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ABSTRACT

The curriculum guide and bibliography identifies the minimum skills, knowledge, and attitudes that emergency physicians should have relative to drug and alcohol abuse and identifies appropriate educational materials and strategies for medical schools to include in their training programs. Objectives were based on 73 survey responses from medical schools and residency programs in emergency medicine. The 45 identified objectives are grouped into the following six categories: (1) general issues; (2) diagnosis and recognition of alcohol and other drug abuse; (3) management of alcohol or other drug abuse; (4) complications; (5) special populations and substance abuse; and (6) physician impairment. A review of over 200 reference materials resulted in a bibliography of 76 recommended items. Included for each item in the bibliography are the specific objectives to which the material pertains, standard bibliographic data, a brief description, and the educational level (undergraduate and/or graduate) for which the material is appropriate. There is also a materials/objectives matrix which provides a quick guide to the materials that address each of the six categories of objectives. (DB)

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National Institute on Alcohol Abuse and Alcoholism
National Institute on Drug Abuse

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Resource Manual for Alcohol and Other Drug Abuse Education in Emergency Medicine

The American College of Emergency Physicians
Society of Teachers of Emergency Medicine
University Association of Emergency Medicine

HE 024398

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Public Health Service
Alcohol, Drug Abuse, and Mental Health Administration

PH267

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The opinions expressed herein are the views of the authors and do not necessarily reflect the official positions of the National Institute on Alcohol Abuse and Alcoholism, the National Institute on Drug Abuse, or any other part of the U.S. Department of Health and Human Services.

Resource Manual for Alcohol and Other Drug Abuse Education in Emergency Medicine

The American College of Emergency Physicians
Society of Teachers of Emergency Medicine
University Association of Emergency Medicine

Final Report
Prepared under contract no. ADM 281-85-0010

U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
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PREFACE

This Resource Manual represents the efforts of a task force composed of members of the American College of Emergency Physicians, the Society of Teachers of Emergency Medicine, and the University Association of Emergency Medicine. The purpose of their project was to arrive at an initial consensus regarding the appropriate skills, knowledge, and attitudes emergency physicians should have relative to alcohol abuse and drug abuse and to promote the adoption of appropriate curriculum objectives relative to those skills, knowledge, and attitudes at the undergraduate, graduate, and continuing medical education levels for emergency physicians. Pursuant to that purpose the following objectives were established.

- To develop consensus statements on the minimum skills, knowledge, and attitudes (KSAs) emergency physicians should have relative to drug abuse and alcohol abuse and to delineate KSAs for each level of training (i.e., undergraduate, graduate, and continuing education).
- To identify current curriculum materials being used at each level of education and evaluate the degree to which they appropriately relate to agreed upon skills, knowledge, and attitudes for each level.
- To identify curriculum materials used by other primary care specialties and determine the degree to which they relate to agreed upon skills, knowledge, and attitudes for emergency physicians.
- To develop a materials catalog that identifies the KSAs for each training level and the appropriate materials for each training level.
- To identify current gaps in educational strategies and curriculum material at each level of training and, further, to develop recommendations to address those gaps.

The task force developed an initial set of KSA objectives and sent that list to over 200 academicians and practitioners in emergency medicine for their review. Based on the input from that review, a final list of objectives was prepared. A feedback form was then sent to all 123 medical schools, as well as all 65 approved residency training programs in emergency medicine, to determine to what degree the KSA objectives identified by the task force were taught at the undergraduate and graduate level. Thirty-three returns (27 percent response rate) were received from medical schools in response

to our request for information about clerkships in emergency medicine. This return was considered too low for analysis. However, the task force felt the findings of other investigations in substance abuse and primary care would apply to emergency medicine and, therefore, this portion of the investigation is not deemed as critical as the focus on graduate medical education.

Forty responses (62 percent) were received from residency directors who provided information on what objectives were covered and how much time was devoted to those objectives. The task force viewed the list of KSAs as minimal content for any graduate of a residency training program in emergency medicine and, therefore, all the objectives should be covered by all residency training programs. The results indicated that this was not the case. Members were particularly concerned by the lack of education provided on physician impairment. A majority of the residency directors (60 percent) indicated they were satisfied with the adequacy of alcohol and other drug abuse training; however, a majority (74 percent) were dissatisfied with the adequacy of substance abuse training materials available.

The task force was unable to identify any continuing medical education programs offering information on alcohol and other drug abuse in emergency medicine.

Over 200 reference materials were identified and reviewed; 76 were considered appropriate for emergency medicine. Appropriate resources were identified for each of the objectives. They are listed in the annotated bibliography. A matrix of materials for each objective is also supplied.

The manual also includes recommendations for further action, including development of a compendium of materials, the assessment of residents' competence in substance abuse, development of appropriate faculty training materials, and the development of adequate support systems.

INTRODUCTION

The emergency department serves as the point of entry into the health care system for a significant percentage of the American population. Emergency physicians are not primary care physicians in the sense of providing ongoing continual care, but emergency physicians do treat patients primarily. Thus, they are faced with many of the same problems as are primary care physicians. This is particularly true of problems related to alcohol and other drug abuse.

In their introduction to Consensus Statements on Alcohol, Drugs, and Primary Care Physician Education developed at the Rancho Mirage Conference sponsored by the U.S. Department of Health and Human Services in 1985, David Lewis, MD, and Robert Niven, MD, stated ". . . we believe that physicians in family medicine, internal medicine, pediatrics, and psychiatry are in a position to have major impact on the problem [arising from substance abuse]. Early stage patient presentation is often non-specific and thus is likely to be seen first by the primary practitioner . . ." The same statement could be made accurately about physicians who practice emergency medicine.

In his book *Emergency Psychiatry*, Douglas Rund, MD, noted "that at least 7 percent of emergency visits are directly caused by alcohol abuse and the percentage of alcoholic patients in the emergency department has been estimated at between 12 percent and 36 percent. A study using strict research diagnostic criteria demonstrated the prevalence of alcoholism in an emergency population of an urban hospital to be 20 percent, with an 11-percent prevalence in the daytime and 29 percent in the nighttime population . . . Trauma is particularly influenced by alcohol. At least 50 percent of automobile accidents involve one intoxicated person."

Alcohol and other drug abusers frequently present to the emergency depart-

ment, and their appearance is not always a welcomed sight. Rund noted that "the most predictable reactions of the emergency staff to these patients are ones of revulsion, disgust, and anger. This easily understood and quite human response is not the most therapeutic one, however, and it may lead to violent confrontation or misdiagnosis of a serious medical problem." Such a negative reaction by emergency physicians as well as primary care practitioners is commonly cited in the literature.

The need to provide physicians with adequate training for identifying and appropriately dealing with substance abuse patients has been well documented. As early as 1972, the American Medical Association had outlined this need and identified several key content areas. This need was echoed in a report from a conference sponsored by the Macy Foundation, and, partially in response to this identified need, the Association for Medical Education and Research in Substance Abuse was formed.

