

During World War II in Japan, amphetamine was extensively used both by Japanese civilians and the military to counteract battle fatigue, to maintain alertness, and to achieve high production quotas imposed by the war. After the war, large stocks of the drug became available without prescription, and the number of heavy users of amphetamine increased so rapidly that medical problems from its use developed. From 1948 to 1955, legal controls were steadily developed and tightened, along with expansion of treatment facilities and strengthening of penal provisions. These measures were complemented by a massive public education campaign, with the result of greatly reducing the amphetamine abuse problem in later years.

Sweden has also had a problem with amphetamine and stimulant abuse. Since the early 1940's, increased legal and medical restrictions on the distribution and use of stimulants have generally failed to halt the illegal misuse of the drugs. Legally, stimulants are restricted to very selected medical cases by special license.

In the United States the recent phase of abuse— intravenous injection of methamphetamine—spread throughout the country from its beginnings in the San Francisco Bay area in the late 1950's and early 1960's. Prescription of injectable amphetamine as an alternative to opiate addiction, and unethical distribution of the drug by a few physicians, made the drug easily available to potential abusers as a liquid in ampules. Although closer legal controls then were placed on prescriptions, a black market developed. In 1970 and 1971, the amphetamines and methamphetamine were placed under strict federal controls. Continued federal concern about the drugs was reflected in Senate hearings in 1971 and 1972, which focused on high-dose intravenous use, misuse of prescribed amphetamines, and diversion of legally produced amphetamine into illegal channels.

Current Medical Uses

Until mid-1970, amphetamines had been prescribed for a large number of conditions including depression, fatigue, and long-term weight reduction. In 1970, the Food and Drug Administration restricted the legal use of the amphetamines to three types of conditions: narcolepsy, hyperkinetic behavior, and short-term weight reduction programs.

Short-term treatment of obesity

Amphetamine, as well as a host of similar compounds, is prescribed for appetite control because it decreases hunger.

In spite of this advantage, two factors argue against the widespread, prolonged use of amphetamine for weight control. One is that tolerance develops rapidly to the appetite depressant characteristics of the drug. Even with moderate dosage increases, 4 to 6 weeks seems to be the limit before tolerance develops to the

anorectic effect of amphetamine.

The second reason is that overeating seems to be controlled primarily by psychological and behavioral factors, not by the physiology of the body. Overeating is regarded by many authorities as a habit, which must be changed if the individual is to lose weight after developing tolerance to the anorectic effect of the amphetamine drugs.

Hyperkinetic syndrome of childhood

This disorder is manifested by impulsive, hyperactive behavior. The child has an unusually short attention span, and in spite of normal or superior intelligence is frequently an underachiever in school. Amphetamines have the paradoxical effect in such children of acting as a tranquilizer, increasing attention span, and decreasing hyperactive behavior. Considerable professional controversy and widespread public attention have recently been focused on drug treatment for the hyperkinetic syndrome. However, the main issue relates more to the prevalence of the syndrome and reliable diagnostic criteria than to the efficacy of amphetamine in its treatment. Caffeine has been reported in recent studies to be as effective as amphetamine in treating hyperkinesis with fewer undesirable side effects.

Narcolepsy

This is a very rare disorder in which the individual experiences frequent episodes of sudden, uncontrollable desire for sleep, sometimes as many as a hundred times a day. Amphetamine was first used to treat narcolepsy in 1955, with the discovery three years later that acute paranoid psychosis was a side effect to be guarded against.

Non-Medical Use of Amphetamines

1. Intermittent low-dose use

Many individuals occasionally take 5 to 20 mg of amphetamines orally to allay fatigue, elevate mood while doing an unpleasant task, produce prolonged wakefulness, help recover from a hangover, or to "get high." Often the pills are obtained from friends, who more than likely obtained them by prescription for weight reduction. Only rarely are they purchased on the black market. Individuals may be any age and usually have little interest in amphetamine use as a "life style."

2. Sustained low-dose use

In this pattern, the individual obtains amphetamine pills from his doctor for weight control, but takes the pills 3 to 4 times a day for the stimulation and euphoria produced by the drug. He may develop a strong psychological dependence on the pills and feel that he cannot get along without them. If he stops taking daily amphetamines, withdrawal depression occurs. Since the depression can be easily and temporarily