment to bring about radical change. If they are correct, perhaps the status quo will be preserved a little longer.

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