These activities predated the development of emergency medicine as a specialty, which occurred in 1979. Most of the efforts in curriculum development in emergency medicine focused on developing the clinical content of the specialty. Specifically, the curriculum has focused on alcohol and other drug abuse in its most acute form, i.e., diagnosing and treating drug overdoses. While such knowledge is critical, most forms of substance abuse are far more subtle. Emergency physicians, like other specialists, must be equipped to identify these more subtle forms and be armed with appropriate information on how to treat and/or refer patients with such problems. Physicians also need to learn how to appropriately identify and manage physician who become substance abusers. The Presidency Review Committee for Emergency Medicine (RRC/EM) recently proposed a requirement that

residency directors have in place a policy for identifying and dealing with residents who are substance abusers. Directors of emergency departments are also struggling with this problem. Any training effort dealing with alcohol and other drug abuse should also deal with identifying such problems in oneself and one's peers.

The problem, then, was the lack of a fully developed curriculum in alcohol and other drug abuse for emergency physicians. This deficiency exists at all levels of emergency medicine training—undergraduate, graduate, and continuing medical education. This resource manual is an attempt to fill that void.

MINIMAL KNOWLEDGE AND SKILLS

The following summarizes the minimal skills, knowledge, and attitudes about alcohol and other drug abuse necessary for medical students and emergency physicians to possess and delineates levels for each objective. Most objectives listed are considered to be essential for anyone graduating from medical school. These same objectives should be reviewed in the training of residents in emergency medicine, along with more indepth material. Certain objectives, which are considered only appropriate for those who are in graduate training programs in emergency medicine, have been designated with an "*".

This manual is written for faculty at the undergraduate and graduate level who are designing curriculum materials as well as evaluation materials for alcohol and other drug abusing education.

General Issues

1. Discuss the epidemiological aspects of alcohol and other drug abuse and poisoning
2. Recognize the extent of the alcohol and other drug abuse problem in the pre-hospital and emergency department settings
3. Discuss the ethnic, socioeconomic, occupational, and other factors associated with substance abuse
4. Recognize the implications of denial of substance abuse at the physician and patient level
5. Compare and contrast the disease concept of alcohol and other drug abuse disorders with other models or theories

6. Identify and define the substances of abuse (their classes and street names)
7. Identify and understand common terminologies such as abuse and addiction, dependency, tolerance, use, and misuse
8. Identify the emergency physician's responsibilities and limitations in treating alcohol and other drug abuse patients
9. List the groups that emergency physicians would be responsible for educating (emergency physicians, nurses, medical students, and prehospital care personnel) and specify strategies and needs
10. Determine the educational offerings available for maintaining knowledge and skills regarding substance abuse
11. Recognize the need to maintain up-to-date knowledge about diagnosis, treatment, and the ongoing recovery process
12. Recognize the importance of patient and family education as part of the treatment process
13. Provide patient education regarding use of addictive or abused substances
14. Discuss the medical-legal aspects of substance abuse

Diagnosis and Recognition of Alcohol and Other Drug Abuse

1. Define and explain the criteria for diagnosing substance abuse (NCA, DSM-III)

2. Identify and apply the appropriate diagnostic methods for recognizing the early stages of substance abuse
3. Describe the medical, surgical, and psychiatric conditions frequently associated with alcohol and other drug abuse
4. Perform a differential diagnosis for each type of substance abused
5. Explain the use of blood, urine, and breath tests in screening for substance abuse and the legal issues of administering these tests
6. Identify the negative attitudes in physicians that may inhibit the diagnosis of alcohol or other drug abuse
8. Describe appropriate attitudes physicians should have toward substance abuse patients (e.g., negative attitudes may have a detrimental effect on the patient-physician interaction; positive attitudes enhance patient compliance)
9. Define, compare, and contrast acute versus chronic organic brain syndromes and recognize that some substances can cause an organic brain syndrome after the initial intoxication
10. Identify the agencies and facilities available to the patient and family for treatment, then, based on the patient's needs and the community resources, make the appropriate referrals (e.g., Al-Anon, AA, NCA, county and State impaired physician committees)

Management of Alcohol or Other Drug Abuse

1. Identify the clinical presentation and treatment of acute intoxication from substances of abuse
2. Identify the clinical presentation and treatment of withdrawal states associated with abused substances
- *3. Compare and contrast the management of acute intoxication and withdrawal in the prehospital setting to that in the emergency department
- *4. Demonstrate technical expertise in performing therapeutic and diagnostic emergency interventions (e.g., intubation, gastric lavage)
5. Recognize the possibility of multiple drug ingestion in the acutely intoxicated patient
6. Recognize that detoxification is only the first step in the definitive treatment of alcohol and other drug abuse
7. Present the diagnosis of substance abuse and emphasize the need for treatment to the patient and significant others
11. Recognize the effects that alcohol and other drug abusing patients have on their families (e.g., spouse and children)
12. Identify and discuss the roles of people who can assist in the treatment of substance abuse patients (e.g., psychiatrists, nurses, alcohol and drug abuse counselors, social workers)
13. Recognize drug-seeking behavior in patients presenting to the emergency department for various medical problems

Complications

1. Discuss the role that substance abuse and incidental poisoning may play in patients with illnesses related to environment, athletics, and/or occupation (e.g., burns, hypothermia, hyperthermia, drowning)
2. Identify and discuss the acute and chronic medical, surgical, and psychiatric manifestations of alcohol and other drug abuse

3. Discuss the complications of pharmacotherapy (including miltosone, disulfiram, and methadone) and drug interactions
4. Compare and contrast pharmacological versus toxicological manifestations of abused substances

Special Populations and Substance Abuse

1. Discuss the patterns and risks of substance abuse associated with age, gender, culture, and occupation
2. Identify the effects of use and abuse of drugs in the pregnant patient including obstetrical and fetal complications
3. Explain the interaction between specific medical and surgical condi-

tions and the development of substance abuse

Physician Impairment

1. Discuss the signs and symptoms of physician impairment
2. Recognize that the impaired physician is often unable to ask for help
3. Discuss methods of identifying and preventing physician impairment
4. Recognize the need for reporting impaired physicians and determine the appropriate manner of intervening in order to initiate treatment
5. Recognize factors that may place physicians at risk for alcohol and other drug abuse

ANNOTATED BIBLIOGRAPHY OF EDUCATIONAL RESOURCES IN SUBSTANCE ABUSE EDUCATION FOR EMERGENCY MEDICINE

Sample Reference

Bibliographic source

Number of references
listed in article

Anderson, C.T. *Minnesota's chemically-dependent physicians*.
Office of Academic Affairs, Hennepin County Medical Center,
701 Park Avenue, Minneapolis, MN 55415. pp. 1-5. 9 ref.

