AN ANNOTATED BIBLIOGRAPHY FOR GENERAL INTERNISTS

Substance Abuse

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THIS BIBLIOGRAPHY is intended for general internists who practice and teach medicine. It includes references to journal articles, books, and book chapters that address a broad range of topics related to substance abuse. Some of the citations were identified by substance abuse educators from various academic medical centers and by the authors during a search of internal medicine journals for articles specifically related to alcohol or drug abuse for the years 1980–1986. These activities were part of a national project on the assessment of substance abuse education in general internal medicine conducted by the Society for General Internal Medicine's Task Force on Alcoholism and Substance Abuse. Other, more recent, citations were identified by a computer search. Citations that address topics relevant to general internists and that appear in journals accessible to and generally respected by internists were specifically chosen. Articles relating to the primary disorders associated with alcohol and other drug abuse are emphasized, although important references on medical complications are included.

ALCOHOL ABUSE/DEPENDENCE

1. Barnes HN, Aronson M, Delbanco TL, eds. Alcoholism. A guide for the primary care physician. New York: Springer-Verlag, in press.

   A practical primary care approach to the early detection and care of the alcoholic, with emphasis on outpatient management. Sections on primary care of the hospitalized alcoholic, management of withdrawal, medical complications, and the problems of special populations are included.

2. Criteria Committee, National Council on Alcoholism. Criteria for the diagnosis of alcoholism. Ann Intern Med 1972;77:249-58

   Guidelines for the proper diagnosis and evaluation of the early and late stages of alcoholism.

3. Diagnostic and Statistical Manual of Mental Disorders. 3rd ed. Alcohol abuse and alcohol dependency. Washington, DC: American Psychiatric Association, 1980;70

   A quantitative definition of the pathologic patterns of alcohol use with or without evidence of tolerance to and withdrawal from alcohol.

4. West LJ, moderator. Alcoholism. Ann Intern Med 1984; 100:405-16

   A review of the epidemiology of alcoholism, medical complications, and important treatment issues.

5. Whitfield CL, Davis JE, Barker LR. Alcoholism. In: Barker LR, Burton JR, Zieve PD, eds. Principles of ambulatory medicine. 2nd ed. Baltimore: Williams and Wilkins, 1986;245-77

   A comprehensive review of the manifestations of alcoholism and principles of diagnosis and treatment of the primary disorder as well as its complications.

Epidemiology and Natural History

1. Holder HD, Blose JD. Alcohol treatment and total health care utilization and costs. JAMA 1986;125:1456-60

   Health care utilization and costs by alcoholics and their families rose in the six months prior to treatment, then declined to the lowest pretreatment levels after several years of follow-up.

2. Schuckit MA. Genetics and the risk for alcoholism. JAMA 1985;254:2614-7

   A review of the evidence supporting the importance of genetic factors as a predisposition for alcoholism and of investigations on how genetic risk might be mediated in populations at high risk for alcoholism.

3. Vaillant GE. The natural history of alcoholism. Cambridge, MA: Harvard University Press, 1983

   A report on the outcome of 204 alcoholic males from a college sample and 456 alcoholic males from the inner city followed prospectively over 40 years. A chapter on practical suggestions for treatment is included.

4. Vaillant GE, Clark W, Cyrus C, et al. Prospective study of alcoholism treatment. Eight-year follow-up. Am J Med 1983;75:455-63

   A hundred patients, with severe, late-stage alcoholism were followed over an eight-year period from the time of a detoxification unit admission. Twenty-five per cent achieved abstinence for three years or more, 29% died, and 26% experienced ongoing severe alcoholism.

Screening and Recognition

1. Bush B, Shaw S, Cleary P, Delbanco TL, Aronson MD. Screening for alcohol abuse using the CAGE questionnaire. Am J Med 1987;82:231-5

   The CAGE questionnaire had a positive predictive value of 62–100% (depending on the number of affirmative responses) compared with a positive predictive value of 30–36% for abnormal liver function tests and an elevated MCV in 521 medical and orthopedic patients screened for alcoholism. Alcoholism was present in 20% of patients; treatment was offered to only 24% of alcoholics.

