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A NATION TRANQUILIZED—A SOCIO-LEGAL ANALYSIS OF THE ABUSE OF SEDATIVES IN THE UNITED STATES

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UNTIL quite recently, the abuse¹ of sedatives in the United States was a "neglected area" of study.² The primary emphasis in drug treatment and prevention was always with the so-called "narcotic drugs" such as heroin, cocaine and marihuana.³ For example, the United States Public Health Service hospitals at Lexington, Kentucky and Fort Worth, Texas—for years the primary drug research and treatment centers in the country—would not accept barbiturate addicts unless they also happened to be habitual users of opiates, cocaine or marihuana.⁴ The emphasis, however, is beginning to shift. The reasons for the change in priorities are not difficult to discover.

In 1972, there were reports that parts of California were "virtually flooded" with illicit barbiturate capsules.⁵ A statewide survey in New York demonstrated that over one half million people fourteen years or older—ten percent of whom obtained their drugs illegally—used sedatives on a consistent basis.⁶ Statistics published in 1973 by the National Commission on Marihuana and Drug Abuse indicate that abuse of depressants is not confined to any one region of the country but is truly a national

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1. In this article, abuse of sedative means the self-administration of these drugs without the supervision of a doctor.

2. Ingersoll, *Drug Abuse in Contemporary America*, 7 J. Cal. L. Enforcement 22 (1972) [hereinafter cited as Ingersoll].

3. It must be realized that the legal definition of a narcotic drug is different from the pharmacological definition. In the pharmacological sense, a narcotic drug is one that depresses the central nervous system, producing stupor, insensibility or sleep. Upton, *Narcotics and Other Drugs Susceptible to Abuse, and Their Regulation*, 10 N.H.B.J. 264, 265 (1968). According to this definition, cocaine (a stimulant) and marihuana (a mild hallucinogenic) would not be considered narcotics. Under the legal definition of a narcotic drug, however, were included various socially disapproved drugs regardless of their pharmacological properties. Thus, American drug laws generally define cocaine and marihuana as narcotic drugs. See *Drug Use in America: Problem in Perspective*, Second Report of the National Commission on Marihuana and Drug Abuse 16-17 (1973) [hereinafter cited as National Commission—Second Report].

4. H. Anslinger & W. Tompkins, *The Traffic in Narcotics* 123 (1953).

5. Ingersoll 22.

6. Chambers, Brill & Inciardi, *Toward Understanding and Managing Nonnarcotic Drug Abusers*, 36 Fed. Prob., Mar. 1972, at 50 [hereinafter cited as Chambers, Brill & Inciardi].

problem. An estimated ten percent of the adult population and six percent of those between twelve and seventeen years of age have used a prescription sedative for non-medical purposes.⁷ If those who used over-the-counter sedatives for non-medical purposes were included, the percentage would be substantially higher.⁸ When compared to the incidence of other forms of drug abuse, the Commission's figures show that the abuse of depressants is approximately eight times more common than the abuse of heroin, three times more common than the abuse of cocaine and twice as common as the abuse of amphetamines.⁹ In addition to this enormous illicit consumption, there are an estimated 150,000,000 prescriptions written every year for sedatives and tranquilizers.¹⁰ With such a large national market, annual production of barbiturates is estimated to be 1,000,000 pounds, enough to provide every American with twenty-four one-and-one-half grain doses.¹¹ These statistics become more frightening when one considers that barbiturates (and possibly other forms of depressants) "are potentially the most lethal of all abused drugs."¹²

In his testimony before a Senate subcommittee studying juvenile delinquency, Dr. Sidney Cohen best summarized the recent increase in sedative abuse: "If 1966 was the year of acid, 1968 the year of speed, and 1970 the year of smack—heroin, then 1972 may well become the year of the downer. . . . [D]owners seem to be coming on fast, especially among the very young."¹³

As with many topics in the field of drug abuse, the legal literature on the subject of the abuse of depressants is minimal.¹⁴ In light of the magnitude of the problem, there is need for a comprehensive analysis of the nature and characteristics of the abuse of sedatives in the United States and the legal controls enacted to regulate that abuse. To that end, Part I of this article will classify the various depressants and indicate the dangers to personal and public health and safety inherent in their widespread abuse. Part II will trace the development of legal controls over the use of

7. National Commission—Second Report 63 (Table II-20).

8. *Id.*

9. *Id.*

10. *Id.* at 43. The Commission states that in 1970 there were 214 million prescriptions written for psychoactive drugs; 67.4 percent of these were for barbiturates and tranquilizers.

11. Chambers, Brill & Inciardi 50.

12. Ognibene, *Legal Drugs, Illegal Abuse—Amphetamines and Barbiturates*, 168 *New Republic*, Feb. 3, 1973, at 21, 22.

13. Hearings on Barbiturate Abuse Before the Subcomm. to Investigate Juvenile Delinquency of the Senate Comm. on the Judiciary, 92d Cong., 1st & 2d Sess. 71 (1971) (Statement of Professor Sidney Cohen, M.D.) [hereinafter cited as Subcomm. Hearings].

14. Perhaps the best article on the history of depressant legislation in the United States is Rosenthal, *Dangerous Drug Legislation in the United States: Recommendations and Comments*, 45 *Texas L. Rev.* 1037 (1967).

sedatives, with particular emphasis on recent statutory and regulatory changes.

I. DESCRIPTION OF DEPRESSANTS

A. *The History of Sedative Use in the United States*

For the purposes of analysis, the terms "sedative" and "depressant" should be given a precise definition. Included in that definition are basically four categories of drugs: a) those sedatives such as potassium bromide, chloral hydrate and paraldehyde which enjoyed wide popularity in the late nineteenth century; b) the barbiturates which were first used in medical practice in 1903; c) the tranquilizers which were introduced into clinical practice in the 1950s; and finally, d) methaqualone, a popular modern depressant which does not fit neatly into the category of either a barbiturate or a tranquilizer.¹⁵ The various drugs in each of these four categories share one basic similarity—they all depress the central nervous system and consequently are referred to in drug parlance as "downers." No one should imagine, however, that all of the drugs to be discussed are similar in every respect. Each drug produces varying side effects and thus has its own precise medical usage.

1. Chloral Hydrate and Other Nineteenth Century Sedatives

During the late nineteenth century, various chemicals were widely marketed as cures for nervous disorders. The bromides, which were introduced during the 1850s, were the first group of drugs used to treat nervous upsets and later to control epilepsy.¹⁶ The oldest of the bromides, potassium bromide, was allegedly used by millions of Americans, particularly in the western part of the United States.¹⁷ Continued use of potassium bromide, however, could result in serious side effects such as delusions, coma and possibly death.¹⁸

Although first synthesized by the German chemist Justus von Liebig in 1832, chloral hydrate was not introduced into medicine until 1869.¹⁹ Like potassium bromide, it could also produce unpleasant side effects and as a

15. Purposely excluded from this definition and therefore from discussion in this article, are various proprietary or over-the-counter sedatives and tranquilizers. Without doubt, these compounds are also the subject of abuse. For the names of the more common over-the-counter sedatives and tranquilizers see National Commission—Second Report 50 n.3.

16. A. Grollman & E. Grollman, *Pharmacology and Therapeutics* 168 (7th ed. 1970) [hereinafter cited as Grollman].

17. J. Fort, *The Pleasure Seekers: The Drug Crisis, Youth and Society* 25 (1969) [hereinafter cited as Fort].

18. *Id.* at 163.

19. Grollman 171.

result was replaced in medical practice by newer and supposedly less toxic sedatives such as the barbiturates.²⁰ Chloral hydrate perhaps received its greatest notoriety as an ingredient of a "Mickey Finn." These infamous knockout drops combined chloral hydrate with the synergistic effects of alcohol.²¹

Paraldehyde entered the medical pharmacopoeia in 1882, thirteen years after chloral hydrate.²² Even though it had an unusually pungent taste,²³ paraldehyde did rank among the most popular early sleeping medicines. Although still used today in certain medical treatments,²⁴ there is a good deal of uncertainty about exactly how paraldehyde affects the human body.²⁵ A fourth early sedative, scopolamine (which is still an ingredient in certain proprietary sleeping remedies) was the forerunner of modern-day "truth serums."²⁶ Scopolamine was first used by a Texas physician in the 1920s to develop a psychoanalytical technique called narcoanalysis.²⁷ These early studies disclosed that verbal responses could be obtained from otherwise uncommunicative subjects. During the 1930s and World War II, however, psychiatrists turned more to barbiturates (such as sodium amytal and sodium pentothal) when they wished to obtain "truthful" uninhibited responses during psychotherapy.²⁸

2. Barbiturates

Barbituric acid was first synthesized by the German organic chemist Adolf von Baeyer in 1863.²⁹ Although the derivation of the word "barbiturate" is still the subject of controversy, it has been argued that von Baeyer named it after St. Barbara on whose feast day he synthesized the

20. See generally P. Weston, W. Kessler, F. Farrell, R. Fisher, J. Dumpson, R. Radna, M. Nealis, J. Belson & H. Houghton, *Narcotics, U.S.A.* 90 (P. Weston ed. 1952).

21. R. Lingeman, *Drugs from A to Z: A Dictionary* 40 (1969) [hereinafter cited as Lingeman].

22. Fort 25.

23. Subcomm. Hearings 1170 (citing AMA Drug Evaluations).

24. For example, it is often used to induce sleep when alcoholics are in delirium tremens. Lingeman 195.

25. For example, the lethal dose of paraldehyde is unknown. *Id.* See also Fort 164-65.

26. On the subject of the admissibility of drug-induced confessions see Despres, *Legal Aspects of Drug-Induced Statements*, 14 U. Chi. L. Rev. 601 (1947) [hereinafter cited as Despres]; Dession, Freedman, Donnelly & Redlich, *Drug-Induced Revelation and Criminal Investigation*, 62 Yale L.J. 315 (1953) [hereinafter cited as Dession].

27. Despres 602-03.

28. Despres 603-04; Dession 317. These drugs, however, do not necessarily elicit the truth. Bieser, *Drugs and the Law or Who Pays for the "Trip"?*, 36 U. Cin. L. Rev. 39, 44 (1967); Despres 606.

29. D. Maurer & V. Vogel, *Narcotics and Narcotics Addiction* 102 (3d ed. 1967). Some say von Baeyer made the synthesis one year earlier. 83 *Time*, Jan. 3, 1964, at 48.

compound.³⁰ Although barbituric acid itself has no effect on the central nervous system,³¹ its various derivatives comprise one of the largest group of sedatives presently marketed. The first barbituric acid derivative was synthesized in 1903 by Fischer and von Mering.³² Called Veronal,³³ the drug was followed in quick succession by Luminal in 1912³⁴ and thereafter by many other barbiturate derivatives. It has been estimated that as many as 2,500 barbituric acid derivatives have been synthesized, although only about twenty-five are used in medical prescriptions.³⁵

Barbiturates can be divided into four categories depending on the onset and duration of their effects.³⁶ The first category—the long acting barbiturates—include the oldest of the barbiturate derivatives, barbital (Veronal) and phenobarbital (Luminal). Drugs in this category take some time before their effects are felt, but once felt, they last for a comparatively long time. The prolonged effect of these drugs is due to their rather slow elimination through the kidneys.³⁷ In some cases, long acting

30. Maurer & Vogel, *supra* note 29, at 102; 83 *Time*, Jan. 3, 1964, at 48. Various other more secular explanations have been offered for the choice of the name. One medical writer argued that when von Baeyer used the word "barbitursäure" to name the compound, he was combining the German word "schlüsselbart" (meaning the "beard" of a key and derived from the Latin for beard, "barba") and uric acid "so as to stress his conception of this substance as the key compound in the large series of cyclic ureides." Levi, *The Barbituric Acids, Their Chemical Structure, Synthesis and Nomenclature*, 9 *U.N. Bull. Narc.*, Jan.-Mar. 1957, at 30. Others claim that the synthesis was named after a Munich waitress named Barbara who supplied urine samples for von Baeyer's experiments. Some think Barbara the waitress was in fact von Baeyer's mistress. 83 *Time*, Jan. 3, 1964, at 48. See also Levi, *The Barbituric Acids, Their Chemical Structure, Synthesis and Nomenclature*, 9 *U.N. Bull. Narc.*, Jan.-Mar. 1957, at 30.