Substance abuse objectives
to which article pertains

General issues

1. epidemiological aspects
4. implications of denial

Diagnosis and recognition

1. criteria for diagnosing
2. diagnostic methods for early stages
6. negative attitudes

Management

8. physician attitudes
10. agencies and facilities
13. drug-seeking behavior

Complications

1. environmental, athletic, and/or occupational illness

Special populations

1. age, gender, culture, occupation

Physician impairments

1. signs and symptoms
2. unable to ask for help
3. identifying and preventing impairment
5. risk factors

- This article describes Minnesota's chemically dependent physicians who are now members of Physicians Serving Physicians, a support group of recovering physicians. AA and general practitioners were positively involved. The article describes demographics, substances used, and resistance to treatment.

Undergraduate and graduate

Recommended level
(note: "graduate" includes
continuing medical education)

Anderson, C.T. Minnesota's chemically-dependent physicians. Office of Academic Affairs, Hennepin County Medical Center, 701 Park Avenue, Minneapolis, MN 55415. pp. 1-5. 9 ref.

General issues

1. epidemiological aspects
4. implications of denial

Diagnosis and recognition

1. criteria for diagnosing
2. diagnostic methods for early stages
6. negative attitudes

Management

8. physician attitudes
10. agencies and facilities
13. drug-seeking behavior

Complications

1. environmental, athletic, and/or occupational illness

Special populations

1. age, gender, culture, occupation

Physician impairment

1. signs and symptoms
2. unable to ask for help
3. identifying and preventing impairment
5. risk factors

This article describes Minnesota's chemically dependent physicians who are now members of Physicians Serving Physicians, a support group of recovering physicians. AA and general practitioners were positively involved. The article describes demographics, substances used, and resistance to treatment.

Undergraduate and graduate

Baker, F.M. ER "capture of the skid-row alcoholic." *General Hospital Psychiatry* 2:138-143, 1985. 23 ref.

General issues

4. implications of denial

Management

6. detoxification as first step in treatment

"Skid row" alcoholics who frequently present to the emergency department intoxicated and unable to care for themselves are defined and discussed. The use of a specialized alcohol treatment unit in the emergency department that resulted in better treatment for the alcoholic and better understanding of the disease process by the emergency department staff is described.

Undergraduate and graduate

Bander, K.W.; Goldman, D.S.; Schwartz, M.A.; Rabinowitz, E.; and English, J.T. Survey of attitudes among three specialists in a teaching hospital toward alcoholics. *Journal of Medical Education* 62:17-24, 1987. 15 ref.

General issues

4. implications of denial
8. responsibilities and limitations in treating patients
9. groups to educate, strategies and needs
10. educational offerings

Diagnosis and recognition

6. negative attitudes

Management

8. physician attitudes

Special populations

3. medical and surgical conditions and development of abuse

This study surveyed three specialties (internal medicine, surgery, and psychiatry) and examined the differences among physicians in these specialties with respect to (1) physicians' attitudes, (2) knowledge, and (3) methods of treatment concerning the alcoholic patient. The results indicated that (1) physicians considered the alcoholic

patient treatable, (2) physicians still maintained a negative perception of the alcoholics' personality, (3) the stereotyped picture of the "skid-row" alcoholic was less prevalent, and (4) physicians rejected standard learning techniques to enhance their understanding of alcoholism.

Undergraduate and graduate

**Bean, M. Chapter principals and methods
—Alcoholics Anonymous. *Psychiatric
Annals* 5(2):6-13, 1975.**

General issues

4. implications of denial

Management

10. agencies and facilities

This article reviews the development of Alcoholics Anonymous (AA) and the importance of this mutual help group in the treatment of alcoholism. It reviews the 12 principles underlying the AA treatment approach and relates them to a psychotherapeutic approach (i.e., breakdown of denial, reassurance, etc.). The actual workings of an AA meeting are explored, which offers further insight into the group dynamics (i.e., the socialization process).

Undergraduate and graduate

**Bernadt, M.W.; Mumford, S.; Taylor, C.;
Smith, B.; and Murray, R.M. Comparison of
questionnaire and laboratory tests in the
detection of excessive drinking and alco-
holism. *Lancet* 1:325-328, 1982. 20 ref.**

Diagnosis and recognition

2. diagnostic methods for early stages

Three hundred eighty-five hospital-ized psychiatric patients were given MAST, CAGE, and Reich interviews as

well as eight laboratory tests (MCV, GGI, HDL, AST, alkaline phosphatase, cholesterol, urate, and GDH). The inter-views had a much higher sensitivity and specificity in identifying true alcoholics than the laboratory tests (90-percent sensitive for interviews, 35 percent for lab tests). The MAST was the most accurate, but the CAGE was shorter. The interview is recommended for alcoholism screening.

Graduate

**Beschner, G.M., and Friedman, A.S.
Treatment of adolescent drug abusers.
International Journal of Addictions
20(6-7):971-993, 1985. 67 ref.**

General issues

1. epidemiological aspects
3. ethnic, socioeconomic, occupation, and other factors
8. responsibilities and limitations in treating patients
9. groups to educate, strategies and needs
12. patient and family education as part of treatment

Diagnosis and recognition

2. diagnostic methods for early stages

Special populations

1. age, gender, culture, occupation

This is a review of the complex social needs of adolescent drug abusers and the treatment network of detoxification, methadone maintenance, drug-free residential, and drug-free outpatient programs. Adolescents abuse drugs because of ready availability and peer acceptance, and as a way to feel good and alter mood.

White adolescents use more sedatives, stimulants, and psychotics than blacks. White adolescents acknowledge regular drinking more than blacks. Social deprivation and heroin use were more highly correlated with blacks.

The severity of drug abuse was best correlated with family factors: religion, education, stability, etc. Most adolescents were multiple drug abusers with consequential antecedent family difficulties. Successful programs necessitate new initiatives.

Undergraduate and graduate

Bewley, T.H. Prescribing psychoactive drugs to addicts. *British Medical Journal* 281:497-498, 1980.

General issues

2. substance abuse in prehospital and emergency department
8. responsibilities and limitations in treating patients
14. medical-legal aspects

Management

2. clinical presentation and treatment of withdrawal
13. drug-seeking behavior

This is a short commentary on the drug-seeking pattern of addicted individuals in Britain. Management of dependency and withdrawal is discussed with regard to strategy for treating dependent patients outside formal rehabilitation programs.

Graduate

Caruana, D.S.; Weinbach, B.; Goerg, D.; and Gardner, L.B. Cocaine-packet ingestion—diagnosis, management and natural history. *Annals of Internal Medicine* 100:73-74, 1984. 8 ref.

General issues

1. epidemiological aspects
2. substance abuse in prehospital and emergency department
7. common terminologies

Diagnosis and recognition

1. criteria for diagnosing

Management

1. clinical presentation and treatment of acute intoxication

Special populations

1. age, gender, culture, occupation

This discussion of cocaine "body-packers" assesses the appropriate strategies with regard to removal, potential for obstruction, and fatal complications. The firmer packet preparations have led to limited complications associated with rupture. This is of particular importance for those working in Miami, New York City, or Los Angeles, where these packers disembark.