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2. Clark WD. Alcoholism: blocks to diagnosis and treatment. Am J Med 1981;71:275-86

Physicians' lack of knowledge about the diagnosis and management of alcoholism, pejorative attitudes, and inability to communicate effectively or to identify the pathophysiologic abnormality responsible for alcoholism are the major blocks to appropriate management. Basic principles of diagnosis and treatment are presented.

3. Skinner HA, Holt S, Israel Y. Early identification of alcohol abuse: 1. Critical issues and psychosocial indicators for a composite index. 2. Clinical and laboratory indicators. Can Med Assoc J 1981; 124:1141-52, 1279-94

A two-part review of the important risk factors for alcohol abuse and the psychosocial, clinical, and laboratory indicators of alcohol abuse. There is a relevant discussion about the predictive value of some of the diagnostic criteria and tests that are discussed.

4. Skinner HA, Holt S, Sheu WJ, Israel Y. Clinical versus laboratory detection of alcohol abuse: the alcohol clinical index. Br Med J 1986;292:1703-8

A probability of alcohol abuse exceeding 90% was found using this index when four or more of 17 clinical signs or four or more of 13 medical history items were positive.

Treatment

1. Bean MH. Alcoholics Anonymous. Principles and methods. Psychiatric Annals 1975;5(2):5-13

A review of the history of A.A. and how it works. Useful for the physician who has not attended meetings and wants to refer patients to A.A.

2. Bean MH. Denial and the psychological complications of alcoholism. In: Bean MH, Zinberg NE, eds. Dynamic approach to the understanding and treatment of alcoholism. New York: The Free Press, 1981;55-96

A very readable account of the clinical presentation of varying stages of alcoholism and current understanding of denial. Practical approaches to patients who deny their alcoholism are offered.

3. Fuller RF, Branchey L, Brightwell DR, et al. Disulfiram treatment of alcoholism. A Veterans Administration cooperative study. JAMA 1986;256:1449-55

In a randomized trial of disulfiram treatment of alcoholism, patients treated with 250 mg disulfiram/day achieved abstinence at one year at a rate similar to those of patients treated with 1 mg disulfiram and no disulfiram. Patients in the 250 mg disulfiram treatment group reported significantly fewer drinking days than those in the other treatment groups.

4. Helzer JE, Robins LN, Taylor JR, et al. The extent of long-term moderate drinking among alcoholics discharged from medical and psychiatric treatment facilities. N Engl J Med 1985;312:1678-82

Eighty-three per cent of 1289 alcoholic patients treated in four different medical facilities were followed by personal interview and/or record review five to seven years after their initial presentations. Overall mortality was high and, among the survivors, 66.5% continued to drink in an alcoholic fashion, 15% were abstainers, and only 1.6% were moderate drinkers.

5. Holder HD. Alcoholism treatment and potential health care cost saving. Med Care 1987;25:52-71

A review of alcoholism treatment concludes that treatment of alcoholism results in sustained reductions in total health care utilization and costs.

6. Kwentus J, Major LF. Disulfiram in the treatment of alcoholism. A review. J Stud Alcohol 1979;40:428-46

A good review of the pharmacology and the toxicology of disulfiram with a brief section on strategies for administration.

Medical Complications

1. Cahill GF Jr. Nephrology forum: ketosis. Kidney Int 1982; 20:416-25

A diabetic patient suffering from starvation and alcohol abuse is the focus of a discussion of acid–base abnormalities in these conditions.

2. Clarren SK, Smith DW. The fetal alcohol syndrome. N Engl J Med 1978;298:1063-7

The clinical features of the syndrome are described.

3. Eckardt MJ, Harford TC, Kaebler CT, et al. Health hazards associated with alcohol consumption. JAMA 1981;246:648-66

An excellent summary of alcohol's effects on the major organ systems, including early symptoms and life-threatening complications.

4. Geokas MC, ed. Symposium on ethyl alcohol and disease. Med Clin North Am 1984;68:1-255

This well-referenced symposium provides succinct reviews of the effects of excess alcohol consumption on the major organ systems.

5. Green HR. Alcohol, nutrition and malabsorption. Clin Gastroenterol 1983;12:563-75

A summary of the mechanism of malabsorption in the alcoholic, including effects on intestinal morphology and function. The clinical impact on nutrition is discussed.

6. Herbert V, ed. Hematologic complications of alcoholism. Semin Hematol 1980;17:83-176

A symposium discussing all aspects of the effects of alcohol on the hematopoietic system. The introduction provides a succinct overview.

