Social and Legal Factors Related to Drug Abuse in the United States and Japan

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Synopsis

This article is an overview of social and legal differences in the United States and in Japan that are related to patterns of current drug abuse epidemics in these countries. These two nations have drug abuse problems with different histories and take different approaches currently to handling illicit drug marketing and use. Histories of opiate and cocaine abuse in the United States and of stimulant and inhalant abuse in Japan are discussed.

The United States has experienced three heroin epidemics in the last three decades; cocaine addiction began to merit national concern by the end of the 1980s. In Japan, the first methamphetamine epidemic began after World War II; it was controlled in the 1950s. The current inhalant epidemic began in the late 1960s and was followed by the second methamphetamine epidemic that began in 1970; both are continuing to the present.

The criminal justice system is always given first consideration when assessing societal measures employed to reduce drug use. Legal penalties for illicit drug offenses reflect the societal differences of these two nations with respect to the seriousness of particular types of crimes.

Characteristics of the health care system of a nation may also influence patterns of drug abuse, particularly where functions of criminal justice and health care systems overlap. Health care systems in the United States and in Japan are based on different treatment philosophies and patients' expectations; these differences are discussed along with explanations of their potential influence on the epidemiology of drug abuse.

OPIATE ADDICTION has a long history in the United States; the first public record of numbers of opiate addicts came from the Michigan State Department of Health in 1878. Accounts of opiate addiction from other sources reach back to the beginning of the 19th century (*1*). Early records indicate that in the last century and during the early 20th century, most opiate addicts were female. The majority of these women acquired opiates from their physicians. The drug was usually initially prescribed as an analgesic; when addiction developed, the patient was maintained on the drug by the physician. With the passage of the Harrison Act in 1914, much previously legitimate use of opiates became illegal. Many women stopped using these drugs after 1914 and, within a few years, the majority of addicts were male, and their predominance persists (*2*).

Opiate Abuse in the United States

Three major heroin epidemics have occurred in the United States in the last three decades. Only the 1960s epidemic was was nationwide. The epidemic of the 1970s was primarily confined to the western United States, possibly because the drug used came predominantly from Mexico. In the 1980s, the heroin being distributed came from Southeast Asia. This third epidemic has been principally located in the northeastern United States.

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epidemics. Initially, the drug was most often used alone. During the second epidemic, heroin began to be used with alcohol. As cocaine became more popular, heroin began to be taken in combination with or in an alternating pattern with cocaine (*3*).

Cocaine Abuse in the United States

The coca leaf and its derivative, cocaine, were initially marketed in the 19th century in the United States as a cure for opiate addiction and alcoholism. After its properties as a topical anesthetic were recognized, cocaine was used as a medication to relieve sore throats and, eventually, in ophthalmic surgery. Its incorporation into various proprietary medications, foods, drinks, and cigarettes is well known. By the late 1800s, the addictive potential of cocaine began to be recognized; the State of Oregon passed the first legislation restricting cocaine in 1887. By 1914, 46 States had restrictions on cocaine, while only 29 had laws restricting opiates (*4*). The Harrison Act made restriction of cocaine nationwide. The act specifically states that cocaine may not be included as an ingredient in patent medications (*5*). In a 1922 amendment to the Narcotics and Drug Export Act, cocaine was defined as a narcotic. Legal constraints and the availability of amphetamines, that produce a similar effect with longer duration at lower cost, kept cocaine use at a low level until the 1960s, when the first increases in use began to appear.

In the 1970s, cocaine was associated more frequently with heroin than with marijuana; cocaine use, while increasing, was low. In the early 1980s, only evidence of psychological dependence was known, and the rates of use of the drug increased. A cocaine epidemic was beginning to be recognized during these years and there was speculation about the potential magnitude of the problem. By the end of the 1980s, when evidence of cardiovascular and other causes of mortality became associated with cocaine use, addiction to cocaine began to merit national concern (*6,7*).

In 1989, cocaine was implicated as impacting on illicit drug use trends in Washington, DC, more than any other single substance. By 1990, a slight decrease in the abuse of cocaine was detected, and in 1991 a greater decrease was identified. Even though these decreases are being detected, cocaine is still the primary illicit drug of abuse in the nation's capital (*8,9a,b*).