Graduate

Chappel, J.N., and Schnoll, S.H. Physician attitudes—effect on treatment of chemically dependent patients. *Journal of the American Medical Association* 237(21): 2318-2319, 1977. 14 ref.

General issues

8. responsibilities and limitations in treating patients
9. groups to educate, strategies and needs

Diagnosis and recognition

6. negative attitudes

Management

8. physician attitudes

Negative physician attitudes toward patients with substance abuse are discussed, especially the pessimistic attitude toward treatment outcomes. These attitudes frequently affect a physician's ability to diagnose and treat the disorder and affect the patient's attitude toward treatment. The authors suggest that the most effective way to change these attitudes is through experience, not persuasion. They briefly describe a week-long course that exposes the student to

treatment programs and requires their participation.

Undergraduate and graduate

Chitwood, D.D.; Wells, K.S.; and Russe, B.R. Medical and treatment definitions of drug use: The case of the adolescent user. *Adolescence* 16(64):817-830, 1981. 22 ref.

General issues

1. epidemiological aspects
3. ethnic, socioeconomic, occupation, and other factors

Special populations

1. age, gender, culture, occupation

This is a study of adolescent drug abusers (age 13-17) in two different areas: the emergency department and a chronic treatment program. The two groups are compared and contrasted on sex, ethnicity, and types of drug used. Legal drugs were predominant among acute ingestions seen in the emergency department. Illegal drugs, especially marijuana (75 percent) were used in 91 percent of the chronic abusers seen in the treatment centers. Females outnumbered males in the emergency department (60:40 percent). White males outnumbered females in the treatment centers (65:35 percent). Hispanics were underrepresented and blacks were overrepresented in both facilities based on relative percentages of these ethnic groups in the population. Hispanics tended to use legal drugs relatively more than whites or blacks.

Graduate

Clark, D.C.; Eckenfels, E.J.; Daugherty, S.R.; and Fawcett, J. Alcohol use patterns through medical school. *Journal of the American Medical Association* 257(1):2921-2926, 1987. 41 ref.

Physician impairment

3. identifying and preventing impairment

4. reporting and intervening
5. risk factors

This longitudinal study follows a medical school class for 4 years of school and monitors drinking patterns over that time. Men drank more than women, but their intake fell. Eleven percent were excessive drinkers for at least 6 months, and more than half of the excessive drinkers were also abusers, but only a third of alcohol abusers drank excessively. Alcohol abusers had better 1st-year grades and NBME scores than their counterparts.

Undergraduate

Clark, W.D. Alcoholism: Blocks to diagnosis and treatment. *The American Journal of Medicine* 71:275-286, 1981.

General issues

4. implications of denial
5. disease concept vs. other models or theories
8. responsibilities and limitations in treating patients
12. patient and family education as part of treatment
13. providing patient education

Diagnosis and recognition

1. criteria for diagnosing
2. diagnostic methods for early stages
6. negative attitudes

Management

4. therapeutic and diagnostic intervention
7. present diagnosis and need for treatment
11. effects of patient or family

The disease concept of alcoholism is discussed, but the article concludes that it cannot be proven. The authors feel that physicians should adopt the disease concept, however, because it allows them to approach the patient in a logical, familiar way, i.e., first establish a diagnosis, then proceed with a treatment

plan. It emphasizes the importance of recognizing alcoholism in patients who present with other complaints. Techniques for making the diagnosis, including questions to ask, are given. It also goes into various treatments that are available. The article emphasizes that the primary role of the physician is as a detector of the problem and that management of alcoholism is in the pretreatment phase.

Graduate

Coggan, P.; Davis, A.; and Rogers, J. Teaching alcoholism to family medicine students. *The Journal of Family Practice* 13(7):1025-1028, 1981. 13 ref.

General issues

1. epidemiological aspects
2. substance abuse in prehospital and emergency department
3. ethnic, socioeconomic, occupation, and other factors
4. implications of denial
8. responsibilities and limitations in treating patients
9. groups to educate, strategies and needs
10. educational offerings

Diagnosis and recognition

1. criteria for diagnosing
2. diagnostic methods for early stages

Management

7. present diagnosis and need for treatment
8. physician attitudes

Special populations

1. age, gender, culture, occupation
3. medical and surgical conditions and development of abuse

Third-year medical clerks were taught basic diagnostic and management skills for the alcoholic patient to sensitize them to the scope of the problem in family medicine. Early recognition and intervention are stressed.

Undergraduate and graduate

Coggan, P.; Davis, A.; and Haddac, R. Alcoholism curriculum development: An examination of the process. *The Journal of Family Practice* 19(4):527-532, 1984. 7 ref.

General issues

4. implications of denial

Diagnosis and recognition

2. diagnostic methods for early stages

This article describes the process used to develop a curriculum in alcoholism for family practice residents. It emphasizes the fact that the major focus of such a curriculum should be directed at improving those skills that aid in the early diagnosis/recognition of alcoholism (i.e., interviewing skills, recognition of early indicators of alcoholism). In addition, the curriculum focuses on making appropriate referrals.

Graduate

Cohen, S. Marijuana use detection: The state of the art. *Drug Abuse and Alcoholism* 12(3), 1983. 4 ref.

Diagnosis and recognition

5. blood, urine, and breath tests

This brief publication describes the urine test used for detection of marijuana use. The author points out that the standard detection tests are capable of finding 100 ng/ml at the 95-percent level of confidence. The highest urinary concentration is seen at 5 hours after smoking, and urines may remain positive from 1 hour to 72 hours after smoking. If a confirmatory test is added, the accuracy of this urine test approaches that of most other biomedical tests in general use. It is an indicator of recent use, but does not correlate with the degree of intoxication. After discon-

tinuing a daily habit, the tests may remain positive for days or weeks.

Graduate

Crowley, T.J. Alcoholism—identification, evaluation and early treatment. *Western Journal of Medicine* 140:461-464, 1984.

General issues

12. patient and family education as part of treatment

Diagnosis and recognition

1. criteria for diagnosing
2. diagnostic methods for early stages
3. associated medical, surgical, and psychiatric conditions

Management

4. therapeutic and diagnostic intervention

A step-by-step approach to the initial diagnosis and management of the alcoholic patient is briefly outlined. The steps include screening, further history, establishing an alliance, involving the family, setting a goal, and consideration of withdrawal.

Undergraduate and graduate

David, G. Early signs of alcoholism. *Journal of the American Medical Association* 238(2):161-162, 1977.

Diagnosis and recognition

2. diagnostic methods for early stages
3. associated medical, surgical, and psychiatric conditions

This is a short and easy to read list of hints and signs and symptoms of alcoholism. It also has a list of questions that may arouse suspicion of alcoholism, but there is no scoring system.

Undergraduate

Dowling, G.P.; McDonough, E.T.; and Bost, R.O. "Eve and Ecstasy," a report of five deaths associated with the use of MDEA and MDMA. *Journal of the American Medical Association* 257(12):1615-1617, 1987. 17 ref.