31. Bureau of Narcotics and Dangerous Drugs, U.S. Dep't of Justice, *A Study of Current Abuse and Abuse Potential of the Sedative-Hypnotic Derivatives of Barbiturate Acid with Control Recommendations* [hereinafter cited as BNDD Report], in *N.Y. Interim Rep. of Temporary State Comm'n to Evaluate the Drug Laws, Drugs and Drug Penalties Under Review: A Documentary Study* 79, 88 (1973) [hereinafter cited as *Drugs and Drug Penalties Under Review*].

32. Grollman 160.

33. It is alleged that Fischer worked out the chemical structure of Veronal while stopped on a train in Verona, Italy. R. De Ropp, *Drugs and the Mind* 162 (1957). Another suggested explanation for the choice of the name is that Verona was the first city where the new drug was tested. New Remedial Agents, *The Ureide Hypnotics*, 100 *Am. J. Pharm.* 692 (1928).

34. See Subcomm. Hearings 1173 (citing Sharpless, *The Barbiturates*, in *The Pharmacological Basis of Therapeutics* 105 (3d ed. L. Goodman & A. Gilman 1965)).

35. BNDD Report 88.

36. *Id.* at 92. Some analysts divide the barbiturates into only three categories. See Lingenman, *supra* note 21, at 19. See also Maurer & Vogel, *supra* note 29, at 104-05.

37. 108 *Am. J. Pharm.* 39 (1936).

barbiturates often linger in human muscle or fat tissue long after their effects on the central nervous system have disappeared.³⁸ For example, traces of barbital have been discovered in tissue eight to twelve days after ingestion.³⁹ One of these long acting barbiturates—phenobarbital—is the most commonly prescribed barbiturate, accounting for over one half of all American barbiturate sales.⁴⁰ Intermediate-acting barbiturates take effect faster but have a shorter duration than the long acting barbiturates. Because they are metabolized rather rapidly, these intermediate-acting drugs have the advantage of not causing any lingering barbiturate hang-over. Included in this category of barbiturates are pentobarbital (Nembutal) and amobarbital (Amytal). The short-acting barbiturates take effect even faster than the intermediate-acting drugs but they last a much shorter time. Secobarbital is the most common short-acting barbiturate. It is both the intermediate- and short-acting barbiturates that are most sought after by the drug taker.

If the potency of a drug is too great and its effects are felt too fast, as in the case of . . . ultra-fast-acting barbiturates, the abuser cannot obtain pleasure from non-medical use; he is asleep before he realizes it. On the other hand, if the onset of effects is delayed too long after administration, the abuser may not obtain the desired feelings soon enough to satisfy himself.⁴¹

As for the ultra-short acting barbiturates, the most widely used of these drugs is thiopental (Pentothal).

From the very first year of their medical use, barbiturates were widely proclaimed by physicians to be a relatively safe form of sedation. But even then there were early danger signs. A nonfatal barbiturate poisoning was reported in the German medical press in 1903—the very year Veronal first appeared on the market.⁴² Five years later, in 1908, there was a report of a fatal Veronal poisoning.⁴³ One English report confirmed that Veronal was the seventh ranked cause of fatal poisonings during 1911 to 1913.⁴⁴ In succeeding decades, studies showed that, taken in excessive amounts, barbiturates could be both highly toxic and addicting.⁴⁵ Despite

38. P. Marin & A. Cohen, *Understanding Drug Use* 104 (1971).

39. *Id.*

40. Subcomm. Hearings 103 (testimony of Dr. H. Frank Fraser).

41. BNDD Report 93. The most abused barbiturates are amobarbital, pentobarbital and secobarbital. Subcomm. Hearings 103 (testimony of Dr. H. Frank Fraser).

42. Glatt, *The Abuse of Barbiturates in the United Kingdom*, 14 U.N. Bull. Narc., Apr.-June 1962, at 19.

43. *Id.*

44. *Id.*

45. See notes 109-36 *infra* and accompanying text.

the dangers of abuse,⁴⁶ barbiturates are still believed to be extremely effective when taken under medical supervision.

3. Tranquilizers

When compared to barbiturates, tranquilizers usually produce much milder effects on the central nervous system. In most situations, tranquilizers will neither make a person groggy nor induce him to fall asleep as do the barbiturates.⁴⁷

The first tranquilizer actively used in western medicine seems to have been reserpine. Although synthesized in Switzerland in 1947, the discovery that reserpine was useful in the treatment of mental illness relied on research done earlier in India. In 1931, Indian scientists discovered that *rauwolfia* reduced blood pressure and hypertension.⁴⁸ From this research, it was a short step to the discovery that reserpine, an alkaloid of *rauwolfia*, could be used in the successful treatment of mental disorders.⁴⁹

As in the case of barbiturates, the introduction of reserpine into clinical practice was followed in rapid order by other tranquilizers. In 1954, glutethimide was marketed under the name Doriden.⁵⁰ In but a few years the manufacturer of Doriden claimed that over one billion capsules had been sold.⁵¹ Although initially acclaimed as a "safe" sedative, the euphoria was short-lived as evidence mounted that Doriden was equally as dangerous as other sedatives.⁵² A second tranquilizing agent—meprobamate—appeared in 1955 under the name of Miltown and later Equanil.⁵³ Like Doriden, Miltown met initial popularity, then disillusionment. As controversy

46. One physician saw possible national security risks in widespread sedative use: "Fortunately, controls are being placed and public warning is being given to America by people who recognize the danger of a tranquilized Nation, men who know from history that it was a tranquilized Babylon who sat in a drunken stupor of self-indulgence while an alert group of Medes and Persians crept under their walls and destroyed them." Joint Committee of the ABA and the AMA on Narcotic Drugs, *Comments on Narcotic Drugs* 35 (1958).

47. Lingeman 238.

48. See generally Blum, *Mind Altering Drugs (LSD, Marijuana, Hashish, etc.): A Scientific Appraisal*, 21 *Unesco Courier*, May 1968, at 13, 14.

49. *Id.*

50. Although a tranquilizer and not a barbiturate, glutethimide resembles phenobarbital in chemical structure and secobarbital in its effects. Lingeman 84.

51. Fort 165.

52. *Id.*

53. 85 *Time*, Apr. 30, 1965, at 85. At one time there were approximately 20 meprobamate drugs on the market. 87 *Sci. News* 69 (1965).

over its effectiveness spread, Miltown was dropped from the official United States Pharmacopoeia in 1965.⁵⁴

Two more recent tranquilizers warrant some mention. Chlordiazepoxide (Librium) has been in medical use since 1960 and by 1966 an estimated fifteen million patients had used the drug.⁵⁵ Librium is primarily used to treat mild cases of anxiety; sometimes it is also used to reduce pre-surgery apprehension.⁵⁶ Diazepam (Valium) came into widespread use in 1963. Three years later it had been dispensed to an estimated five million patients.⁵⁷ Valium has medical uses similar to those of Librium although it may have somewhat more benefit in the treatment of neuromuscular or musculoskeletal disorders.⁵⁸

For purposes of pharmacological classification, tranquilizers are usually divided into two groups: major tranquilizers and minor tranquilizers. These terms refer to the relative strength of the drugs and to their potential for causing toxic reactions.⁵⁹ Thus, the major tranquilizers (such as chlorpromazine and reserpine) are highly potent and toxic and are used only in the treatment of acute forms of mental illness such as schizophrenia.⁶⁰ The minor tranquilizers (glutethimide chlordiazepoxide and diazepam among others) are relatively less potent and toxic than the major tranquilizers with the result that they are prescribed for treatment of less severe forms of anxiety and nervous tension.⁶¹

4. Methaqualone

Although not available to American physicians until 1965, methaqualone became popular in Western Europe and Japan in the early and mid 1960s.⁶² Sold under various names such as Quaalude, Sopor, Parest and Optimil, methaqualone prescriptions grew to approximately four million in 1972, making it one of the most widely used sedatives in the United

54. 85 Time, Apr. 30, 1965, at 85. Even though dropped from the pharmacopoeia, Miltown was still available to doctors for prescriptions.

55. Hoffman-La Roche, Inc. v. Kleindienst, 478 F.2d 1, 4 (3d Cir. 1973).

56. Lingeman 126.

57. Hoffman-La Roche, Inc. v. Kleindienst, 478 F.2d 1, 4 (3d Cir. 1973).

58. Subcomm. Hearings 764 (citing AMA Drug Evaluations).

59. Packman, *Tranquilizers*, 140 Am. J. Pharm. 170 (1968).

60. *Id.* Chlorpromazine, one of the first major tranquilizers, was known in the United States as Thorazine and in Europe as Largactil. Fort 171.

61. Packman, *supra* note 59, at 170.

62. Bureau of Narcotics and Dangerous Drugs, U.S. Dep't of Justice, *Control Recommendations for Methaqualone* [hereinafter cited as BNDD Methaqualone Report], in *Drugs and Drug Penalties Under Review* 39, 42, 53. Methaqualone was first introduced in India in 1950. National Clearing House for Drug Abuse Information, *Methaqualone 1* (Report Series 18, No. 1, Oct. 1973).

States.⁶³ Paralleling this increased legitimate use, there are indications that there is mounting illegitimate use of methaqualone, so much so that a recent magazine article claimed that methaqualone abuse is growing faster than that of any other drug.⁶⁴ In New York City, quaalude clubs or "juice bars" have appeared "which cater to users of the drug, and appropriately serve juice to take with the pills, rather than alcoholic beverages, which can intensify the drug's effects and increase the chances of overdose."⁶⁵ Police statistics also demonstrate this increased methaqualone use. For example, the District Attorney of Nassau County in New York State reports that there were 21 cases of methaqualone overdose in the county during 1972.⁶⁶ A survey of patients at a San Francisco drug clinic shows that of patients recently detoxified, 35 percent admitted having used the drug—all quite recently.⁶⁷ Although it is difficult to account for the sudden popularity of various drugs among addicts and abusers, methaqualone may owe its sudden emergence on the drug scene to reports that it is an aphrodisiac.⁶⁸ In popular drug folklore, methaqualone has been proclaimed as "the love drug" and as "heroin for lovers."⁶⁹

B. *The Use and Abuse of Sedatives*

1. Legitimate Medical Use

Although all sedatives have a wide range of legitimate medical uses, the barbiturates are perhaps the most varied in their application. Barbiturates have three main clinical uses—as anesthetics, as sedatives, and as anti-convulsants.

63. Ognibene, *There's Gold in Them There Pills*, 168 *New Republic*, Apr. 21, 1973, at 13, 14; 74 *U.S. News & World Rep.*, Apr. 23, 1973, at 59, 60.

64. 74 *U.S. News & World Rep.*, Apr. 23, 1973, at 60.

65. National Clearing House for Drug Abuse Information, *supra* note 62, at 3.

66. *Drugs and Drug Penalties Under Review* 21.