7. Klatsky AL, Friedman GD, Siegelaub AB, Gerard MJ. Alcohol consumption and blood pressure: Kaiser Permanente multiphasic health examination data. N Engl J Med 1977;296:1194-2000

Daily consumption of three or four or more drinks was associated with significantly increased blood pressure.

8. Klatsky AL, Friedman GD, Siegelaub AB. Alcohol and mortality. A ten-year Kaiser-Permanente experience. Ann Intern Med 1981; 95:139-45

In a case control study, the ten-year mortality among persons drinking six or more drinks/day was twice that of persons drinking two or fewer. Cancer, cirrhosis, accidents, and respiratory illness contributed to the excess mortality. Non-drinkers had increased mortality, compared with light drinkers.

9. Klatsky AL, Armstrong MA, Friedman GD. Relations of alcoholic beverage use to subsequent coronary artery disease hospitalization. Am J Cardiol 1986;58:710-4

Former drinkers and infrequent drinkers had coronary artery disease risks similar to that of lifelong abstainers. A significantly lower risk was found at higher drinking levels, although most of the apparent protection was present with a daily intake of one to two drinks per day.

10. Lieber CS, ed. Medical disorders of alcoholism. Philadelphia: W. B. Saunders, 1982 (Vol. 22, Series of major problems in internal medicine)

A thorough review of alcohol-related problems. Emphasizes biochemical and cellular changes.

11. Lishman WA. Cerebral disorders in alcoholism. Syndromes of impairment. Brain 1981;104:1-20

An excellent review of Wernicke-Korsafoff syndrome, alcoholic dementia and psychological impairment in apparently intact alcoholics.

12. Mills JL, Graubard BI, Harley EE, et al. Maternal alcohol consumption and birth weight. How much drinking during pregnancy is safe? JAMA 1984;252:1875-9

A prospective study of 31,000 pregnancies notes that increasing alcohol intake from less than one drink per day to three to five drinks

per day is associated with increased risk for growth-retarded infants after controlling for maternal age, race, education, and smoking.

13. Puddey IB, Beilin LJ, Vandongen R. Regular alcohol use raises blood pressure in treated hypertensive subjects. A randomized controlled trial. Lancet 1987;1:647-51

    Reduction in alcohol consumption contributed to improved blood pressure control in men with treated hypertension.

14. Regan TJ, Haider B. Ethanol abuse and heart disease. Circulation 1981;64:14-9

    This well-referenced clinical summary covers the diverse manifestations of alcohol-related disease.

15. Reuler JB, Girard DE, Cooney TG. Wernicke's encephalopathy. N Engl J Med 1985;312:1035-9

    An excellent review of alcoholic and other causes of Wernicke's encephalopathy. Diagnosis and treatment are outlined.

16. Schatzkin A, Jones DY, Hoover RN, et al. Alcohol and breast cancer in the epidemiologic follow-up study of the First National Health and Nutrition Examination Survey. N Engl J Med 1987;316:1169-73

    In this study of a cohort of women followed over ten years, moderate alcohol consumption is associated with an elevation in the risk of breast cancer of 50 to 100 per cent.

17. Schenker S. Alcoholic liver disease: evaluation of natural history and prognostic factors. Hepatology 1984;4:365-435

    A good review of the spectrum of alcoholic liver disease, with discussion of the clinical findings that predict prognosis.

18. Van Thiel DH, Gaveler JS, Sanghvi A. Recovery of sexual function in abstinent alcoholic men. Gastroenterology 1982;84:677-82

    Twenty-five per cent of abstinent alcoholic men had return of sexual function, usually in the first year of abstinence.

19. Willet WC, Stampfer MJ, Colditz GA, et al. Moderate alcohol consumption and the risk of breast cancer. N Engl J Med 1987;316:1174-80

    In this cohort of women followed over four years, consumption of an average of nine drinks/week by women without risk factors for breast cancer was associated with a relative risk of breast cancer of 2.5

Alcohol Withdrawal

1. Brown CG. The alcohol withdrawal syndrome. Ann Emerg Med 1982;11:276-80

   A review of the pathophysiology, clinical presentation, and treatment of alcohol withdrawal syndromes.