General issues

6. classes and street names of abused substances
7. common terminologies
11. maintaining up-to-date knowledge

Management

1. clinical presentation and treatment of acute intoxication

This discusses the use of "designer drugs" as an attempt to circumvent DEA guidelines. MDMA is methylenedioxy-methamphetamine or ecstasy, and MDEA is the ethyl design or eve. These are dangerous and comparable to amphetamine in terms of potential use and misuse.

Undergraduate and graduate

Eckardt, M.J.; Harford, T.C.; Kaebler, C.T.; et al. Health hazards associated with alcohol consumption. *Journal of the American Medical Association* 246:648-666, 1981. 348 ref.

General issues

1. epidemiological aspects
2. substance abuse in prehospital and emergency department
3. ethnic, socioeconomic, occupation, and other factors
4. implications of denial
5. disease concept vs. other models or theories
7. common terminologies
11. maintaining up-to-date knowledge
12. patient and family education as part of treatment
13. providing patient education
14. medical-legal aspects

Diagnosis and recognition

1. criteria for diagnosing
2. diagnostic methods for early stages
3. associated medical, surgical, and psychiatric conditions
4. differential diagnosis
5. blood, urine, and breath tests

Management

1. clinical presentation and treatment of acute intoxication
2. clinical presentation and treatment of withdrawal
3. management prehospital vs. emergency department
4. therapeutic and diagnostic intervention
6. detoxification as first step in treatment
7. present diagnosis and need for treatment
8. physician attitudes
9. acute vs. chronic organic brain syndrome
10. agencies and facilities
11. effects of patient or family
12. roles of people assisting in treatment
13. drug-seeking behavior

Complications

1. environmental, athletic, and/or occupational illness
2. acute and chronic manifestations
3. complications of pharmacotherapy
4. pharmacological vs. toxicological manifestations

Special populations

1. age, gender, culture, occupation
2. pregnancy
3. medical and surgical conditions and development of abuse

This is an excellent general overview of alcohol abuse and use and their broad implications. It reviews health hazards associated with alcohol consumption and includes information on fetal health hazards.

Undergraduate and graduate

Ewing, J.A. Detecting alcoholism: The CAGE questionnaire. *Journal of the American Medical Association* 252:1905-1907, 1984. 10 ref.

Diagnosis and recognition

2. diagnostic methods for early stages

This article reintroduces the results of the original studies that led to the development of the CAGE questionnaire. The breakout of data allows the reader to determine the corresponding sensitivities and specificities of this diagnostic test depending on the number of positive responses to four yes/no questions.

Undergraduate and graduate

Ficarra, B.J. Toxicology states treated in an emergency department. *Clinical Toxicology* 17(1):1-43, 1980. 66 ref.

General issues

1. epidemiological aspects
2. substance abuse in prehospital and emergency department
5. disease concept vs. other models or theories
8. responsibilities and limitations in treating patients
11. maintaining up-to-date knowledge

Diagnosis and recognition

1. criteria for diagnosing
2. diagnostic methods for early stages

Management

1. clinical presentation and treatment of acute intoxication

Complications

2. acute and chronic manifestations

This is an indepth collective review of alcohol and drug abuse as seen in the emergency department.

Graduate

Funkhouser, J.E., and Dennison, R.W. Preventing alcohol-related birth defects—suggestions for action. *Alcohol Health and Research World* 10(1):54-60, 1985. 43 ref.

General issues

1. epidemiological aspects
9. groups to educate, strategies and needs
10. educational offerings
11. maintaining up-to-date knowledge
12. patient and family education as part of treatment
13. providing patient education

Diagnosis and recognition

3. associated medical, surgical, and psychiatric conditions

Management

11. effects of patient or family

Complications

2. acute and chronic manifestations

Special populations

2. pregnancy

This excellent pamphlet contains 10 articles on alcohol-related birth defects and a collection of works by many of the leaders in alcohol teratogenicity. The implications of the fetal alcohol syndrome are well developed. The authors discuss issues of prevention of complications as well as methods for establishing pregnancy-related health programs.

Undergraduate and graduate

Gallant, D.S. *Alcohol and Drug Abuse Curriculum Guide for Psychiatry Faculty*. U.S. Department of Health and Human Services, Curriculum Resource Series: Medicine 2. 1982,

General issues

1. epidemiological aspects
2. substance abuse in prehospital and emergency department
3. ethnic, socioeconomic, occupation, and other factors

4. implications of denial
5. disease concept vs. other models or theories
6. classes and street names of abused substances
7. common terminologies
8. responsibilities and limitations in treating patients
9. groups to educate, strategies and needs
10. educational offerings
11. maintaining up-to-date knowledge
12. patient and family education as part of treatment
13. providing patient education
14. medical-legal aspects

Diagnosis and recognition

1. criteria for diagnosing
2. diagnostic methods for early stages
6. negative attitudes

Management

1. clinical presentation and treatment of acute intoxication
2. clinical presentation and treatment of withdrawal
3. management prehospital vs. emergency department
4. therapeutic and diagnostic intervention
8. physician attitudes
10. agencies and facilities
11. effects of patient or family
12. roles of people assisting in treatment

Complications

2. acute and chronic manifestations
4. pharmacological vs. toxicological manifestations

Physician impairment

1. signs and symptoms
2. unable to ask for help
3. identifying and preventing impairment
4. reporting and intervening
5. risk factors

This is a complete curriculum on alcohol and substance abuse for psychiatry faculty. Special focus on psychology, culture, and biology of substance abuse.

Early recognition, therapeutic essentials, intervention, and treatment are emphasized. A special section on the disabled physician is well done. A community-oriented approach is discussed.

Undergraduate and graduate

Gay, G.R. Clinical management of acute and chronic cocaine poisoning. *Annals of Emergency Medicine* 11:562-572, 1982. 59 ref.

General issues

1. epidemiological aspects
2. substance abuse in prehospital and emergency department
3. ethnic, socioeconomic, occupation, and other factors
6. classes and street names of abused substances
7. common terminologies
8. responsibilities and limitations in treating patients
11. maintaining up-to-date knowledge

Diagnosis and recognition

1. criteria for diagnosing
2. diagnostic methods for early stages
3. associated medical, surgical, and psychiatric conditions
4. differential diagnosis
5. blood, urine, and breath tests

Management

1. clinical presentation and treatment of acute intoxication
3. management prehospital vs. emergency department
4. therapeutic and diagnostic intervention
5. multiple drug ingestion

Complications

2. acute and chronic manifestations
3. complications of pharmacotherapy
4. pharmacological vs. toxicological manifestations

Special populations

1. age, gender, culture, occupation

This discussion of cocaine use emphasizes freebase, the cocaine reaction, and community use. A detailed interpretation of the physiology, pharmacology, and toxicology are presented. A management strategy is discussed, and although some components are incorrect, in general the perspective is appropriate.

Undergraduate and graduate

Gibb, K. Serum alcohol levels, toxicology screens, and use of the breath alcohol analyzer. *Annals of Emergency Medicine* 15: 349-353, 1986. 25 ref.