67. Ognibene, *There's Gold in Them There Pills*, 168 *New Republic*, Apr. 21, 1973, at 14.

68. National Clearinghouse for Drug Abuse Information, *supra* note 62, at 3-4.

69. BNDD Methaqualone Report 62; 74 *U.S. News & World Rep.*, Apr. 23, 1973, at 60. Various other drugs have also been described as aphrodisiacs. Cocaine reputedly stimulates sexual desire and gives the male greater potency. See M. Olden, *Cocaine passim* (1973); House Comm. on Foreign Affairs, 93d Cong., 1st Sess., Report of Special Study Mission to Latin America and the Federal Republic of Germany 8-9 (Comm. Print 1973); McLaughlin, *Cocaine: The History and Regulation of a Dangerous Drug*, 58 *Cornell L. Rev.* 537, 556 (1973). Marijuana, LSD, and various solvents inhaled by juvenile drug abusers have also been associated with increased sexual stimulation. Nakamura & Adler, *Psychotoxic or Psychodelic?*, 63 *J. Crim. L.C. & P.S.* 416, 423 (1972). There may not be a physiological basis to such associations; rather, they may have arisen because these drugs may lower inhibitions and dissolve the superego. *Id.* Heroin, a depressant, would not seem to stimulate sexual desire, but excessive amounts of depressants may have paradoxically reverse reactions.

a. Barbiturates as Anesthetics

If taken in large enough quantities, barbiturates will render a person unconscious, thus making them effective where general anesthesia is required.⁷⁰ Dentists and oral surgeons often use ultra-fast-acting barbiturates to pull teeth or treat severe gum or jaw injuries.⁷¹ In situations where surgery is called for, barbiturates can be used as pre-anesthetic medication if a doctor feels that a person's tension may endanger his post-operative recovery.⁷²

b. Barbiturates as Sedatives

Perhaps the most widespread use of barbiturates is in the treatment of insomnia.⁷³ Taken in sufficient doses, barbiturates will generally induce sleep. The fact that smaller doses of barbiturates mildly depress the nerves, skeletal and heart muscles, and lower blood pressure,⁷⁴ makes them ideal anti-anxiety agents. Combined with other drugs, barbiturates frequently serve as medicine for such ailments as gastric ulcers, thyroid malfunction, asthma, and hay fever.⁷⁵ Although not strong analgesic drugs, barbiturates are sometimes prescribed for menstrual pains.⁷⁶

c. Barbiturates as Anti-convulsants

Phenobarbital is commonly administered in cases of grand mal epileptic seizures.⁷⁷ Barbiturates are also used to control bodily spasms in other situations where convulsions develop.⁷⁸ In addition to their broad application in human medicine, barbiturates have many uses in veterinary practice, particularly for anesthesia and euthanasia.⁷⁹

Although it may not be wise to draw precise delineations between the medical uses of barbiturates and the minor tranquilizers, it does seem that these tranquilizers are more widely prescribed for daytime sedation when there is a need to reduce tension but not mental acuity.⁸⁰ The major tran-

70. BNDD Report 109.

71. Subcomm. Hearings, *supra* note 13, at 108.

72. BNDD Report 110.

73. Subcomm. Hearings 108.

74. Amphetamines and Barbiturates: The Up and Down Drugs, 58 *Today's Educ.*, Mar. 1969, at 42, 44. Barbiturate sedatives have many uses in psychotherapy.

75. Maurer & Vogel, *supra* note 29, at 103.

76. *Id.*

77. Subcomm. Hearings 109.

78. BNDD Report 110.

79. Although not the most common anesthetic in human surgery, it may be in animal surgery. Hearing Before the Subcomm. on Drug Abuse and Alcoholism of the Comm. on Health and Welfare, Cal. Legis. Assembly, at 75 (1969) [hereinafter cited as *California Hearing*].

80. See Lingeman, *supra* note 21, at 238. Some would dispute that minor tranquilizers are more effective in daytime sedation than small amounts of barbiturates. *Id.* at 169. See

quilizers are used almost exclusively in the treatment of severe mental disturbances.⁸¹ One major tranquilizer, chlorpromazine, has also been used to reduce the unusual visual effects of hallucinogenic drugs.⁸²

Methaqualone, a non-barbiturate, while sometimes prescribed for day-time sedation, is used primarily to treat insomnia.⁸³ It supposedly will induce sleep within ten to thirty minutes.⁸⁴ Because it also has certain antitussive and antispasmodic characteristics, methaqualone may be particularly useful when insomnia is aggravated by coughing or by gastrointestinal distress.⁸⁵ However, methaqualone is not recommended for children or for pregnant women.⁸⁶

2. Illegitimate Abuse

Those who abuse barbiturates will generally do so for a variety of reasons—some will take increased amounts of barbiturates to keep calm under emotional stress. Paradoxically, others will take the drug not to calm but to stimulate; when a sufficient tolerance level has been reached, barbiturates may produce reverse bodily reactions and excite rather than depress. A third group of individuals may employ barbiturates either to counteract or to enhance the effects of other drugs. Finally, there are those who will take barbiturates in order to commit suicide.⁸⁷ In discussing the various ways in which barbiturates are abused, primary emphasis will be placed on those individuals who use barbiturates either in combination with other drugs or to obtain excitatory reactions.

As has already been noted, most abusers prefer an intermediate- to short-acting barbiturate because of the prompt onset of effects.⁸⁸ The strength of these effects, however, is significantly influenced not only by the amount of the drug taken, but also by the mood of the person taking the drug and the social setting in which he finds himself.⁸⁹ This explains

also 81 *Sci. News* 312 (1962). Valium, a minor tranquilizer and skeletal-muscle relaxant, has been known to relieve the rare "stiff-man's syndrome." Roueche, *Annals of Medicine*, The Case of Mrs. Carter, 44 *New Yorker*, Dec. 7, 1968, at 207, 224.

81. See note 61 *supra* and accompanying text.

82. Hussar, *Therapeutic Incompatibilities: Drug Interactions*, 139 *Am. J. Pharm.* 215, 224 (1967). See also Halasz, Formanek & Marrazzi, *Hallucinogen-Tranquilizer Interaction: Its Nature*, 164 *Science* 569 (1969). In some cases, tranquilizers may aggravate hallucinogenic action, however. *Id.* at 571. Chlorpromazine reportedly can also cause slight changes in the eye lenses of patients. 89 *Sci. News* 235 (1966).

83. *Drugs and Drug Penalties Under Review*, *supra* note 66, at 26.

84. Sedam & Tice, *New Drugs of 1965 and 1966*, 139 *Am. J. Pharm.* 47, 64 (1967).

85. *Id.*

86. *Drugs and Drug Penalties Under Review*, *supra* note 66, at 26; National Clearinghouse for Drug Abuse Information, *supra* note 62, at 5.

87. Chambers, Brill & Inciardi, *supra* note 6, at 50-51. Paraldehyde and chloral hydrate are not widely abused drugs. Subcomm. Hearings, *supra* note 13, at 1230.

88. See text accompanying note 41 *supra*.

89. R. Blum & M. Funkhouser-Balbaky, *Mind-Altering Drugs and Dangerous Behavior*:

the rather unusual custom of taking sleeping pills before going to a party.⁹⁰

Small amounts of barbiturates like small amounts of alcohol will reduce fear and anxiety, making the individual less inhibited. Although his inhibitions may be reduced, the individual's ability to carry out complex tasks which require either mental or physical dexterity is also reduced.⁹¹ As the dose of barbiturates is increased, the intoxication experienced will become progressively more heightened. Lack of muscle coordination, faulty articulation and judgment all result from the barbiturate "high."⁹² It is this state of "dreamy, floating . . . awayness untroubled by reality" that may appeal to juvenile barbiturate users.⁹³ Sometimes of course these large doses of barbiturates may increase belligerency or irritability in a person. Adolescent youths may "drop a roll of them reds (seconal) or yellow jackets (nembutal) and go out terrorizing . . ."⁹⁴ As the barbiturate dose begins to approach toxic levels, an individual will experience dreamlike states with periods of unconsciousness and even coma.⁹⁵ Paranoid delusions and violent outbursts may also occur in this highly drugged state.⁹⁶ Finally, if the dosage is excessively large, barbiturates will depress the respiratory centers of the brain so completely that death will result.⁹⁷

Since tranquilizers tend to be milder sedatives than the barbiturates, they do not seem to be preferred drugs of abuse.⁹⁸ For example, the major

Dangerous Drugs in President's Commission on Law Enforcement and Administration of Justice, Task Force Report: Narcotics and Drug Abuse 22-23 (1967). See also BNDD Report 106.

90. BNDD Report 106-07.

91. *Id.* at 105. Small amounts of barbiturates can obviously affect a man's ability to drive a car. *Id.* at 106.

92. Subcomm. Hearings 109-10.

93. *Id.* at 71.

94. H. Blumer, *The World of Youthful Drug Use* 25 (1967). Various types of barbiturates have acquired street names usually from the color of their capsules. Nembutal pills are called yellow jackets or nebbies; Seconal, reds, red birds, or red devils; Amytal Sodium, blues, blue birds, blue heavens, or blue devils; Luminal, purple hearts; and Tuinal, rainbows or reds and blues. See generally E. Brecher, *Licit & Illicit Drugs*, The Consumers Union Report on Narcotics, Stimulants, Depressants, Inhalants, Hallucinogens and Marijuana—Including Caffeine, Nicotine, and Alcohol (1972); Lingeman, *supra* note 21, *passim*.

95. H. Blumer, *supra* note 94, at 83; BNDD Report 107.

96. H. Blumer, *supra* note 94, at 83.

97. BNDD Report 107. Death through respiratory depression, however, is not unique in cases of barbiturate poisoning. Excessive amounts of any drug which is a stimulant or a depressant will cause similar reactions. Lynch, *The Pharmacology of Addicting Drugs*, 12 *Catholic Law* 121, 123 (1966). Barbiturate poisoning is detectable by determining the presence of barbituric acid in either the blood or the urine. Grollman, *supra* note 16, at 166.

98. Because of their relative newness, however, there is much less research data on various types of tranquilizers. Tranquilizer abuse may be just as widespread as barbiturate abuse only, as yet, not adequately analyzed.

tranquilizers used to treat severe psychotic disorders appear not to be taken for other than medical reasons.⁹⁹ The same cannot be said for the minor tranquilizers. If taken in medically prescribed doses, most minor tranquilizers will not produce a feeling of elation or a euphoric "high." With increased doses, however, there is some medical evidence that euphoria may result from the use of Librium and Valium—two of the most popular minor tranquilizers.¹⁰⁰ Whether or not minor tranquilizers do cause a "high,"¹⁰¹ there seems to be growing evidence that some people do attempt to use them for this purpose.¹⁰²

If there is dispute over whether these minor tranquilizers produce euphoria, there is significantly less dispute over the fact that they, like the barbiturates, can affect a person's judgment and physical dexterity. For example, as early as 1960, large doses of Librium were reported to produce disturbing reactions.¹⁰³ One man who was taking a larger than average dose of Librium allegedly put his car into reverse and crashed it into a tree at fifteen miles per hour.¹⁰⁴

When taken in doses larger than those recommended by doctors, methaqualone will produce effects similar in most respects to those of the barbiturates.¹⁰⁵ The effects have been described as "dream-like" and "euphoric."¹⁰⁶ There is evidence, however, that a methaqualone high has a more rapid onset and lasts comparatively longer than that of other sedatives—including many of the more widely abused barbiturates.¹⁰⁷ Mixed with alcohol, methaqualone reportedly causes hallucinatory sensations.

3. Dependence¹⁰⁸

"Down" drugs cause a physical dependence not observed with "up"

99. E. Brecher, *supra* note 94, at 257; Subcomm. Hearings, *supra* note 13, at 1023.

100. See *Hoffman-La Roche, Inc. v. Kleindienst*, 478 F.2d 1 (3d Cir. 1973). The court, however, characterized the evidence as neither very ample nor very persuasive. *Id.* at 10.