2. Krauss ML, Gottlieb LD, Horwitz RI, Anscher M. Randomized clinical trial of atenolol in patients with alcohol withdrawal. N Engl J Med 1985;313:905-9

   In this trial of atenolol or placebo in addition to short-acting benzodiazepine treatment of alcohol withdrawal, patients treated with atenolol had a shorter length of hospital stay and required lower doses of benzodiazepines.

3. Sampliner R, Iber FL. Diphenylhydantoin control of alcohol withdrawal seizures. JAMA 1974;230:1430-2

   Three per cent of patients with a past history of alcohol withdrawal seizures had seizures when treated prophylactically with chlordiazepoxide and diphenylhydantoin, compared with 17% of a similar group of patients treated with chlordiazepoxide alone.

4. Thompson WL, Johnson AD, Maddrey WL, and the Osler Medical Housestaff. Diazepam and paraldehyde for treatment of severe delirium tremens. A randomized controlled trial. Ann Intern Med 1975;82:175-80

   This classic randomized trial of intravenous diazepam versus paraldehyde for alcohol withdrawal demonstrates the effectiveness and safety of diazepam.

5. Thompson WL. Management of alcohol withdrawal syndromes. Arch Intern Med 1978;138:278-83

   This well-written review provides useful guidelines for evaluation and pharmacologic treatment of alcohol withdrawal states.

Pharmacology

1. Ritchie JM. The aliphatic alcohols. In: Gilman AG, Goodman LS, Gilman A, eds. The pharmacologic basis of therapeutics. 7th ed. New York: Macmillan, 1985;372-86

   Concise review of the pharmacologic effects of ethyl alcohol. Includes a brief section on disulfiram.

2. Seixas FA. Alcohol and its drug interactions. Ann Intern Med 1975;83:86-92

   This review calls attention to the interactions of alcohol with commonly used drugs, including antibiotics, anticoagulants, antihistamines, digitalis, antidepressants, and other psychoactive drugs.

Special Populations

1. Blume SB. Women and alcohol. A review. JAMA 1986; 256:1467-70

   Reviews important physiologic, psychological and clinical factors important in considering alcoholism among women.

2. Hartford JT, Samorajski T. Alcoholism in the geriatric population. J Am Geriatr Soc 1982;30:18-24

   This review examines pharmacologic and biologic effects of alcohol use and abuse in the elderly, with emphasis on central nervous system changes.

3. Mishara BL, Kastenbaum R. Alcohol and old age. New York: Green and Stratton, 1980; 127-62

   This text reviews alcohol use among the elderly, including beneficial effects. The discussion includes physiologic effects of alcohol, problems associated with use, and treatment approaches.

DRUG ABUSE/DEPENDENCE

1. Health and Public Policy Committee, American College of Physicians. Chemical dependence. Ann Intern Med 1985;102:405-8

   An important position paper which acknowledges chemical dependence as a medical illness and stresses the physician's responsibility to provide patient education, prescribe potentially abused drugs appropriately, and diagnose and treat patients with chemical dependence.

2. Jaffe JE. Drug addiction and drug abuse. In: Gilman AG, Goodman LS, Gilman A, eds. The pharmacologic basis of therapeutics. 7th ed. New York: Macmillan, 1985;532-81

   The best available discussion of the principles of addiction, the clinical characteristics of each class of abused drugs, and a brief review of the treatment of withdrawal.

3. D'Lugoff B, Hawthorne J. Use and abuse of illicit drugs and substances. In: Barker LR, Burton JR, Zieve PD, eds. Principles of ambulatory medicine. 2nd ed. Baltimore: Williams and Wilkins, 1986;278-90

   A comprehensive review of the physician's role in diagnosis and referral and of the clinical syndromes associated with illicit drug use and abuse.

Epidemiology and Natural History

1. Coulehan JL, Zettler-Segal M, Block M, McClelland M, Schulberg HC. Recognition of alcoholism and substance abuse in primary care patients. Arch Intern Med 1987;147:349-52

   Patients new to three academic primary care practices were screened for psychiatric diagnoses using the Diagnostic Interview Schedule. Fourteen per cent of patients had alcohol or other drug abuse problems. Forty per cent were recognized by their physicians. Patients who were not recognized were often depressed.