General issues

2. substance abuse in prehospital and emergency department

Diagnosis and recognition

1. criteria for diagnosing
2. diagnostic methods for early stages
5. blood, urine, and breath tests

Management

7. present diagnosis and need for treatment

This article emphasizes early and rapid diagnosis of alcohol or drug intoxication in the emergency department, with appropriate use of labs for blood alcohol, toxicology screens, and a breath analyzer.

Graduate

Gold, M.S.; Potash, A.L.C.; and Extein, I.R.L. Clonidine: Inpatient studies from 1978 to 1981. *Journal of Clinical Psychiatry* 43(6 sec. 2):35-38, 1982. 18 ref.

Management

2. clinical presentation and treatment of withdrawal

The norepinephrine hypothesis of opioid withdrawal explains most of the clinical manifestations associated with acute abstinence. Clonidine through alpha-adrenergic receptors inhibits noradrenergic neural activity at the locus coeruleus much as opiates inhibit through opiate receptors. Clonidine is effective in reversing cognitive, affective, and physiological signs and symptoms of opioid withdrawal and continues to do so when maintained for 10 to 14 days.

Graduate

Goldstein, D.B. Effect of alcohol on cellular membranes. *Annals of Emergency Medicine* 15:1013-1018, 1986. 35 ref.

Complications

2. acute and chronic manifestations

This article proposes that a cellular mechanism (membrane disordering) is responsible for alcohol's acute intoxicating effects, as well as the cellular changes in response to chronic alcohol administration. Using physiochemical techniques (i.e., electroparamagnetic resonance and fluorescence polarization), one can quantify the degree of membrane disordering due to ethanol. Studies using these techniques have shown that the sensitivity of membranes to ethanol may in part be genetically determined, and this sensitivity correlates with the in vivo intoxicating effects of the drug. This disordering of cellular membranes may therefore be responsible for the acute intoxicating effect of ethanol. Similarly, studies in mice made tolerant to ethanol have shown that they develop membranes that are less easily disordered by alcohol than are those of controls. These changes at the cellular level may account for some of the clinical effects of both acute and chronic ethanol administration.

Graduate

Griffin, J.B.; Hill, I.K.; Jones, J.J.; Keeley, K.A.; Krug, R.S.; and Pokorny, A. Evaluating alcoholism and drug abuse knowledge in medical education: A collaborative project. *Journal of Medical Education* 58(11):859-863, 1983. 4 ref.

General issues

9. groups to educate, strategies and needs
10. educational offerings

The National Institute on Drug Abuse and the National Board of Medical Examiners developed patient management problems and multiple choice questions for 629 third- and fourth-year medical students. This broad-based task force (without any emergency physicians) created 350 multiple choice questions on drug abuse, including physiology, pharmacology, diagnosis, and treatment. Students did well on the pharmacology of drugs of abuse, use of AA, and treatment of DTs. They did poorly on metabolism and biochemistry of substances of abuse. Of note in emergency medicine is that the ED treatment of overdoses and coma, including initial management, was poor. This may reflect the time (1978) when emergency medicine had only begun to thrive, the relative paucity of texts at that time, and the diverse opinions as to appropriate management. Legal issues were also poorly handled. The prepared syllabus books and tests might be valuable.

Undergraduate and graduate

Holt, S., and Skinner, H.A. Early identification of alcohol abuse: 2 clinical and laboratory indicators. *Canadian Medical Association Journal* 124:1279-1299, 1981. 268 ref.

Diagnosis and recognition

1. criteria for diagnosing
2. diagnostic methods for early stages

This is a lengthy, well-referenced article on indicators of alcohol abuse.

Clinical disorders consistent with abuse are discussed, including maladies of the GI, nervous, and cardiovascular systems, as well as the liver. Alcohol abuse is shown to correlate with trauma and accidents. Lab abnormalities that correlate to alcohol abuse are listed. The authors point out that no clear cut, single test or physical finding is of sufficient sensitivity to be reliably used as a screening device. A combination of questionnaires regarding drinking habits and clinical and lab findings remains the best means of detecting alcohol abuse.

Undergraduate and graduate

Hughes, J.H.; Schernitzki, P.; Byers, J.; and Likes, K. Trauma in patients influenced by drugs and alcohol. *Annals of Emergency Medicine* 9(1):7-11, 1980. 30 ref.

General issues

2. substance abuse in prehospital and emergency department

Diagnosis and recognition

2. diagnostic methods for early stages

Special populations

1. age, gender, culture, occupation

This article examines the interrelationship of drugs, alcohol, and trauma. It is a retrospective study of 66,099 patients seen in the emergency department.

Graduate

Jankowski, G., and Drum, D.E. Criteria for the diagnosis of alcoholism. *Archives of Internal Medicine* 137:1532-1536, 1977. 40 ref.

General issues

4. implications of denial
8. responsibilities and limitations in treating patients

11. maintaining up-to-date knowledge

Diagnosis and recognition

1. criteria for diagnosing
2. diagnostic methods for early stages
3. associated medical, surgical, and psychiatric conditions
4. differential diagnosis
5. blood, urine, and breath tests

Management

4. therapeutic and diagnostic intervention
7. present diagnosis and need for treatment
8. physician attitudes
9. acute vs. chronic organic brain syndrome
11. effects of patient or family

Complications

2. acute and chronic manifestations

This is a retrospective study of hospitalized patients for manifestations of alcoholism. Specific manifestations were notable by their absence in hospital charts, which may be due to the traditional structure of the medical history.

Graduate

Kamerow, D.B.; Pincus, H.A.; and MacDonald, D.I. Alcohol abuse, other drug abuse, and mental health disorders in medical practice. Prevalence costs, recognition, and treatment. *Journal of the American Medical Association* 255:2054-2057, 1986. 35 ref.

General issues

1. epidemiological aspects
5. disease concept vs. other models or theories
8. responsibilities and limitations in treating patients
9. groups to educate, strategies and needs

Diagnosis and recognition

6. negative attitudes

Management

3. management prehospital vs. emergency department
8. physician attitude

This short article reports the incidence and cost of alcohol, drug abuse, and mental disorders and their impact on primary care. The authors discuss how ineffective primary care physicians are in diagnosing and managing these disorders. Barriers to recognition and treatment of these disorders are identified and include physical preparation, attitudes and knowledge, patient attitudes, and the constraints of the health care system. Specific recommendations are made to combat these deficiencies.

Undergraduate and graduate

Keller, M. The disease concept of alcoholism revisited. *Journal of Studies on Alcohol* 37(11):1694-1717, 1976.

General issues

5. disease concept vs. other models or theories

This is a comprehensive view of the concept of alcoholism as a disease. The argument for this is based on (1) historical precedent (was defined as a disease as early as the 1st century) and (2) comparison of definitions of other recognized diseases such as diabetes. The author refutes arguments for not classifying alcoholism as a disease.

Undergraduate

Khantzian, E.J., and McKenna, G.J. Acute toxic and withdrawal reactions associated with drug use and abuse. *Annals of Internal Medicine* 90:361-372, 1979. 79 ref.