101. See 91 *Sci. News* 232-33 (1967).

102. For mention of Librium abuse among "hippies" and "Hell's Angels," see A. Cain, *Young People and Drugs* 46 (1969).

103. 75 *Time*, May 30, 1960, at 37.

104. *Id.*

105. For a description of methaqualone's effects, see National Clearinghouse for Drug Abuse Information, *supra* note 62, at 4.

106. BNDD Methaqualone Report 61. Some individuals who use the drug show their approval by wearing shirts marked with one manufacturer's initials. *Id.* at 61-62.

107. For example, methaqualone produces its effects within 15 to 30 minutes after ingestion and lasts for approximately six to ten hours. *Drugs and Drug Penalties Under Review*, *supra* note 66, at 20-21. Intermediate-acting barbiturates such as Nembutal produce effects in ten to 15 minutes, but their duration is only two to four hours. Maurer & Vogel, *supra* note 29, at 106.

108. Dependence is used in this article to include both physical dependence and psycho-

drugs. A 1940 study revealed that barbiturate addiction accounted for more than ten percent of all non-alcohol addiction cases reported by thirteen hospitals.¹⁰⁹ Interestingly, however, none of these addicts showed any withdrawal symptoms.¹¹⁰ In his famous 1950 study, Dr. Harris Isbell confirmed the findings of the earlier study, concluding that barbiturate intoxication did represent a real physical dependence.¹¹¹ Isbell, however, did uncover barbiturate withdrawal symptoms—symptoms so severe, he argued, that barbiturate withdrawal was in fact more dangerous than opiate withdrawal.¹¹² In cases of barbiturate withdrawal, severe convulsions may occur; whereas, in opiate withdrawal, convulsions or lack of muscle control have not been observed.¹¹³ The convulsions in barbiturate withdrawal have been known to block respiration, thereby causing death.¹¹⁴ There is one definite similarity, however, between opiate and barbiturate withdrawal. Both have been observed in infants born to mothers who used either type of drug during the last trimester of pregnancy.¹¹⁵

The speed with which barbiturate dependence (either physical or psychological) can occur is a matter of debate. Most scientists agree, however, that it will occur more rapidly than alcoholism. Studies show that alcoholism can take from three to fifteen years to become chronic.¹¹⁶ There is evidence that many people who are kept deeply intoxicated for long periods of time can become dependent on depressants in as little as ten to twelve days.¹¹⁷ Some would claim that a barbiturate *habitué* can be created after only ten doses.¹¹⁸ Isbell himself reported that if the daily

logical dependence. In 1964, the World Health Organization recommended using the term "drug dependence" to replace two earlier terms, "drug addiction" and "drug habituation." See Eddy, Halbach, Isbell & Seevers, *Drug Dependence: its Significance and Characteristics*, 32 WHO Bull. 721, 722 (1965). For definitions of these terms, see McLaughlin, *supra* note 69, at 552-54.

109. Hearings on Control of Narcotics, Marihuana and Barbiturates Before a Subcomm. of the House Comm. on Ways and Means, 82d Cong., 1st Sess. 33 (1951).

110. *Id.*

111. BNDD Report 121.

112. *Id.* at 122-23.

113. R. Horman & A. Fox, *Introduction to Drug Awareness* 30-31 (R. Horman & A. Fox eds. 1970).

114. BNDD Report 122.

115. *Id.* at 123.

116. Soden, *The Need for Realistic Treatment of Alcohol and Drug Addiction*, Fed. Probation, Mar. 1973, at 40.

117. Subcomm. Hearings, *supra* note 13, at 1222.

118. California Hearing, *supra* note 79, at 85 (testimony of Dr. Andy Peoples). Of course, any such estimates cannot take account of individual susceptibilities to a particular drug or

dose of barbiturate approaches 800 to 900 milligrams for as long as sixty days, withdrawal will occur upon removal of the drug.¹¹⁹

As for the major tranquilizers, they may be unique in their relatively low potential for causing dependence. Large amounts of these tranquilizers will lead neither to coma nor to physical or psychic dependence.¹²⁰ Minor tranquilizers, however, will cause dependence if taken in large enough doses over a prolonged period of time. For example, Librium will produce dependence if 300 to 600 milligrams (about ten times the recommended dose) are taken over a five-month period.¹²¹ Once dependence on a minor tranquilizer occurs, it is no less consuming than barbiturate dependence.¹²² Various studies have demonstrated that methaqualone abuse also leads to dependence.¹²³ A dosage of 1.2 grams of methaqualone a day has been reported to lead to dependence.¹²⁴ In a recent report, the Bureau of Narcotics and Dangerous Drugs concluded that "methaqualone produces a severe physical dependence characteristic of the barbiturate-alcohol type."¹²⁵

4. Toxicity, Accidental Death, and Suicide

The toxicity of an overdose of barbiturates was confirmed as far back as 1903—the year in which Veronal, the first barbiturate, was introduced.¹²⁶ For those bent on suicide, barbiturates offer an agreeable way to ensure a peaceful end.¹²⁷ Although it is usually claimed that a lethal dose of barbiturates is fifteen times the sleep-inducing dose,¹²⁸ this ratio does not hold true if the barbiturates are intravenously injected. In that case a lesser dose of the drug can kill, usually within a matter of minutes.¹²⁹

to drug-taking in general. Individuals with addiction-prone personalities become dependent more quickly and totally than others.

119. BNDD Report 122-23.

120. Lingemen, *supra* note 21, at 141.

121. *Id.* at 126-27.

122. See National Clearinghouse for Drug Abuse Information, *supra* note 62, at 5-6.

123. Ognibene, *There's Gold in Them There Pills*, 168 *New Republic*, Apr. 21, 1973, at 14.

124. *Id.*

125. BNDD Methaqualone Report 54.

126. See note 42 *supra* and accompanying text.

127. As with hemlock among the ancient Greeks, the relative ease and painlessness of using sleeping pills may actually contribute to the suicide rate. See Daube, *The Linguistics of Suicide*, 1 *Phil. & Pub. Aff.* 387, 393 (1972).

128. BNDD Report 115.

129. *Id.* Some mention should be made of the various methods of taking sedatives. The most common form is swallowing sedatives in tablet or capsule form—in street parlance, this method is called dropping or popping pills. Intravenous injection, or shooting, of seda-

In addition to suicide, there are many accidental deaths attributed to barbiturates. These accidental deaths can occur in either of two ways. First, as with other drugs, individuals can have idiosyncratic or allergic reactions to barbiturates.¹³⁰ Although these abnormal reactions usually take the form of skin rashes or other forms of dermal eruption,¹³¹ they could be fatal if severe enough. The second form of accidental death, however, is far more common. It is caused not by an allergic reaction but rather by individual misjudgment. In order to fall asleep, an individual may take a strong dose of barbiturate sleeping pills. After a brief interval of sleep, he may awake and think he has forgotten to take his pills. The first barbiturates may have made the individual confused or drowsy. In this state he may mistakenly take a further dose which combined with the first can be fatal.¹³² Statistics confirm that deaths from barbiturates are a serious national problem. Between 1967 and 1971, Philadelphia and Pittsburgh reported 115 and 118 barbiturate deaths respectively.¹³³ Of the 569 reported drug deaths in Los Angeles in the first half of 1972, 309 resulted from barbiturates.¹³⁴

Both tranquilizers and methaqualone can be fatal if taken in excessively large doses. Substantially fewer suicides and accidental deaths, however, have been attributed to tranquilizers than to the barbiturates.¹³⁵ As for methaqualone, it has been blamed for at least 313 overdose poisonings and 53 suicides during one recent sixteen-month period.¹³⁶

tives does take place. Often the powder is mixed not only with water but also with other drug substances to obtain the injectable solution. Injection of barbiturates may be more prevalent in Europe than in the United States. See N. Bejerot, *Addiction and Society* 43 (1970), wherein the author states that hundreds of Swedish addicts inject Nembutal regularly. Bejerot also reports an increase in barbiturate injection in England. *Id.* Injecting barbiturates is a dangerous occupation. Injecting any substance can lead to abscesses or, if an artery is struck, to gangrene. Some addicts may require amputations. Ognibene, *Legal Drugs, Illegal Abuse—Amphetamines and Barbiturates*, 168 *New Republic*, Feb. 3, 1973, at 21, 23.

130. See generally BNDD Report 117.

131. Grollman, *supra* note 16, at 166.

132. See California Hearing, *supra* note 79, at 86 (testimony of Dr. Andy Peoples). One early medical report suggested that sugar injections could be beneficial in barbital poisonings. It is important that the kidneys eliminate the toxic doses in the bodily system. Sugar solutions increase the rate of urine secretion. 102 *Am. J. Pharm.* 599 (1930). Naloxone, a specific narcotic antagonist, seems to have little effect in cases of sedative poisonings. *The Lancet*, Mar. 3, 1973, at 452.

133. 74 *U.S. News & World Rep.*, Apr. 23, 1973, at 59.

134. *Id.* See generally BNDD Report 149-52.

135. Rosenthal, *Dangerous Drug Legislation in the United States: Recommendations and Comments*, 45 *Texas L. Rev.* 1037, 1044 (1967).

136. 74 *U.S. News & World Rep.*, Apr. 23, 1973, at 60. Methaqualone poses additional problems for the user. Because it is metabolized in the liver, methaqualone is not recommended for individuals with liver ailments. Sedam & Tice, *supra* note 84, at 64.

5. Multi-Drug Abuse

Barbiturates are frequently taken in combination with various other abused drugs, such as alcohol, heroin and stimulants.¹³⁷

Barbiturates have been called solid alcohol and alcohol, liquid barbiturates.¹³⁸ Both produce a similar intoxication and enhance the effects of the other.¹³⁹ If a person were to have a drink and then take a barbiturate, the effects of the two added together would increase the chance of a possible overdose. Death has been reported with as little as 300 milligrams of a short-acting barbiturate and a few ounces of alcohol.¹⁴⁰ With an estimated nine million alcoholics in the United States,¹⁴¹ the potential danger of widespread alcohol-barbiturate abuse is serious.¹⁴²

Since both heroin and barbiturates are "down" drugs, barbiturates are commonly used either as an alternative to,¹⁴³ or an adulterant for, heroin¹⁴⁴—particularly during times of heroin scarcity. As does alcohol, barbiturates heighten the effects of heroin; thus when taken with barbiturates, a small amount of heroin will produce a more powerful effect. Interestingly, barbiturates have also been used to ease withdrawal from heroin.¹⁴⁵

If two similar drugs such as barbiturates and heroin increase the effects of the other, dissimilar drugs such as barbiturates and amphetamines have an opposite effect. Thus, a woman may take a barbiturate in the evening to go to sleep and an amphetamine in the morning to wake up and dispel

137. Multi- or poly-drug abuse is a growing phenomenon in the United States—perhaps it now represents the rule, rather than the exception. Wald & Hutt, *The Drug Abuse Survey Project: Summary of Findings, Conclusions, and Recommendations*, in *Dealing with Drug Abuse: A Report to the Ford Foundation* 3, 5 (1972).

138. E. Brecher, *supra* note 94, at 252.

139. The increased effect occurs because barbiturates hinder the breakdown of alcohol in the body. 83 *Time*, Jan. 3, 1964, at 48.

140. Ognibene, *Legal Drugs, Illegal Abuse—Amphetamines and Barbiturates*, 168 *New Republic*, Feb. 3, 1973, at 21, 23.

141. Soden, *The Need for Realistic Treatment of Alcohol and Drug Addiction*, *Fed. Probation*, Mar. 1973, at 40.

142. A study in Dade County, Florida, shows that of 132 persons who died from barbiturate-related causes during 1970 and 1971 and were tested for the presence of alcohol, 35 percent tested positive. National Commission—Second Report 194. In fact, it has been said that a pure alcohol problem is a phenomenon of the over-50 age group. *Alcoholism compounded*, 94 *Sci. News* 338 (1968).