2. Hasday JD, Karch FE. Benzodiazepine prescribing in a family medicine center. JAMA 1981;246:1321-5

Over a two-year period, diazepam was the most frequently prescribed medication. Most of the recipients of benzodiazepines (72%) were women. Anxiety neurosis, hysterical neurosis, vertebral column disorder, and situational adjustment disorders were the most commonly associated diagnoses.

3. Kamerow DB, Pincus HA, Macdonald DI. Alcohol abuse, other drug abuse, and mental disorders in medical practice. Prevalence, costs, recognition and treatment. JAMA 1986;255:2054-7

Studies show that 19% of the American population have one of these disorders. Many are seen only by primary care physicians who do not recognize or treat the underlying disorder.

4. Kandel DB, Logan JA. Patterns of drug use from adolescence to young adulthood: I. Periods of risk for initiation, continued use, and discontinuation. Am J Public Health 1984;74:660-6

Structured interviews of adolescents performed between 1971 and 1981 revealed that the period of highest risk for initiation of legal and illicit drugs peaks at age 18. Rates of initiation of prescribed psychoactive drugs increase after age 18 and persist through the mid-20s, at a time when use of legal and illicit drugs is declining. Use of all drugs is more common among males than females, except for the use of prescribed psychoactive drugs.

5. Nicholi AM. The nontherapeutic use of psychoactive drugs. A modern epidemic. N Engl J Med 1983;308:925-33

This review traces the more than 20-fold increase in use of psychoactive drugs during the 1960s and 1970s and describes their continued use through the 1980s. Factors accounting for the increase in use and adverse consequences are discussed.

6. Swanson DW, Weddige RL, Morse RM. Abuse of prescription drugs. Mayo Clin Proc 1973;48:359-67

In 225 patients hospitalized because of prescription drug abuse, analgesics and sedatives were the most commonly used drugs. Drugs were prescribed by physicians for a variety of medical disorders.

7. Tennant FS, Day CM, Ungerleider JT. Screening for drug and alcohol abuse in a general medical population. JAMA 1979;242:533-5

One hundred fifty consecutive first-visit medical patients were screened by questionnaire, history, and physical examination for alcohol and/or drug abuse. Twenty (13%) used psychoactive drugs or had an alcohol problem. Seventy per cent of the drug and alcohol abusers entered treatment.

Prevention

1. Council on Scientific Affairs. Drug abuse related to presecribing practices. JAMA 1982;247:864-6

A series of recommendations by the AMA to curtail drug prescribing behavior that may lead to abuse.

Screening

1. Council on Scientific Affairs. American Medical Association. Scientific issues in drug testing. JAMA 1987;257:3110-4

Reviews the issues to consider in developing a drug testing program, testing techniques, and pitfalls in interpreting results.

2. Gibb K. Serum alcohol levels, toxicology screens, and use of the breath alcohol analyzer. Ann Emerg Med 1986;15:349-53

Reviews the rationale for ordering serum alcohol levels and toxicology screens in the emergency room setting.

3. Hanson HJ, Candill SP, Boone DJ. Crisis in drug testing. Results of a CDC blind study. JAMA 1985;253:2382-7

Blind testing of 13 laboratories under contract to 262 methadone programs revealed false-negative rates of 0 to 100% for all major drug classes except methadone. This report raises questions about the reliability of urine screening in drug treatment programs.

4. Rosenstock L, Cullen MR. Routine urine testing for evidence of drug abuse in workers: the scientific, ethical and legal reasons not to do it. J Gen Intern Med 1987;2:135-7

Reviews the scientific, ethical, and medicolegal dilemmas associated with urine testing for drugs of abuse.

Cocaine

1. Criegler LL, Mark H. Medical complications of cocaine abuse. N Engl J Med 1986;315:1495-500

A review of the pharmacology of cocaine and a description of the cardiovascular, cerebrovascular and obstetric complications of its use.

2. Gay GR. Clinical management of acute and chronic cocaine poisoning. Ann Emerg Med 1982;11:562-72

A review of the pharmacology of cocaine and the clinical manifestations of acute and chronic use. Protocols for treatment of cocaine-related syndromes are provided.

3. Gold MS, Verebey K. The psychopharmacology of cocaine. Psychiat Ann 1984;14:714-23

A useful article linking the clinical effects of cocaine use with its pharmacologic effects on the central nervous system.