Like users of other illicit drugs, people in metropolitan, rather than rural, areas are more likely to use cocaine. Initial use and changes in use are associated with similar behaviors in the peer groups of individual users. Cocaine use most frequently starts in high school, while use of other drugs often starts earlier. Cocaine use continues after graduation from high school, but the use of other drugs often declines by this time of life. Cocaine use is associated with educational status; more users with a college education than persons with fewer years of schooling tend to be addicted to this drug (*10,11*).

Methamphetamine and Inhalant Abuse in Japan

Unlike other eastern countries, except for Turkey (*12*), Japan has never experienced a problem with opium addiction of its citizens. Japan was the first Asian power to enact legislation and to control opiate use within its boundaries when, at the turn of the century, it severely restricted use of opiates by Japanese nationals (*13*). The country did not, however, restrict in a similar fashion the transshipment of opiates not sold to Japanese citizens (*14*). The first significant drug abuse problem for Japan occurred in the late 1940s, when a major number of Japanese became addicted to methamphetamine (MAP). Widespread addiction to drugs in a country that, essentially, had never had any drug addiction beforehand is often attributed to the aftermath of World War II (*15*). During this period, the Japanese people experienced severe social dislocations and hardships such as scarcity of food and housing, poverty, and unemployment. MAP, originally produced for military use, was available from pharmaceutical companies. MAP was sold in large quantities to "fight sleepiness and enhance vitality," with no information given about its addictive potential (*16*). This period also witnessed the growth of organized crime networks, or "Boryokudan" in Japan (*17*).

After large numbers of Japanese became addicted to MAP, the Stimulant Control Law was enacted in

Maximum Sentences for Criminal Offenses Involving Selected Drugs in the United States and Japan

	Sentence and fines[1]	
Offense	*United States (28)* *Heroin and cocaine*[2]	*Japan (17,29)* *Amphetamines and heroin*[2]
Possession	1 year or $5,000 or both	10 years or at least 1 year and 5 million yen
Trafficking	14 years or $5,000 or both	10 years or at least 1 year and 5 million yen
Importation	15 years or $5,000 or both	Life in prison and 10 million yen

[1]1,000 yen = $8.80 (reference *31*). [2]Federal statutes.

1951 (*18*). In 1954, the Mental Health Act was amended to include compulsory hospitalization for chronic MAP addicts who are determined to be dangerous to themselves or to others. In 1954 and 1955, the Stimulant Control Law was amended to strengthen the criminal penalties for offenses involving amphetamines. With the cooperation of national and local governments, the mass media developed an educational campaign directed at methamphetamine addiction in response to this amendment. Legal control of MAP was successful until 1970, when a resurgence in addiction to this substance occurred (*19–21*).

The population of MAP abusers in this second epidemic, which began in the 1970s, is different from that in the initial epidemic. The first epidemic was confined primarily to urban areas. This more recent wave of drug abusers encompasses the cities and rural areas. The average age has increased to the thirties, as opposed to the twenties. In 1981, the extent of the MAP epidemic was estimated at five men to one woman affected, whereas in the first epidemic nine men to one woman were affected (*22*). More recent estimates indicate a higher proportion of women, particularly housewives, are abusing methamphetamine currently (*17*).

Volatile solvents are virtually the only substance abused, excluding tobacco and alcohol, among juveniles in Japan. Volatile solvent abuse began in the late 1960s with the use of commercially available paint thinner and glue. Abuse of these substances spread rapidly throughout Japan. In 1972, the Poisonous and Deleterious Substance Law was amended to include solvent inhalation after it was discovered that inhalants were being abused by some adults and by teenagers, in particular.

Although the legal control of illicit drugs has been successful, especially in the case of heroin (*15,23*), legal control of methamphetamine and inhalants has proven more difficult. Penalties regarding stimulants were increased when the law was amended in response to the second stimulant epidemic that began in the 1970s. The MAP and inhalant epidemics have decreased somewhat with the new legislation; however, they have not responded in the same way as the post-World War II epidemic (*24*).

Suwaki hypothesized that some of the difficulty in controlling the current MAP epidemic may be attributed to differences in the addict populations. The Japanese population in the 1950s was essentially naive regarding the potentially dangerous effects of drugs. Today, crime has a stronger influence on the lives of the population and individuals are possibly making a more conscious choice to use drugs. These differences made the population of the 1950s more responsive than the population of the 1990s to the mandates of the Japanese Government during these two epidemics (*25*). Throughout the recent epidemic, the majority of abusers have been teenagers coming from single parent families and broken homes. Nevertheless, the numbers of abusers from intact families are increasing. Wada and Fukui have documented that this increase may be the result of weakened family cohesion (*26*).