143. National Commission—Second Report 145.

144. *The Analysis of Heroin*, 5 *U.N. Bull. Narc.*, Apr.-June 1953, at 27, 28. An adulterant potentiates the effects of other drugs; a dilutant merely dilutes the strength of other drugs. *Id.*

145. BNDD Report 131. Barbiturates, like cocaine, are also being abused by methadone maintenance patients. *Id.*; McLaughlin, *supra* note 69, at 555-56.

any barbiturate hangover. A youthful drug abuser, on the other hand, may inject a speedball—a combination of a depressant and a stimulant—to “go fast slow.”¹⁴⁶

Multiple drug abuse in its various forms poses difficult problems for the physician who must detoxify an addict. To cite but one example: multiple drug use can and often does result in multiple addictions. However withdrawal from each of these addictions does not take place simultaneously; rather it may be spaced over a period of time. For example, withdrawal from alcohol usually begins about twelve hours after the last drink, and may continue for as long as four days.¹⁴⁷ In contrast, barbiturate withdrawal doesn't commence until about four days after the drug is removed.¹⁴⁸ Finally, the withdrawal from tranquilizers doesn't occur for seven or more days.¹⁴⁹ With this staggered pattern of withdrawals, an addict with multiple addictions could be inadvertently discharged between the end of alcohol withdrawal and the first signs of barbiturate or tranquilizer withdrawal. In some situations, this could be a fatal mistake. The convulsions that may accompany barbiturate withdrawal usually require trained medical supervision.¹⁵⁰

C. *Special Problems Associated With Sedative Abuse*

1. Ready Availability

As has already been mentioned,¹⁵¹ the production of barbiturates in the United States approximates 1,000,000 pounds a year. The legitimate production supplies not only the legal market but also, indirectly, the illegal market. The ways, in which legally produced drugs are diverted into illegal channels are, of course, many and varied.

Sedatives can be pilfered from drug manufacturers, distributors, retailers, physicians and sometimes even patients. For the year ending April 1, 1972, the Bureau of Narcotics and Dangerous Drugs reported over

146. A speedball is usually a mixture of heroin and cocaine, but there is no reason why barbiturates cannot serve in place of the heroin. Lingeman, *supra* note 21, at 226.

147. Alcoholism compounded, 94 *Sci. News* 338, 339 (1968).

148. *Id.*

149. *Id.*

150. In addition to the convulsions, the addict will run a high fever—perhaps as high as 104°F. Cold packs, however, are contraindicated because they would strain the already impaired respiratory system. *The Problem of Barbiturates in the United States of America*, 9 *U.N. Bull. Narc.*, Apr.-June 1957, at 15, 17. During the early stages of withdrawal, a bed with sideboards should be provided so that if the convulsions are strong, the addict will not roll out of bed. *Id.* After withdrawal, it usually takes the body several months to normalize. *Amphetamines and Barbiturates, The Up and Down Drugs*, 58 *Today's Educ.*, Mar. 1969, at 42, 44.

151. See note 11 *supra* and accompanying text.

seven million stolen barbiturate doses.¹⁵² There are no available statistics on the amount of tranquilizers stolen.

Doctors' prescriptions are another source of illegal drug diversion. There will always be unethical physicians ("script doctors") who will write unnecessary prescriptions after giving cursory "physical examinations" to clear their records.¹⁵³ Even honest doctors may inadvertently contribute to illegal diversion by overprescribing. The fact of widespread medical overprescription has been amply documented.¹⁵⁴

Unauthorized sales by retail distributors is a third major source of illegally diverted drugs. Although forged prescriptions do account for a portion of these unauthorized retail sales, the vast majority are directly traceable to the drug retailers themselves. For the period ending December 31, 1962, 78 percent of the convictions for illegal sale of either amphetamines or barbiturates involved retail drug firms, pharmacists or their employees.¹⁵⁵

Although sedatives are illegally imported into the United States, the ordinary pattern of smuggling depressants tends to be quite different from that of heroin or cocaine. There are recent indications, however, that the old patterns of barbiturate smuggling are changing. The time-honored method was to export barbiturates to Mexico and then to smuggle them back into the United States.¹⁵⁶ The individual or firm in Mexico to which the drugs were exported was usually non-existent. One investigation showed that of forty-five stores in Mexico consigned restricted drugs, only five were legitimate.¹⁵⁷ More recently, however, some of the barbiturates smuggled into the United States have not been of American origin, indicating foreign suppliers are entering the domestic illegal sedative market.¹⁵⁸

Interestingly, clandestine production does not seem to be a significant source of street depressants.¹⁵⁹ Diversion from legal distribution channels seems sufficient to fill the present requirements of the illegal market. If clandestine production is negligible, it would seem that the way to dry up

152. BNDD Report 160.

153. California Hearing, *supra* note 79, at 46.

154. BNDD Report 165-69.

155. The President's Advisory Comm'n on Narcotic and Drug Abuse, Final Report 44-45 (1963). See also N.Y. Times, Aug. 16, 1973, at 19, col. 1.

156. The President's Advisory Comm'n on Narcotic and Drug Abuse, Final Report 47 (1963).

157. California Hearing, *supra* note 79, at 59.

158. The President's Advisory Comm'n on Narcotic and Drug Abuse, Final Report 47-48 (1963).

159. Some clandestine production of depressants, however, is beginning to appear. Ingersoll, *supra* note 2, at 22.

the market for illegal depressants is to stop the leakage from legal distribution channels. The problem, however, is to find a means of stopping this leakage. Medical need for depressants is widespread. It has been estimated that if the medical requirements for amphetamines can be counted in the thousands of doses, barbiturate requirements must be counted in the billions of doses.¹⁶⁰ Thus, there is no realistic way to reduce production to any significant extent. Although rigid production and distribution controls¹⁶¹ are part of the answer, past history would seem to indicate that at the various levels of a drug distribution system leakage is inevitable.

2. Low Cost

In addition to their ready availability, a prime reason for the popularity of depressants in the drug subculture is their low cost. In many instances, the barbiturate user can acquire his supply of drugs legitimately from a doctor's prescription.¹⁶² Even if the user were forced to buy from a pusher, he could probably buy one hundred Seconal tablets for between five dollars and eight dollars.¹⁶³ There have been reports that certain pills sell for as little as twenty-five cents each,¹⁶⁴ although the price of others may be as high as seventy-five cents each.¹⁶⁵ Since two pills a day can produce euphoria in teenagers,¹⁶⁶ it is easy to see how a barbiturate high is within the financial reach of the average teenager, and, a fortiori, of the average adult drug user. Their comparatively low cost clearly differentiates depressants from other abused drugs and renders their widespread abuse almost inevitable.

3. Depressants as Criminogens

Until quite recently there were few studies made of the connection between drugs and crime. Whatever studies there were attempted to show that drug abuse and crime were highly correlated.¹⁶⁷ These studies clearly demonstrated that drug users did commit crimes—but mainly drug related crimes, such as possession or sale of narcotics. These studies, how-

160. Ognibene, *Legal Drugs, Illegal Abuse—Amphetamines and Barbiturates*, 168 *New Republic*, Feb. 3, 1973, at 21, 22.

161. This method was quite successful in controlling amphetamines. *Id.* 21-22.

162. Subcomm. Hearings, *supra* note 13, at 83.

163. *Id.* at 85.

164. *Id.* at 89.

165. *Id.* at 85. There are three methods of taking depressants. The first and most common method is to take the pills orally. The contents of the pills can be snorted like cocaine or injected intravenously like heroin. See generally *id.* at 83; note 129 *supra*.

166. See Subcomm. Hearings 88.

167. For a review of early research on the relationship between drug usage and criminal behavior, see U.S. Dep't of Justice, Bureau of Narcotics & Dangerous Drugs, *Drug Usage and Arrest Charges* 8-18 (1971).

ever, made no effort to compare non-drug related crime statistics in drug user and non-drug user populations. In 1971, however, the Bureau of Narcotics and Dangerous Drugs published a report analyzing drug usage and arrest charges in six cities throughout the United States.¹⁶⁸ The statistics concerning the interconnection of barbiturate use and crime are quite revealing.¹⁶⁹

When compared to non-drug users, those who use barbiturates had a smaller percentage of arrest charges for aggravated assault: 16.1 percent of the non-drug users had been charged with aggravated assault as against only 8.3 percent of the barbiturate users. Non-drug users also had a higher percentage of arrest charges for criminal homicide and forcible rape. The barbiturate users, however, had a significantly higher percentage of burglary and robbery arrest charges than non-drug users. These statistics would seem to indicate that non-drug users are at least charged more often with violent crimes than barbiturate users. The barbiturate users, on the other hand, are more frequently charged with acquisitive crimes.

When barbiturate users are compared to users of other drugs, barbiturate users are charged with aggravated assault more than twice as often as heroin and cocaine users, and almost twice as often as amphetamine users. As for criminal homicide and forcible rape, the arrest charge statistics for barbiturate users are higher than for heroin users, about the same as for cocaine users and less than those for amphetamine users. Burglary and robbery statistics are approximately the same for all drugs mentioned. These figures seem to indicate that among drug users, barbiturate users tend to be more frequently charged with crimes of violence (aggravated assault, criminal homicide and forcible rape) than users of other drugs.

This conclusion, that the barbiturate user is more violence-prone than other drug users, seems to be confirmed in the drug subculture itself. The barbiturate user has been called "worse than the meanest fighting drunks."¹⁷⁰ One barbiturate user described taking his drug in this way: "They always make me hate and mean or something, those reds and yellow jackets. Drink a little bit behind it like I said and a person can look at you, just glance at you and you poke 'em off in their nose . . ."¹⁷¹ The irony of the situation is evident: depressants which should tranquilize and calm can in fact galvanize and inflame.

168. *Id.*

169. *Id.* at 173, 175. The subsequent statistics can be found on various charts contained on these pages.

170. 74 U.S. News & World Rep., Apr. 23, 1973, at 60 (quoting an unnamed California prosecutor).

171. See H. Blumer, *supra* note 94, at 21.

II. LEGISLATIVE CONTROLS

Although narcotic drugs such as morphine and cocaine began to be regulated by the states as early as the 1870s,¹⁷² depressants did not come under state regulation until over fifty years later. Even when depressants were finally regulated, the law tended to categorize them differently from the narcotic drugs,¹⁷³ reflecting an attitude that the depressants were in fact less harmful than other abused drugs. The reasons why this attitude developed are not difficult to discern. First, whereas depressants have many legitimate medical uses, most narcotic drugs do not. For example, although heroin did briefly appear in the official pharmacopoeia of American drugs in 1910,¹⁷⁴ it has not been widely used as a medicine in this country for over sixty years. Even cocaine (which can be and still is used in eye and dental surgery) has largely been replaced by other drugs such as novocaine and procaine.¹⁷⁵ Second, unlike the narcotic drugs which have become associated in the public mind with prostitutes, criminals and other undesirable elements, depressants have been widely used as sedatives at all levels of the socioeconomic ladder. Hence, no stigma has attached to their use. Third, and perhaps most important, the dangers of depressant use were not fully realized until quite recently. It was not until the 1950s that barbiturates were conclusively proven to be addictive.¹⁷⁶

An analysis of state and federal legislation regulating depressants will demonstrate clearly that public awareness of the dangers of depressant abuse was late in coming. Even as the evidence of their danger mounted, there was a reluctance on the part of the legislators to punish the abuse of depressants as harshly as the abuse of narcotics.