Management

1. clinical presentation and treatment

of acute intoxication

2. clinical presentation and treatment of withdrawal

The authors have written a general review of the intoxication and withdrawal state of commonly abused drugs. They touch on general symptoms, signs, and management and include specific recommendations for some drugs.

The drugs covered are narcotics, barbiturates and other sedatives, ethanol, and stimulants as well as user withdrawal states. They also discuss PCP, hallucinogens, inhaled hydrocarbons, and marijuana, but in less depth. This is a clear and precise overview.

Undergraduate and graduate

Landers, D.F. Alcoholic coma and some associated conditions. *American Family Physician* 28(4):219-222, 1983. 12 ref.

Diagnosis and recognition

1. criteria for diagnosing
3. associated medical, surgical, and psychiatric conditions
4. differential diagnosis
5. blood, urine, and breath tests

Management

1. clinical presentation and treatment of acute intoxication
4. therapeutic and diagnostic intervention
7. present diagnosis and need for treatment
9. acute vs. chronic organic brain syndrome

Complications

2. acute and chronic manifestations

An alcoholic coma is diagnosed when: (1) blood alcohol level is high and (2) signs of bilateral cortical dysfunction are present without focal neurological needs. In youth, a coma may be hypoglycemia, which must be corrected immediately.

Graduate

Landesman-Dwyer, S. Drinking during pregnancy: Effects on human development. In: *Biomedical Processes and Consequences of Alcohol Use*, Alcohol and Health Monograph No. 2, DHHS Pub. No. (ADM) 82-1191, 1982. pp. 335-357. 107 ref.

General issues

1. epidemiological aspects

Special populations

2. pregnancy

This paper discusses a number of issues pertaining to the consumption of alcohol during pregnancy. Included are (1) the proposed criteria for the diagnosis of the fetal-alcohol syndrome (including an extensive listing of all the clinical findings reported in the fetal-alcohol syndrome) and (2) the current controversies surrounding this syndrome (including whether milder forms of alcohol consumption, binge drinking, or chronic maternal alcoholism contribute in varying degrees to the development of the fetal-alcohol syndrome).

Undergraduate and graduate

Lewis, D.C., and Gordon, A.J. Alcoholism and the general hospital: The Roger Williams intervention program. *Bulletin of the New York Academy of Medicine* 59(2):181-197, 1983.

General issues

1. epidemiological aspects
2. substance abuse in prehospital and emergency department
9. groups to educate, strategies and needs
10. educational offerings
12. patient and family education as part of treatment
13. providing patient education

Diagnosis and recognition

1. criteria for diagnosing
6. negative attitudes

Management

4. therapeutic and diagnostic intervention
6. detoxification as first step in treatment
7. present diagnosis and need for treatment
8. physician attitudes
10. agencies and facilities
11. effects of patient or family
12. roles of people assisting in treatment

This is an excellent discussion of how the general hospital can function in the detection, treatment, and referral of alcoholics among admitted patients and patients from outpatient centers. A 10-step program is outlined in detail, providing an example of how a hospital can respond to the very prevalent problem of alcohol abuse among its patients. The article is supplemented by a series of statistics from institutions across the county regarding the incidence of alcoholism and alcohol-related problems among medical/surgical inpatients and emergency department patients.

Undergraduate and graduate

Long, W.A.; Brown, R.C.; Jenkins, R.R.; Samuels, J.M.; and Schenberg, S.K. The role of the pediatrician in substance abuse counseling. *Pediatrics* 72(2):251-252, 1983. 4 ref.

Management

11. effects of patient or family

Special populations

1. age, gender, culture, occupation

This is a statement of the Committee on Adolescence on the pediatrician's role in counseling for substance abuse.

Graduate

Lowenfels, A.B., and Miller, T.T. Alcohol and trauma. *Annals of Emergency Medicine* 13:1056-1060, 1984. 42 ref.

General issues

1. epidemiological aspects

Diagnosis and recognition

2. diagnostic methods for early stages

Complications

1. environmental, athletic, and/or occupational illness

Special populations

1. age, gender, culture, occupation

This is an epidemiologic review of the effect of alcohol ingestion and various forms of trauma. The article illustrates the pervasive effect of alcohol use and abuse in all forms of accidents. Accidents discussed are vehicular (fatal, nonfatal, head injuries, young drivers, and auto/pedestrian), hypothermia and frostbite, aquatic injuries, falls, homicides, and suicides.

Undergraduate and graduate

Ludwig, A.; Bendfeldt, F.; and Wikler, A. Loss of control in alcoholics. *Archives of General Psychiatry* 35:370-373, 1978.

General issues

5. disease concept vs. other models or theories

This is a study of the ability of alcoholics to regulate their blood alcohol levels based on internal and external cues. Two study groups were used, alcoholics and nonalcoholics. The findings indicated the alcoholics were unable to control their blood alcohol levels as well as the nonalcoholics. The authors conclude the "loss of control" theory explains alcohol abuse in alcoholics.

Undergraduate

McCarron, M.M.; Schulze, B.W.; Thompson, G.A.; Conder, M.C.; and Goetz, W.A. Acute phencyclidine intoxication: Incidence of clinical findings in 1,000 cases. *Annals of Emergency Medicine* 10(5):237-242, 1981. 35 ref.

General issues

7. common terminologies

Diagnosis and recognition

1. criteria for diagnosing
5. blood, urine, and breath tests

Management

5. multiple drug ingestion

This prospective emergency department study investigated the major clinical findings in patients presenting with pure phencyclidine overdose or phencyclidine as the major intoxicant. This study highlights the fact that although nystagmus and hypertension were common findings, a significant percentage of patients had only one or none of these findings. This study goes on to outline the other clinical manifestations (psychiatric, neurological, laboratory, etc.) of phencyclidine overdose.

Undergraduate and graduate

MacDonald, D.I. How you can help prevent teenage alcoholism. *Contemporary Pediatrics* Nov:50-72, 1986. 12 ref.

General issues

1. epidemiological aspects
3. ethnic, socioeconomic, occupation, and other factors
8. responsibilities and limitations in treating patients
9. groups to educate, strategies and needs
10. educational offerings
11. maintaining up-to-date knowledge
12. patient and family education as part of treatment
13. providing patient education

Diagnosis and recognition

1. criteria for diagnosing
2. diagnostic methods for early stages

Management

6. detoxification as first step in treatment
8. physician attitudes
10. agencies and facilities
11. effects of patient or family
12. roles of people assisting in treatment
13. drug-seeking behavior

Special populations

1. age, gender, culture, occupation

This article offers the following advice. Recognize the risk factors for teenage alcoholism: family history of alcoholism, parental discipline, peer group, school and behavioral factors. Look for diagnostic clues such as deterioration of school performance, family relationships, defensiveness, personality changes, difficulty with authority, and physical signs. Make sure to broach the subject, determining the patient's level of use and the family drinking habits; consider administering the children of alcoholics screening test (CAST). Ultimately, work on prevention and giving treatment information to families.