Suwaki and Bjorksten have hypothesized that addiction behaviors may be closely related to the Japan's achievement-oriented society in which children are pressured to attain academic success. Entrance examinations required for admission into junior high and high schools often mark the beginning of this pressure. Many parents enroll children in schools that teach courses in improving performance on entrance examinations in addition to their regular schools. Enrollment in these after-school programs is regarded as necessary for acceptance into better junior high and high schools of Japan, leading

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to acceptance into more prestigious universities. Stress placed on children in this society may be associated with a tendency to abuse drugs (*27*).

Criminal Penalties for Drug Offenses

The United States and Japan differ considerably in the way each handles criminality related to drug use. Legislation concerning penalties for substance abuse offenses reflects the aspects of this criminality considered important in these societies. The accompanying box compares the maximum criminal sentences in the United States and in Japan for possession, trafficking, and importation of illicit substances. In the United States, the Federal Controlled Substances Act classifies drug offenses into two categories: (*a*) possession of the substance and (*b*) manufacture, distribution, or dispensing of the substance. In addition to Federal legislation, separate legislation exists for each State. State laws model the Federal statutes in most cases, but many slight variations exist (*28*). Overall, the penalties for possession in the United States are less severe than those for trafficking and importation of controlled substances.

In Japan, possession is considered a more serious crime than in the United States. Penalties are markedly more severe than penalties for a comparable offense in the United States. Penalties for trafficking and importation in Japan are heavy and, for the most part, show a greater degree of overlap with penalties for possession than in the United States (*17,29,30*).

Health Care in Two Countries

The differing structure of health care systems, treatment philosophies, and patient expectations must be considered because of their effects on the epidemiologic patterns of drug abuse in the United States and Japan. In the United States, most health care is on a fee-for-service basis. People purchase insurance from a health insurance plan, and they are reimbursed by the plan for costs of medical care. Each treatment facility determines its own charges, and each insurance plan determines the percentage of treatment costs reimbursed.

The Japanese health insurance plan has been evolving since it was originally mandated in 1922 (*32*). People receive their health care from physicians on a fee-for-service basis. They purchase health insurance plans either through their employers or through a national health insurance plan. All plans are nonprofit; all are administered by the national government (*33*). In contrast to the United States, fees in Japan are regulated by the government. The same fee is charged for the same treatment regardless of the treatment site (*34*).

In the United States, many medications are available only if prescribed by a physician, although numerous other medicines can be purchased over-the-counter (OTC) without a consulting physician. People in the United States may treat minor ailments with OTC medications obtained without visiting a physician. There are in excess of 300,000 OTC medications marketed in the United States, approximately 10 times the number of prescription medications marketed (*35*). In September 1994, the Public Affairs Office of the Non-Prescription Drug Manufacturers Association in Washington, DC, declared, "There are an estimated 125,000 to 300,000 OTC (in a variety of sizes, dosage forms, and strengths) marketed in the United States."

Research interest in OTC drugs has been growing in the past decade. Users of different types of OTC drugs have different demographic characteristics. In a study of users of sedatives, tranquilizers, and stimulants, women and nonwhites were found to be more frequent users of tranquilizers than men. Race was not found to be associated with the use of OTC sedatives. Men were found to use stimulants more frequently than women. Younger persons and those who were unmarried were also more frequent users of OTC stimulants than others (*36*). The availability and marketing of patent medications fosters self-diagnosis and self-medication for prevention and treatment of illnesses. Much marketing of OTC medications is directed at women, who have been found to be the highest consumers of these medications in several studies (*37,38*). OTC drugs have valuable uses; however, their wide availability may also result in misuse and abuse (*35*).

The Japanese health care system is based on a

practice of medicine grounded in both scientific and traditional, nonscientific roots. Various types of traditional healing are practiced. Examples are dispensing of herbal medicines and acupuncture (*39*). In Japan, socialization from childhood teaches the person to consider physical and mental harmony the optimal personal state; the use of medications or herbal formulations to treat lack of harmony, or the presence of disorder, is also learned. These cultural teachings may result in a belief that medications are used for treatment and not for recreation. The scientific influence of European medicine prevails among clinicians; however, the Japanese people expect the traditional treatment philosophy to be incorporated to a reasonable extent into their medical care.