A. *Early State and Federal Legislation Regulating Depressants*

1. State Legislation to 1970

Although there was some earlier legislation regulating the use of chloral hydrate,¹⁷⁷ the first state to place specific controls over the more modern categories of depressants, such as the barbiturates, was Califor-

172. See, e.g., Act of Feb. 9, 1877, ch. 27, §§ 1-5, [1877] Nev. Laws 69.

173. Narcotic drugs have been variously defined. Medically speaking, a narcotic drug is one that depresses the central nervous system, producing stupor or sleep. In this sense a depressant might be considered a narcotic drug. From the legal standpoint, however, narcotics have been defined as basically two categories of drugs—opium and its derivatives (morphine and heroin) and cocaine. Cocaine, of course, is a stimulant and would not be considered a narcotic drug under medical terminology.

174. Heroin in the Official Pharmacopoeia, 5 U.N. Bull. Narc., Apr.-June 1953, at 19.

175. See generally McLaughlin, *supra* note 69, at 544-47.

176. See notes 111-19 *supra* and accompanying text.

177. See, e.g., Act of Apr. 25, 1900, ch. 667, § 198, [1900] Laws of N.Y. 1471, 1480-81.

nia. In 1929,¹⁷⁸ the California Legislature made it "unlawful for any person . . . to sell, furnish, or give away, or offer to sell, furnish, or give away any veronal, barbital . . . or any of its salts, derivatives, or compounds of the foregoing substance . . . except upon the written order or prescription of a physician . . ."¹⁷⁹ Violations of the act were misdemeanors punishable by a fine not exceeding \$200 or by imprisonment not exceeding six months or both. The California statute, however, did not criminalize the illegal *possession* of veronal or barbital. One year later in 1930, Virginia enacted legislation¹⁸⁰ requiring that sales of "hypnotic drugs" including barbital could be made only upon prescription. Like California, the Virginia enactment criminalized only the non-prescription sale, but not the possession, of these drugs. Other states began to follow California's and Virginia's lead. In 1933, for example, New Jersey,¹⁸¹ Maine¹⁸² and Oklahoma¹⁸³ adopted special laws to regulate barbiturates. By 1946, thirty-six states had either laws or regulations in force which directly or indirectly controlled the distribution of either barbiturates alone or barbiturates and other "hypnotic drugs."¹⁸⁴ Some of this later legislation, however, differed in several respects from the early California legislation. For example, a New York statute adopted in 1946 outlawed not only the non-prescription sale or dispensation of any barbiturate or any "other hypnotic or somnifacient drug,"¹⁸⁵ but their illegal possession as well.¹⁸⁶ In addition the New York statute increased the severity of applicable penalties for violations of the Act. Anyone convicted of an offense was liable to either imprisonment for up to one year, a fine of not more than \$500, or both.

The end of World War II marked a turning point in the American social and legislative attitude toward depressants. The war had disrupted traditional opium and heroin supply routes, forcing narcotic addicts to search for new drugs either to substitute for heroin or to adulterate the little heroin that was available.¹⁸⁷ Some of these addicts began to use barbiturates because barbiturates could enhance the effects of weak

178. Act of May 24, 1929, ch. 449, [1929] Cal. Laws 812.

179. *Id.*

180. Act of Mar. 20, 1930, ch. 164, [1930] Va. Acts 445.

181. Act of June 21, 1933, ch. 279, [1933] N.J. Laws 749.

182. Act of Mar. 28, 1933, ch. 204, [1933] Me. Laws 347.

183. Act of Apr. 24, 1933, ch. 77, [1933] Okla. Laws 140.

184. Hearings on Control of Narcotics, Marihuana and Barbiturates Before a Subcomm. of the House Comm. on Ways and Means, 82d Cong., 1st Sess. 14 (1951).

185. Act of Apr. 8, 1946, ch. 597, § 1, [1946] Laws of N.Y. 1246. Hypnotic or somnifacient drugs would obviously include such nonbarbiturates as chloral hydrate and paraldehyde among others.

186. *Id.* § 3.

187. For a discussion of the war's effect on the "cutting" or adulterating of heroin see A. McCoy, *The Politics of Heroin in Southeast Asia* 5-6 (1972).

heroin.¹⁸⁸ As concern about barbiturate abuse began to spread, there was a simultaneous outbreak of amphetamine abuse in various parts of the world—particularly in Japan.¹⁸⁹ Thus, the public, which had long been aware of the dangers of narcotic abuse, was now exposed to the potential dangers inherent in the abuse of two new categories of drugs—"uppers" (the amphetamines) and "downers" (the barbiturates and other depressants).

As concern over depressant abuse grew, attempts were made to unify state legislation regulating their distribution. In 1955 the Council of State Governments proposed to the states "An Act to regulate the handling, sale and distribution of hypnotic or somnifacient drugs."¹⁹⁰ In the explanatory statement preceding the Act, the drafters remarked:

The proposal is recommended for consideration of states which may require new legislation in this field, or which may wish to broaden or strengthen the coverage of existing legislation. The attention of states which have comparable laws confined to control of barbiturates is called specifically to the wider coverage of this proposal.¹⁹¹

The proposed legislation outlawed the illegal sale and possession of barbiturates and other hypnotic or somnifacient drugs.¹⁹² In this respect it was quite similar to the 1946 New York act in that it covered not only barbiturates but other depressant drugs as well, and prohibited both their illegal possession and sale. The model act, however, did contain certain new features—features which had long been part of federal and state narcotic control laws but had not been used uniformly in laws regulating depressants. The Act required those in the business of distributing depressant drugs to "make a complete record of all stocks of drugs on hand on the effective date of this act" and to "maintain detailed records and inventories relating to drugs manufactured, purchased, sold, distributed and handled . . ."¹⁹³ The responsibility for keeping records was not just imposed upon retail pharmacists but also upon drug manufacturers and wholesalers.¹⁹⁴ The Act represented an attempt to control depressants not only at the point of retail distribution but also at the point of manufacture. As penalties for violations of the Act, the drafters

188. See notes 143-45 *supra* and accompanying text.

189. For reference to the post-war amphetamine problem in Japan see Nagahama, A review of drug abuse and counter measures in Japan since World War II, 20 U.N. Bull. Narc., July-Sept. 1968, at 19.

190. The Council of State Governments, Suggested State Legislation: Program for 1955, at 28-32.

191. *Id.* at 28.

192. *Id.* at 28-29, § 1(1).

193. *Id.* at 31, § 4(1)(A), (B).

194. *Id.* § 4(1).

suggested a fine not exceeding \$1,000 or imprisonment for not more than one year, or both.¹⁹⁵

The Council of State Governments proposed yet another model act in 1966. Recognizing the continued indiscriminate use of "pep pills" and "goof balls,"¹⁹⁶ the Council drafted the Depressant and Stimulant Drug Control Act which established similar controls for both amphetamines and barbiturates.¹⁹⁷ Recognizing that it was difficult to name each drug to be covered by the Act "and that new drugs of similar nature come on the market frequently,"¹⁹⁸ the drafters suggested certain criteria for a drug to be included under the Act's coverage and then empowered state boards of health to determine which specific drugs met the criteria.¹⁹⁹ Thus the term "drug" for purposes of the act was defined to mean

any drug containing any quantity of a substance which significantly affects or alters consciousness, the ability to think, critical judgment, motivation, mood, psychomotor coordination or sensory perception and is substantially involved in drug abuse or has substantial potential for such involvement.²⁰⁰

The Act continued existing prohibitions on illegal sale and distribution of depressants but made certain modifications in the prohibitions on possession of depressants. Where the 1955 Act had prohibited possession of these drugs except upon the prescription of a practitioner or upon his good faith delivery in the course of his professional practice,²⁰¹ the 1966 proposed statute made possession illegal when it was "other than for (1) the personal use of [a person] or a member of his household, or (2) for administration to an animal owned by him or a member of his household."²⁰² Thus, technically it could be possible for a person to possess depressants legally even though he himself had not received a prescription for them.

Although the proposed statutes of the Council of State Governments did influence the legislation of many states, there continued to be a wide diversity of state legislation regulating depressants during the 1960s.²⁰³ On one point, however, most state legislation tended to agree. Depressants were still treated in a totally different fashion from narcotic drugs,

195. *Id.* § 7.

196. The Council of State Governments, Suggested State Legislation 1966, at 202.

197. *Id.* at 202-04.

198. *Id.* at 202.

199. *Id.*

200. *Id.* at 203, § 2(a).

201. The Council of State Governments, Suggested State Legislation: Program for 1955, at 30, § 2(5).

202. The Council of State Governments, Suggested State Legislation 1966, at 203, § 3.

203. See Rosenthal, *Dangerous Drug Legislation in the United States: Recommendations and Comments*, 45 Texas L. Rev. 1037, 1063 (1967).

both in terms of the extent of their regulation and in terms of the penalties imposed for violation of the law. At the same time, however, there was a mounting body of opinion that the abuse of depressants, particularly barbiturates, was as serious a threat to a person's health as the abuse of heroin and other narcotic drugs.²⁰⁴ This growing scientific evidence was the catalyst for federal intervention into the problem of depressant abuse.

2. Federal Legislation to 1970

The first significant federal regulation of depressants did not occur until 1965,²⁰⁵ more than fifty years after the passage of the Harrison Act which had brought narcotic drugs under federal control.²⁰⁶ To be sure, there had been some minimal federal legislation prior to 1965 that could be considered as regulating the use of depressants. For example, the Federal Food, Drug and Cosmetic Act of 1938 prohibited the introduction and receipt in interstate commerce of any drug that was misbranded.²⁰⁷ A drug was considered misbranded if it was for use by man and contained any quantity of barbituric acid, chloral and paraldehyde and did not bear a label containing (a) the name, quantity and percentage of the substance and (b) the statement "Warning—May be habit forming."²⁰⁸ If these drugs were dispensed pursuant to a doctor's prescription, however, there was no requirement that the label or warning be affixed as long as the prescription was marked as nonrefillable, contained the name of the doctor, the date of the prescription and the name and place of business of the dispenser.²⁰⁹ Violations of the Act were punishable by imprisonment for up to one year, a fine of not more than \$1,000, or both.²¹⁰ In 1951, the Federal Food, Drug and Cosmetic Act was amended to require that all habit-forming drugs (barbiturates included) be dispensed only upon the prescription of a doctor.²¹¹ In 1962, the Act was further amended to require all manufacturers and processors of drugs (including manufacturers and processors of depressants) to

204. *Id.* at 1043-44.

205. Drug Abuse Control Amendments of 1965, Act of July 15, 1965, Pub. L. No. 89-74, 79 Stat. 226 (codified at 21 U.S.C. §§ 321, 331, 333, 334, 352n, 360, 360a, 372 (Supp. II 1973)).

206. Act of Dec. 17, 1914, ch. 1, §§ 1-12, 38 Stat. 785.

207. Act of June 25, 1938, ch. 675, § 301(b), 52 Stat. 1042 (codified at 21 U.S.C. § 331(b) (1970)).

208. *Id.*, § 502(d), 52 Stat. 1050 (codified at 21 U.S.C. § 352(d) (1970)).

209. *Id.* § 503(b), 52 Stat. 1052 (codified at 21 U.S.C. § 353 (1970)).

210. *Id.*, § 303(a), 52 Stat. 1043 (codified at 21 U.S.C. § 333(a) (1970)).

211. Act of Oct. 26, 1951, ch. 578, § 1, 65 Stat. 648 (codified at 21 U.S.C. § 353(b) (1970)).

register with the Food and Drug Administration.²¹² At this time, however, manufacturers or processors of drugs were not required specifically to include in their registration statements the fact that they produced depressants.