4. Isner JM, Estes NAM, Thompson PD, et al. Acute cardiac events temporally related to cocaine abuse. N Engl J Med 1986;315:1438-43

Cocaine use in individuals without underlying heart disease may cause myocardial infarction and sudden death. These complications are associated with intranasal administration of cocaine and are not limited to massive doses.

Marijuana

1. Council on Scientific Affairs. Marijuana. Its health hazards and therapeutic potentials. JAMA 1981;246:1823-7

This report reviews data supporting conclusions that marijuana has adverse effects on the respiratory, reproductive, immune, and central nervous systems and describes potential therapeutic use of tetrahydrocannabinol.

Opiates

1. Charney DS, Riordan CE, Kleber HD, et al. Clonidine and naltrexone. A safe, effective, and rapid treatment of abrupt withdrawal from methadone therapy. Arch Gen Psychiat 1982;39:1327-32

In a controlled inpatient setting, clonidine blocked withdrawal symptoms induced by naltrexone in patients chronically treated with methadone.

2. Fultz JM, Senay EC. Guidelines for the management of hospitalized narcotic addicts. Ann Intern Med 1975;82:815-8

Reviews the appropriate evaluation and management of patients maintained on methadone, those claiming to be addicted to heroin, and addicted patients requiring analgesia in the acute hospital setting.

3. Gold MS, Pottash AC, Sweeney DR, Kleber HD. Opiate withdrawal using clonidine. A safe, effective and rapid nonopiate treatment. JAMA 1980;243:343-6

Clonidine in a dose of 6 μg/kg was effective in treating opiate withdrawal symptoms, whereas placebo was not. Clonidine administration in a dose of 17μg/kg/day in divided doses allowed for discontinuation of methadone without significant opiate withdrawal symptoms.

4. McGlothin WH, Auglin D. Shutting off methadone: costs and benefits. Arch Gen Psychiat 1981;38:885-92

A two-year follow-up of patients left without treatment after the closure of a methadone treatment clinic demonstrated that 54% of the terminated clients returned to heroin addiction, compared with 30% of control patients who remained in treatment. Increased rates of arrests and incarceration lead to increased costs in the group of

terminated clients compared with the total overall costs in the group of control, treated patients.

5. Musto DF, Ramos MR. Notes on American medical history. A follow-up study of the New Haven morphine maintenance clinic of 1920. N Engl J Med 1981;304:1071-7

   A historical review of attempts at narcotic regulation by federal and local governments. Follow-up of 91 participants in a morphine maintenance clinic demonstrated higher mortality rates compared with the general population and higher rates of alcoholism, suicide, infectious diseases, and accidents, in spite of apparent recovery from narcotic addiction.

6. Newman RG. Methadone treatment. Defining and evaluating success. N Engl J Med 1987;317:447-50

   A thoughtful discussion of the medical and societal problems associated with methadone maintenance as a clinical treatment for heroin addiction.

Sedative Hypnotics

1. Busto U, Sellers EM, Naranjo CA, Cappell H, Sanchez-Craig M, Sykora K. Withdrawal reaction after long-term therapeutic use of benzodiazepines. N Engl J Med 1986;315:854-9

   In a randomized trial of diazepam versus placebo treatment of patients desiring discontinuation of chronic benzodiazepine use, the placebo-treated group experienced withdrawal symptoms at a higher rate than diazepam-treated patients. Symptoms of withdrawal overlapped with those consistent with anxiety but, in addition, included tinnitus, involuntary movements, paresthesias, perceptual changes, and confusion.

2. Connell LJ, Berlin RM. Withdrawal after substitution of a short-acting for a long-acting benzodiazepine. JAMA 1983;250:2838-40

   Substitution of short-acting benzodiazepines given in a single dose for long-acting benzodiazepine resulted in withdrawal symptoms of several weeks' duration. Advantages and disadvantages of prescribing short-acting benzodiazepines are discussed.

3. Preskorn SH, Schwin RL, McKnelly WV. Analgesic abuse and the barbiturate abstinence syndrome. JAMA 1980;244:369-70

   Patients with acute organic brain syndrome secondary to abrupt withdrawal of butalbital in combination with other analgesics are described. Guidelines for treatment of withdrawal and detoxification from barbiturates are provided.