The patient has a strong expectation that the physician will prescribe medication to treat illnesses. In addition to prescription medications, herbal and synthetic OTC preparations are available. Despite OTC availability, people consult their physicians prior to taking these medicines. A general preference for treatment with medications and bed rest over any invasive procedure whenever possible increases numbers of prescription medications dispensed. Social acceptability of these practices in the health care system results in overprescribing of medicines, by U. S. standards (*33,40,41*).

Discussion

The incidence or prevalence of drug abuse is difficult to determine in any country where the activity is illegal or socially unacceptable. Societal norms result in the community of drug addicts becoming a hidden population that is difficult to identify. Any incidence or prevalence estimate must be viewed while keeping these restrictions in mind. Ethnicity, access to health care, treatment philosophies, and legal controls are also factors related to the epidemiology of substance abuse.

The United States is ethnically diverse compared with Japan's homogeneous population composed of essentially one ethnic group. Desmond and Maddux state that ethnic differences affect preferences for drugs of abuse and also the entire addiction career (*42*). Ethnic differences must be taken into consideration when comparing the epidemiology of drug addiction in the United States to that of Japan.

Type and availability of medical treatment is known to influence the epidemiology of mental disorders (*43*). Availability of treatment encompasses more than the geographic proximity of health care providers and institutions to the potential patient's residence. Ability to pay for care, awareness of the need, and willingness to seek treatment also influence availability. In the United States, most treatment for opiate and cocaine addiction is voluntary, and a well-known consequence is that many addicts never seek treatment.

In Japan, specifications of the Narcotic Control Law determine governmental decisions regarding narcotic addicts. Compulsory hospitalization for treatment of addiction is mandated within this law. The successful control of opiate use has been attributed to the compulsory treatment that is part of criminal sentencing for narcotic offenses.

In contrast to the legislation mandating treatment of narcotic addicts, methamphetamine and inhalant addicts receive criminal penalties through the Stimulant Control and the Poisonous and Deleterious Substance Laws. There is no compulsory treatment for methamphetamine addicts in general. Those who are involuntarily hospitalized must first be diagnosed as being dangerous to themselves or others, as defined in the Mental Health Law. The inadequate control of the methamphetamine and inhalant epidemic has been attributed to this important difference in the legislation that permits the legal and health care systems to deal with these addicts. This duality is also a good example within one country of the potential for differences in the laws to alter the epidemiology of drug abuse.

An example of overlapping functions of the legal and health care systems in controlling drug addiction in Japan is the existence of national registries of narcotic addicts, with mandatory reporting requirements for physicians. Such registries are unknown and probably would be unacceptable in the United States. The feasibility of instituting a similar system of compulsory treatment as a criminal penalty in North America has been debated previously. It was concluded that cultural differences would make such a system unrealistic in the West (*44*). These differences in treatment philosophy may have strong influences on patterns of substance abuse in the United States and in Japan.

Conclusions

Comparing the United States with Japan, a cultural belief in the rights of the person in the United States combined with less harsh penalties for drug possession produces different outcomes from law enforcement efforts in reducing drug offenses. The United States concentrates its efforts for legal control of controlled substances on drug dealers rather than on persons who purchase the substances. Cultural beliefs

of the Japanese uphold a group-oriented society in which each member behaves so as to improve society (*40,41*). These beliefs, coupled with strict laws for possession of drugs, result in a low level of drug abuse compared to the United States. These beliefs and laws may influence those who do abuse substances in Japan to use substances that are legally available, rather than illicit drugs.

Health care systems of countries also influence legal availability of substances. National policies regarding availability and accessibility of health care services and medications, together with professional practice patterns and patient expectations, are related to the use of prescribed and other legally available medications for medical and recreational purposes. While medications in Japan are overprescribed by U.S. standards, self-imposed limitations on usage of medications and other addictive substances, particularly for recreation, in Japan may result in sociocultural monitoring of drug use that leads to little demand for illicit drugs. This monitoring may also decrease illicit use of legally available substances. Characteristics of the United States and Japan discussed in this article describe social and legal factors in general and the criminal justice and health care systems in particular and their relationships to the epidemiology of a major public health problem, substance abuse.

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