The 1965 amendments to the Federal Food, Drug and Cosmetic Act, however, were intended as a comprehensive plan to regulate the production and distribution of both stimulant and depressant drugs. With respect to depressants, the amendments prohibited the manufacture of all barbiturates and other drugs which the Secretary of Health, Education and Welfare designated as having a potential for abuse because of their depressant effect on the central nervous system.²¹³ Excepted from this prohibition were registered drug manufacturers who produced drugs for use in research, teaching, medicine or for chemical analysis.²¹⁴ If a drug manufacturer wished to produce depressants, the amendments mandated that his registration statement refer specifically to his manufacturing of depressants.²¹⁵ In addition to this registration requirement, manufacturers were also required (1) to prepare an initial inventory of each depressant on hand when the amendments took effect and (2) to maintain future records of all such manufacturing.²¹⁶

Sales of depressants were also regulated by the 1965 amendments. All sales were forbidden except by those who were legally in the chain of drug distribution and then only in the ordinary and authorized course of their business.²¹⁷ Wholesale distributors of these drugs were required to register, although retail pharmacies, clinics, hospitals or dispensing physicians were exempted from registration.²¹⁸ Of course, prescriptions were still required in order to dispense barbiturates legally. Possession of depressants was made a crime unless it was for the personal use of the possessor or a member of his household or for administration to an animal owned by him or by a member of his household.²¹⁹ In 1968, unauthorized possession of depressants—even for personal use—was criminalized.²²⁰

212. Drug Amendments of 1962, Act of Oct. 10, 1962, Pub. L. No. 87-781, § 302, 76 Stat. 794 (codified at 21 U.S.C. § 360 (1970)).

213. Drug Abuse Control Amendments of 1965, Act of July 15, 1965, Pub. L. No. 89-74, § 3(a), 79 Stat. 227.

214. *Id.* § 3(b).

215. *Id.* § 4, 79 Stat. 231.

216. *Id.* § 3(b), 79 Stat. 229.

217. *Id.* § 3(b), 79 Stat. 228-29.

218. *Id.* § 3(b), 79 Stat. 228.

219. *Id.* § 3(b), 79 Stat. 229; cf. text accompanying note 202 *supra*.

220. Act of Oct. 4, 1968, Pub. L. No. 90-639, § 2(2), 82 Stat. 1361, amending 21 U.S.C. § 360a (c) (Supp. III 1968).

It was Congress' hope that these amendments to the Federal Food, Drug and Cosmetic Act would serve to check the growing abuse of depressants and stimulants. But a close reading of the amendments shows that Congress did not in fact consider the abuse of depressants or stimulants to be as dangerous a threat to the nation as the abuse of narcotic drugs. For example, Congress did not impose production quotas on manufacturers of depressants as it had on manufacturers of narcotic drugs five years earlier.²²¹ The result of not imposing production quotas was that an unlimited amount of these drugs could be produced legitimately by registered manufacturers. Of course, the possibilities for illegal diversion increased in direct proportion to the amount of drugs manufactured. In addition, Congress did not impose the same harsh penalties on those who violated the 1965 amendments as it did on those who violated comparable narcotics legislation.²²² Even enforcement of the 1965 amendments was initially entrusted to the Food and Drug Administration in the Department of Health, Education and Welfare, rather than to the Bureau of Narcotics in the Treasury Department, the agency which had enforced narcotics legislation for many years.²²³ Although all drug enforcement, including depressant enforcement, ultimately was switched to the Department of Justice in 1968,²²⁴ its initial assignment to the Food and Drug Administration seems to indicate that at least in 1965 Congress viewed depressant abuse more as a national health problem than as a criminal law problem.

B. *Present Federal Legislation Regulating Depressants*

The passage of Title II of the Comprehensive Drug Abuse Prevention and Control Act of 1970²²⁵ ended the separate treatment of depressant and narcotic drugs. This enactment combined the regulation of all so-called controlled substances (narcotics, depressants and stimulants) in one statute.

221. Act of Apr. 22, 1960, Pub. L. No. 86-429, § 7, 74 Stat. 61.

222. Compare, e.g., 21 U.S.C. § 333(a) (1970) (\$1,000 and/or one-year imprisonment for first offenders) with 21 U.S.C. § 960(b)(1) (1970) (\$25,000 and/or 15-years imprisonment for first offenders).

223. Initially, enforcement of the Harrison Act (see note 206 *supra*) was entrusted to the Narcotics Division of the Prohibition Unit of the Internal Revenue Service in the Treasury Department. In 1927, this division became part of the Prohibition Bureau of the Treasury Department. Act of Mar. 3, 1927, ch. 348, § 1, 44 Stat. 1381. In 1930, the Federal Bureau of Narcotics in the Treasury Department was finally established. Act of June 14, 1930, ch. 488, § 1, 46 Stat. 585.

224. Reorganization Plan No. 1 of 1968, § 2(a) [printed at 28 U.S.C. § 509 (1970)].

225. Act of Oct. 27, 1970, Pub. L. No. 91-513 §§ 101-709, 84 Stat. 1242 (codified at 21 U.S.C. §§ 801-904 (1970)).

1. Definition of Controlled Substances

The 1970 Act established five schedules of controlled substances. Schedule I included substances such as heroin and LSD which have a high potential for abuse and no current medical value.²²⁶ While equally dangerous as the drugs in schedule I, schedule II substances (such as cocaine and methadone) have a currently accepted medical use.²²⁷ Initially, depressants were classified as either schedule III or schedule IV controlled substances.²²⁸ To be in schedule III, a drug was required to have a lesser potential for abuse than the drugs in the first two schedules, have a currently accepted medical use in treatment in the United States, and have a low physical or a high psychological dependence potential.²²⁹ The vast majority of the barbiturates (such as secobarbital and amobarbital) and glutethimide were placed in this schedule.²³⁰ Barbitol, chloral hydrate, meprobamate, phenobarbital and paraldehyde were classified as schedule IV drugs, which meant that they had a low abuse potential, a currently accepted medical use, and a rather limited physical or psychological dependence potential.²³¹ Valium and Librium were not classified as controlled substances although there were continuing attempts to bring them under federal regulation.²³²

Although the scientific data linking barbiturate abuse with physical dependence²³³ would seem to have dictated that most barbiturates be included in schedule II, they were not so classified. The significance of this misclassification becomes apparent when one considers that production quotas and other statutory drug control devices are triggered by a drug's inclusion in schedules I or II. Provision is made in the 1970 Act, however, for the transfer of drugs from one schedule to another. The Attorney General is given the power under the Act to add to or transfer between schedules a drug which fits the requirements of a particular schedule.²³⁴ Before initiating procedures to control a drug, however, the Attorney General must request from the Secretary of Health, Education and Welfare a scientific and medical evaluation of the drug and his recommendations as to whether the substance should be con-

226. 21 U.S.C. § 812(b)(1), (c) (1970) (schedule I).

227. Id. § 812(b)(2), (c) (schedule II).

228. Id. § 812(b)(3), (4), (c) (schedules III(b)(1), & IV(1), (3), (7), (9), (11)).

229. Id. § 812(b)(3).

230. Id. § 812(c) (schedule III(b)(1), (3)).

231. Id. § 812(b)(4), (c) (schedule IV (1), (3), (7), (9), (11)).

232. For example, in *Hoffman-La Roche, Inc. v. Kleindienst*, 478 F.2d 1 (3d Cir. 1973), the court held that the procedure used to classify Valium and Librium was illegal.

233. See discussion notes 108-19 *supra*.

234. 21 U.S.C. § 811 (1970).

trolled.²³⁵ If the Secretary of HEW recommends that a drug not be controlled, the Attorney General does not have the power to control it.

2. Significance of Scheduling

The placement of depressants in schedules III and IV rather than in schedule II was extremely significant. First, although all drug manufacturers must register annually with the Attorney General, manufacturers of schedule II drugs were additionally subjected to production quotas.²³⁶ Since no quotas were imposed on the manufacturers of schedules III and IV drugs, there was no control over the amount of these substances that could be manufactured in the United States every year. Second, schedule II drugs can be dispensed only pursuant to a nonrefillable written prescription, except in emergency situations when an oral prescription suffices.²³⁷ Prescriptions for schedules III and IV drugs on the other hand can be refilled as many as five times within a six-month period from the date of prescription²³⁸ upon either a written or oral (telephone) prescription.²³⁹ The less rigid prescription standards make illegal diversion somewhat easier for schedules III and IV drugs than for schedule II drugs. With a valid prescription, a barbiturate user could easily secure a large supply of drugs either for his personal use or for further distribution. Compounding this problem of misclassification is the practice of doctors in overprescribing large quantities of drugs for their patients' use.²⁴⁰ Third, the 1970 Act requires that all distributors of schedules I or II drugs may effect legal transfers only pursuant to a written order from the person to whom the drugs are to be delivered.²⁴¹ All such orders must be made on a special Justice Department form, one copy of which must be kept by each of the parties to the transaction.²⁴² These special order forms can only be procured by individuals registered or exempted from registration under the Act.²⁴³ This close scrutiny of each transfer involving schedules I and II drugs does not exist with respect to drugs in the other schedules.

A fourth significant result of placing depressants in schedules III and IV is that the import and export restrictions for non-narcotic substances, including barbiturates, which are in those schedules are much less strin-

235. *Id.* § 811(b).

236. *Id.* § 826(a), (b).

237. *Id.* § 829(a).

238. *Id.* § 829(b).

239. *Id.*

240. For a discussion of the over-prescribing of barbiturates see notes 153-54 *supra*.

241. 21 U.S.C. § 828(a) (1970).

242. *Id.* § 828(c) (1), (2).

243. *Id.* § 828(d) (1).

gent than for schedules I and II substances or even narcotic substances in schedules III and IV.²⁴⁴ Since there is some evidence that barbiturates have been legally exported to foreign countries only to be brought back into the United States,²⁴⁵ there may be need for the tighter restrictions that apply to schedules I and II drugs. Fifth, the penalties for violating the 1970 Act often vary depending on whether a schedule I or II, or a schedule III or IV drug is involved. For example, if a person knowingly and illegally manufactures heroin or cocaine, schedules I and II drugs respectively, he can be sentenced to a prison term of up to 15 years, a fine of up to \$25,000, or both.²⁴⁶ If the drug were a schedule III substance, the penalty drops to a prison term of up to 5 years, a fine of up to \$15,000, or both.²⁴⁷ In the case of a schedule IV substance, the penalties are lower still—a prison term of up to 3 years, a fine of up to \$10,000, or both.²⁴⁸

3. Recent Changes

As the depressant menace increased in scope and intensity during 1972 and 1973, there developed a body of opinion that certain depressants should be transferred to schedule II in order to effect closer control over their manufacture and distribution. The strategy of transferring amphetamines from schedule III to schedule II seemed to have had an important impact on decreasing their availability and consequently their widespread abuse.²⁴⁹ It was argued forcefully that the imposition of production quotas on barbiturates was necessary for any successful strategy to limit their abuse.²⁵⁰ The sudden appearance of methaqualone in the illegal market also resulted in a movement to classify this drug as a schedule II substance.²⁵¹ Up to this time, methaqualone had not been included in any schedule.

The response of the Justice Department came in late 1973. Three commonly abused barbiturates—amobarbital, secobarbital and pentobarbital—were transferred from schedule III to schedule II,²⁵² and methaqualone

244. Id. §§ 952-53.

245. See discussion at note 156 *supra* and accompanying text.

246. 21 U.S.C. § 841(b)(1)(A) (1970).