4. Ray WA, Blazer DG, Schaffner W, Federspiel CF, Fink R. Reducing long-term diazepam prescribing in office practice. A controlled trial of educational visits. JAMA 1986;256:2536-9

   A review of appropriate prescribing and adverse effects of diazepam. A tapering schedule for withdrawal is provided. An educational program which included physician visits to physicians known to be frequent diazepam prescribers reduce the long-term use of diazepam as compared with a control group.

5. Rickels K, Case G, Downing RW, Winokur A. Long-term diazepam therapy and clinical outcome. JAMA 1983;250:767-71

   In a randomized trial of diazepam treatment in 180 chronically anxious patients, tolerance to the anxiolytic effect of diazepam did not develop in 22 weeks, 50% of patients did not experience return of symptoms of anxiety when diazepam was stopped, and withdrawal symptoms occurred in 3–18% of patients, depending on length of treatment with diazepam.

6. Solomon F, White CC, Parron DL, Mendelson WB. Sleeping pills, insomnia and medical practice. N Engl J Med 1979;300:803-8

   A review of the data supporting the lack of efficacy of barbiturates and benzodiazepines in relieving insomnia when taken on a nightly basis for longer than one to two weeks. The problems associated with long-term use of these drugs, including suicide attempts, interactions between alcohol and other drugs, and residual effects on daytime performance, are also described.

Treatment

1. McLellan AT, Luborsky L, O'Brien CP, Woody GE, Druley KA. Is treatment of substance abuse effective? JAMA 1982;247:1423-8

   This study reports on the effectiveness of six different treatment programs for consecutively hospitalized alcoholics and drug abusers with severe medical and social problems to two VA medical centers. Favorable treatment outcomes as measured by days of alcohol/drug use, employment status, legal problems, and family problems were demonstrated.

2. Stitzer ML, Bigelow GE, McGaul ME. Behavior therapy in drug abuse treatment. Review and evaluation. Rockville, MD: National Institute on Drug Abuse, 1985; DHHS publication no. ADM 85-1401; 31-50

   A description of a behavioral model of drug abuse and several behavioral strategies for treatment.

Intoxication, Overdose, Withdrawal

1. Khantzian EJ, McKenna GJ. Acute toxic and withdrawal reactions associated with drug use and abuse. Ann Intern Med 1979;90:361-72

   The diagnosis and treatment of intoxication, overdose, and withdrawal syndromes related to the use of opiates, sedative hypnotics, and stimulants are reviewed.

Special Populations

1. Morant JC. Use and abuse of psychoactive drugs in the elderly. Can Med Assoc J 1983;129:245-8

   Review of the pharmacologic effects in the elderly of commonly prescribed psychoactive medications. Does not address behavioral aspects of drug abuse.

2. Ray WA, Griffin MR, Schaffner W, Baugh DK, Melton LJ. Psychotropic drug use and the risk of hip fracture. N Engl J Med 1987;316:363-9

   Elderly Medicaid patients prescribed long-acting hypnotic-anxiolytics, tricyclic antidepressants, and antipsychotics had a significantly increased rate of hip fracture compared with matched controls who were not prescribed these medications. An increased rate of hip fracture was not identified with short-acting hypnotic–anxiolytics. An analysis for possible confounding of results by dementia did not alter the results.

3. Wells LA. Chemical dependence among adolescents. Mayo Clin Proc 1985;60:557-61

   This review distinguishes between experimentation, drug abuse, and drug dependence in adolescents and provides guidelines for counseling and treatment.

Medical Complications

1. DesJarlais DC, Friedman SR, Hopkins W. Risk reduction for the acquired immunodeficiency syndrome among intravenous drug-users. Ann Intern Med 1985;103:755-9

   This report discusses characteristics of AIDS that hinder educational efforts at risk reduction and reviews efforts at risk reduction among intravenous drug-users in New York City.

2. Cherubin CE. The medical consequences of narcotic addiction. Ann Intern Med 1967;67:23-33

   A classic description of the medical problems associated with intravenous drug abuse. Although knowledge about specific disease states has advanced since this article was published, it is one of the best overviews available.

HEALTH PROFESSIONS

1. Bissell L, Jones RW. The alcoholic physician: a survey. Am J Psychiat 1976;133:1142-6

A well-known study describing the demographic characteristics, treatment experience, and medical and social sequelae of 98 abstinent, alcoholic physicians. A revealing point is the relative infrequency of formal disciplinary action taken against these individuals by colleagues or medical organizations.

2. Clark DC, Eckenfels EJ, Dougherty SR, Fawcett J. Alcohol-use patterns through medical school. A longitudinal study of one class. JAMA 1987;257:2921-6

   The pattern of alcohol use in a cohort of medical students from one class was studied over four years. Male students drank more than females, but decreased their alcohol consumption during the clinical years. Overall, 11% of students drank excessively for at least one of the periods assessed and 18% met diagnostic criteria for alcohol abuse. Alcohol abusers had better grades and higher scores on the National Board of Medical Examiners' Part 1 test. A discussion of the implementation of preventive programs during medical school is included.

3. Herrington RE, Benzer DG, Jacobson GR, Hawkins MK. Treating substance-use disorders among physicians. JAMA 1982; 247:2253-7

   This study reports the encouraging experience of 40 health care professionals (36 physicians) who entered an impaired-physician inpatient treatment program during a one-year period. Eighty-three per cent of the participants completed or remained active in the program and all but two returned to full practice.

4. McAuliffe WE, Rohman M, Santangelo S, et al. Psychoactive drug use among practicing physicians and medical students. N Engl J Med 1986;315:805-10

   Recreational psychoactive drug use and self-treatment occurs at a higher rate among physicians and medical students than among pharmacists and pharmacy students. Rates of drug dependence are similar among the four groups (2–5%). Younger physicians (<40 years) account for almost all of the recreational drug use among physicians.

5. Morse RM, Martin MA, Swenson WM, Niven RG. Prognosis of physicians treated for alcoholism and drug dependence. JAMA 1984;251:743-6

   A retrospective review of the outcomes of 73 physicians and 185 demographically similar control patients treated for alcoholism or drug dependence at the Mayo Clinic reveals that more physicians than controls had favorable outcomes (83% vs. 67%). Additional discussion focuses on differences in prognosis based on the substance abused.

6. Smith JW, Denny WF, Witzke OB. Emotional impairment in internal medicine housestaff. Results of a national survey. JAMA 1986;255:1155-8

   The results of a national survey (63% return rate) of program directors in internal medicine reveal that more than half of internal medicine residency programs granted leaves of absence to an average of 0.9% of housestaff, most during internship and least during the third training year. Alcohol and drug abuse was recognized in 2% of trainees.

7. Spickard A, Billings FT. Alcoholism in a medical-school faculty. N Engl J Med 1981;305:1646-8

   A discussion of the factors that prevent physicians from recognizing alcoholism in colleagues.

8. Vaillant GE, Sobowale NC, McArthur C. Some psychologic vulnerabilities of physicians. N Engl J Med 1972;287:372-5

   As part of a long-term prospective study of a cohort of male college students, the authors report on 47 subjects who became physicians compared with 79 socioeconomically matched controls. Drug use, marital instability, and use of psychotherapy over a 30-year period were more common problems among physicians. However, their presence or absence was strongly associated with life adjustment before medical school.

LEGAL ASPECTS

1. National Institute on Drug Abuse. Consensus Development Panel. Drug concentrations and driving impairment. JAMA 1985; 254:2618-21

   This useful report represents the consensus of a panel from the National Institute on Drug Abuse on a number of important issues which relate to current knowledge about the relationship between body fluid concentrations of alcohol and other drugs and their active metabolites and driving impairment.

MEDICAL EDUCATION

1. Kinney J, Price TRP, Bergen BJ. Impediments to alcohol education. J Stud Alcohol 1984;45:453-9

   Discusses the two major impediments to alcohol education: 1) the emphasis in medical education on acute disease states and technologically oriented diagnostic and treatment techniques; 2) the failure of the alcoholism field to identify with similar areas in medicine (e.g., chronic diseases).

2. Kinney J, Price TRP, Whybrow PC, Linsey S. Project Cork: a case study in designing and implementing an alcohol curriculum for medical education. Project Cork Institute, Dartmouth Medical School, 1986

   Describes the process of integrating an alcoholism curriculum into the overall medical school curriculum and provides a model curriculum.

3. Lewis DC, Niven RG, Czechowicz D, Trumble JG. A review of medical education in alcohol and other drug abuse. JAMA 1987;257:2945-8

   A review of past efforts and the present emphasis in substance abuse education for physicians. Objectives for future directions are provided.