247. Id. § 841(b)(1)(B).

248. Id. § 841(b)(2).

249. The production of amphetamines was cut by 83 percent resulting in a "dying industry." Reports confirm that amphetamine abuse is on the decline as a consequence of rigid federal controls. See Ognibene, *Legal Drugs, Illegal Abuse—Amphetamines and Barbiturates*, 168 *New Republic*, Feb. 3, 1973, at 21-22.

250. But see *id.* at 22.

251. BNDD *Methaqualone Report* 70-76.

252. 38 *Fed. Reg.* 31310 (1973), amending 21 C.F.R. § 1308.12 (1970).

was also added as a schedule II substance.²⁵³ The Drug Enforcement Administration of the Justice Department lost no time in putting into effect the changes caused by the reclassification of the three barbiturates. Interim production quotas, for example, were to take effect on January 1, 1974.²⁵⁴ Moreover, the Drug Enforcement Administration ordered the monitoring of six other abused barbiturates—cyclobarbital, heptabarbital, probarbital, talbutal, vinobarbital and butabarbital.²⁵⁵ In addition to these changes with regard to certain barbiturates and methaqualone, the Drug Enforcement Administration has taken steps to classify Librium and Valium as controlled substances,²⁵⁶ although as of this writing these tranquilizers have not as yet been scheduled.

C. *Present State Legislation Regulating Depressants*

The passage of the Comprehensive Drug Abuse Prevention and Control Act of 1970 had a strong impact on the shape of state drug legislation. Traditionally the states had tended to model their narcotics legislation on existing federal narcotics legislation. Thus, the 1932 Uniform Narcotic Drug Act²⁵⁷ which had been adopted in most states complemented and was modelled on the earlier federal Harrison Act. When, in 1970, Congress placed the control of narcotic and non-narcotic drugs under one statute, the states began to follow suit. The Commissioners on Uniform State Laws provided the states with the Uniform Controlled Substances Act.²⁵⁸ The purpose of the new Uniform Act was to "provide an interlocking trellis of Federal and State law to enable government at all levels to control more effectively the drug abuse problem."²⁵⁹

Although many states have adopted the Uniform Act or some version of it,²⁶⁰ the remainder of this article will concentrate on the statutory scheme of but one state—New York. New York has been chosen because recent amendments to its drug laws have received nationwide attention and have aroused critical debate.

253. 38 Fed. Reg. 27519 (1973), amending 21 C.F.R. § 1308.12 (1970).

254. *Id.* at 31311.

255. *Id.* at 31310.

256. See N.Y. Times, Aug. 16, 1973, at 1, col. 5.

257. National Conf. of Comm'rs on Uniform State Laws, 1932 Handbook 324-38. The states which did not adopt the uniform act were California and Pennsylvania. National Conf. of Comm'rs on Uniform State Laws, 1970 Handbook 309.

258. National Conf. of Comm'rs on Uniform State Laws, 1970 Handbook 225-63.

259. *Id.* at 223.

260. See, e.g., Ill. Ann. Stat. ch. 56½, §§ 1100-603 (Smith-Hurd Supp. 1973); Nev. Rev. Stat. §§ 453.011-.361 (1973); Wash. Rev. Code Ann. § 69.50.101-606 (Spec. Pamphlet 1972). As of June 30, 1973, 32 states had adopted provisions substantially similar to the Uniform Controlled Substances Act. See National Conf. of Comm'rs on Uniform State Laws, 1972 Handbook 349.

1. Controlled Substances

Although the federal and state schedules of controlled substances are similar, there are certain important differences. While both the New York and the federal schedules include methaqualone in schedule II, New York still classifies all barbiturates in schedule III or schedule IV—even though amphetamines are placed in schedule II.²⁶¹ Neither set of schedules has classified Librium or Valium.

2. Significance of Scheduling

Although certain prescription requirements do hinge on whether a drug is categorized as a schedule II or a schedules III or IV substance,²⁶² the most significant differences between the New York schedules lie in the area of the criminal law. For the purpose of criminal penalties, New York divides depressants into two categories; namely, (1) "dangerous depressants" which include methaqualone, the barbiturates and glutethimide and (2) "depressants" which include chloral hydrate, paraldehyde and meprobamate.²⁶³

a. Possessory Offenses

Under New York law, if a person knowingly and unlawfully possesses any amount of a controlled substance (including dangerous depressants and depressants), he is guilty of criminal possession of a controlled substance in the seventh degree—a class A misdemeanor punishable by up to one year in jail.²⁶⁴ If the amount of dangerous depressants possessed exceeds ten ounces or the amount of depressants exceeds two pounds, the offense escalates to criminal possession of a controlled substance in the fifth degree—a class C felony, punishable by a possible fifteen-year sentence.²⁶⁵ A second conviction for fifth degree criminal possession automatically changes the offense to fourth degree criminal possession—a class B felony, punishable by a possible prison term of twenty-five years.²⁶⁶

b. Possession with Intent to Sell

Under the New York Penal Law, possession of any amount of a controlled substance (including dangerous depressants and depressants)

261. See N.Y. Pub. Health Law § 3306 (schedules II, III, IV) (McKinney Supp. 1973).

262. See id. §§ 3330-39.

263. N.Y. Penal Law § 220.00 (12), (13) (McKinney Supp. 1973).

264. Id. § 220.03; N.Y. Penal Law § 70.15 (McKinney 1967).

265. N.Y. Penal Law §§ 70.00(2)(c), 220.09(8), (9) (McKinney Supp. 1973).

266. Id. §§ 220.12, 70.00(2)(b).

with intent to sell is defined as sixth degree criminal possession—a class D felony, punishable by up to seven years in jail.²⁶⁷

c. Trafficking Offenses

The sale of any amount of a controlled substance is treated as sixth degree criminal sale—a class D felony under New York law, punishable by the same penalties as possession of a controlled substance with intent to sell.²⁶⁸ If the amount sold exceeds ten ounces of a dangerous depressant or two pounds of a depressant, the offense becomes fifth degree criminal sale, a class C felony.²⁶⁹ Just as in the case of criminal possession of these amounts, a second conviction of fifth degree criminal sale raises the offense to fourth degree criminal sale, a class B felony.²⁷⁰

What is particularly interesting in this penalty structure is the comparative treatment depressants and stimulants receive. No matter how large an amount of depressants a first offender sells, he cannot be convicted of anything more than a class C felony. This is not the case with stimulants. For example, a person who is convicted of selling five grams or more of a stimulant is guilty of second degree criminal sale—a class A-II felony, punishable by possible life imprisonment as the maximum sentence.²⁷¹ From this comparison, it appears that the New York Legislature seems to consider stimulants to be a greater criminal threat than depressants. While stimulants are obviously dangerous and should be rigidly controlled, they do not lead to physical dependence and possible death from overdose, as can most depressants.²⁷² The specter of widespread dependence on barbiturates or other depressants should dictate penalties at least as severe for their abuse as for stimulant abuse. The separate treatment of stimulants and depressants under the New York Penal Law is, therefore, somewhat inexplicable in the light of existing medical data about the effects of each category of drugs.

III. CONCLUSION

It should be obvious from Part I of this article that depressants are potentially among the most dangerous of all drugs. Somewhat paradoxically, however, the law has tended to treat depressants as less dangerous than many other classes of drugs, a fact demonstrated in Part II of

267. Id. §§ 220.06, 70.00(2)(d).

268. Id. § 220.31.

269. Id. § 220.34(1)(b).

270. Id. § 220.37.

271. Id. § 220.41(3). See id. §§ 70.00(2)(a), 3(a)(ii) for the minimum sentence.

272. Reports of death from an overdose of amphetamines are rare. Ognibene, *Legal Drugs, Illegal Abuse—Amphetamines and Barbiturates*, 168 *New Republic*, Feb. 3, 1973, at 22. That Amphetamines do not cause physical dependence see Lingeman, *supra* note 21, at 6.

this article. Two principal reasons may account for this uncharacteristic legal response:

1. Public Acceptance

Unlike narcotic drugs which have become popularly associated with criminal elements in society, depressants have enjoyed wide popularity among groups at every level of the socio-economic ladder. Consequently, no stigma or community disapproval has attached to their use. Mirroring this public acceptance, legislatures have dealt with depressant abuse in a relatively mild fashion, trying to contain the problem through the use of distributive controls rather than through the use of harsh criminal sanctions. This rather *laissez faire* attitude began to change during the 1960s and is slowly being replaced by a tough law enforcement approach reminiscent of that which has characterized narcotics control since the late 1800s.

2. Ignorance of Effects

Scientific evidence of the dangers of depressants was rather late in coming. Not until the 1950s was it convincingly proved that depressants lead to physical dependence if taken for too long and in too large doses. In this regard, however, legislatures treated depressants very differently from other drugs, such as cocaine and marihuana. Even when there was little convincing scientific data proving cocaine and marihuana to be dangerous, legislatures of many states and indeed Congress itself had no qualms about outlawing their possession and sale. Whereas, in the case of depressants, it was not until the evidence was conclusive that legislatures finally moved to impose controls on their distribution.

Even when a tough legislative response to depressants began to take shape in the 1960s, it was still fraught with anomalies. For example, the Department of Justice has placed only three classes of barbiturates in schedule II of the Controlled Substance Act, leaving most barbiturates in schedules III and IV with little or no effective production or distribution controls. The inevitable result of such halfhearted patchwork regulation will be that either the market for the less tightly controlled schedule III barbiturates will increase or a clandestine production of schedule II barbiturates will begin in earnest. If clandestine manufacture of barbiturates becomes a reality, new dimensions will be added to an already difficult drug enforcement problem. Once created, illegal manufacturing and distribution systems are hard to dismantle.

Similarly, while slow in placing meaningful controls over barbiturates, Congress and the states have been even slower as regards the regulation of certain minor tranquilizers. As evidence of their abuse potential grows,

tranquilizers such as Librium and Valium have not yet appeared in any schedule of controlled substances. The legislative reluctance to add Librium and Valium to the schedules may stem in part from the activities of the drug industry lobby. The more controls placed on a drug, the more difficult it is not only to expand the size of an existing market but also to maintain it at its present size.

Even assuming that Congress and state legislatures clear up certain of these legislative anomalies, the successful containment of depressant abuse will be a difficult task. Of course the experience fighting the amphetamine epidemic of the 1960s is instructive. When transferred from schedule III to schedule II, amphetamines became scarce in the illegal market. It must be remembered, however, that there are marked differences between amphetamines and barbiturates. Unlike amphetamines which have only limited medical uses, barbiturates have a wide variety of medical uses. As one commentator indicated: if the legitimate need for amphetamines can be counted in the thousands of doses, the need for barbiturates must be counted in the billions.²⁷³ Since so large an amount of barbiturates must be produced to meet national medical needs, the threat of continued illegal diversion is greater than in the case of amphetamines. Consequently, the imposition of production quotas will probably not reduce the availability of barbiturates on the black market to the extent that comparable quotas reduced the availability of black market amphetamines. Even if they did, however, clandestine production of barbiturates would undoubtedly increase to fill the void created by reduced legal production.

The difficulty of curtailing depressant abuse becomes more apparent when one realizes that public opinion is more tolerant of the use of sedatives than of the use of most other drugs in the chemical smörgåsbord. As has been seen recently with marihuana, it is difficult to prohibit the illegal use of a substance that a large portion of society has come to regard as safe and beneficial. Thus, while tight governmental control over the distribution of depressants is needed in any successful strategy to curtail their abuse, it alone will not succeed. Gradually the public must be made aware of the dangers of depressants; gradually doctors who overprescribe these drugs for their patients must come to realize the dangers inherent in such a practice; gradually with decreased availability and increased drug education, the menace of depressant abuse may begin to subside.

273. Ognibene, *Legal Drugs, Illegal Abuse—Amphetamines and Barbiturates*, 168 *New Republic*, Feb. 3, 1973, at 22.