Undergraduate and graduate

MacDonald, D.I. Drugs, drinking, and adolescence. *American Journal of Diseases in Children* 138:117-125, 1984. 67 ref.

General issues

1. epidemiological aspects
4. implications of denial
12. patient and family education as part of treatment
13. providing patient education
14. medical-legal aspects

Diagnosis and recognition

1. criteria for diagnosing

2. diagnostic methods for early stages
6. negative attitudes

Management

7. present diagnosis and need for treatment
8. physician attitudes
10. agencies and facilities

Special populations

1. age, gender, culture, occupation

This article reviews several aspects of drug abuse in the adolescent population, in particular, the incidence of the problem and some of the acute and chronic complications. Most importantly, the article discusses drug abuse as a progressive disease by giving the clinician a model for seeing the disease develop in several stages. This model is then taken one step further as it is applied in the diagnosis and prognosis of adolescent drug abuse. The author also discusses the important legal issues of confidentiality and consent to treatment in adolescents by providing some important clinical guidelines. The article also emphasizes the importance of the family, as well as the need for "nonmedical" agencies, as an integral part of treating chemical dependency in adolescents.

Undergraduate and graduate

Morse, R.M., and Hurt, R.D. Screening for alcoholism. *Journal of the American Medical Association* 242(24):2688-2690, 1979. 15 ref.

Diagnosis and recognition

1. criteria for diagnosing
2. diagnostic methods for early stages
3. associated medical, surgical, and psychiatric conditions
5. blood, urine, and breath tests

This brief article is designed to familiarize physicians with simple screening methods for the detection of

alcoholism. It includes four suggested questions as well as reference to the MAST and a revision called "The Self-Administered Alcoholism Screening Test." The authors suggest interviewing the spouse and mentions high-risk groups. The article reviews laboratory tests such as liver function and blood alcohol tests. Lastly, it reviews the National Council on Alcoholism (NCA) criteria for the diagnosis of alcoholism.

Undergraduate

Nace, E.P. Epidemiology of alcoholism and prospects for treatment. *Annual Review of Medicine* 35:293-309, 1984.

General issues

1. epidemiological aspects

Special populations

1. age, gender, culture, occupation

This article reviews drinking patterns in the general public, the prevalence of problems as a result of drinking, and the general success rate for treatment. It also looks specifically at five subgroups — older adults, adolescents, blacks, Hispanics, and women—and discusses the epidemiology and success of treatment for these groups.

Graduate

Nace, E.P. Alcoholism: Epidemiology, diagnosis, and biological aspects. *Alcohol* 3:83-87, 1986. 34 ref.

General issues

1. epidemiological aspects

Diagnosis and recognition

1. criteria for diagnosing
2. diagnostic methods for early stages
3. associated medical, surgical, and psychiatric conditions

This article reviews an epidemiologic data form derived from random surveys

of American households and standardized diagnostic instruments. It also discusses recent studies on lab tests and their efficacy in diagnosing alcoholism. It concludes with a discussion of genetic factors in alcoholism and the tetrahydroisoquinoline theory.

Undergraduate and graduate

Naranjo, C.A.; Sellers, E.M.; Chater, K.; Iverson, P.; Roach, C.; and Sykora, K. Non-pharmacologic intervention in acute alcohol withdrawal. *Clinical Pharmacological Therapeutics* 34(2):214-219, 1983. 15 ref.

Management

2. clinical presentation and treatment of withdrawal

A prospective, randomized, double-blind, placebo-controlled study examined supportive care versus supportive care plus drug therapy in the treatment of patients with acute alcohol withdrawal. The study indicated that patients in mild withdrawal can improve without drug therapy in an emergency department setting.

Graduate

Nicholi, A.M. The nontherapeutic use of psychoactive drugs. A modern epidemic. *New England Journal of Medicine* 308:925-933, 1983. 95 ref.

General issues

1. epidemiological aspects
6. classes and street names of abused substances
7. common terminologies

Diagnosis and recognition

3. associated medical, surgical, and psychiatric conditions

Management

1. clinical presentation and treatment of acute intoxication
2. clinical presentation and treatment of withdrawal

Complications

2. acute and chronic manifestations

Special populations

1. age, gender, culture, occupation

This is an excellent review of six classes of commonly abused drugs. Epidemiologic data (with emphasis on prevalence of use) is detailed, along with symptoms of acute and chronic use. Short- and long-term sequellae of the various drugs are discussed. A discussion postulates the reason for the 20-fold increase in illicit drug use over a 20-year period (1960s to 1980s) as being a disruption of the family unit, primarily through divorce.

Undergraduate and graduate

Niven, R.G. Adolescent drug abuse. *Hospital and Community Psychiatry* 37(6):596-607, 1986. 37 ref.

General issues

1. epidemiological aspects
4. implications of denial
12. patient and family education as part of treatment

Diagnosis and recognition

2. diagnostic methods for early stages
3. associated medical, surgical, and psychiatric conditions
6. negative attitudes

Management

6. detoxification as first step in treatment
7. present diagnosis and need for treatment
8. physician attitudes
10. agencies and facilities
11. effects of patient or family

Special populations

1. age, gender, culture, occupation

This article summarizes the principles for assessing and intervening in adolescents with drug abuse problems. The historical and laboratory evaluations are

presented concisely. Since the presentation of an adolescent to the emergency department with a drug abuse problem often involves a "crisis" situation, the discussion of intervention principles (i.e., presenting the diagnosis), as well as major problems in intervention (and how they should be handled), is important and presented concisely. The section on dealing with violent behavior in the drug abusing patient is an excellent introduction to this clinical problem.

Undergraduate and graduate

Nocks, J.J. Instructing medical students on alcoholism: What to teach with limited time. *Journal of Medical Education* 55:858, 1980. 17 ref.

Diagnosis and recognition

6. negative attitudes

Management

8. physician attitudes

This article reviews the literature on the development of the negative attitudes physicians have toward alcoholic patients. In addition, it describes a short course that can be introduced into the medical curriculum emphasizing an approach to dealing with medical students' negative attitudes toward alcoholic patients.

Undergraduate and graduate

Parsons, O.A., and Leber, W.R. Alcohol, cognitive dysfunction, and brain damage. In: *Biomedical Processes and Consequences of Alcohol Use*. Alcohol and Health Monograph, No. 2, DHHS Pub. No. (ADM) 82-1191, 1982. pp. 213-253. 87 ref.

Complications

2. acute and chronic manifestations

This article reviews the existing evidence (i.e., cerebral blood flow studies, event-related potentials, and

computerized axial tomography) supporting a causal relationship between alcohol abuse and brain damage/cognitive dysfunction in alcoholics, especially in relation to the age of the patient.

Graduate

Reyna, T.M.; Holiis, H.W.; and Hulsebus, R.C. Alcohol-related trauma. The surgeon's responsibility. *Annals of Surgery* 201(2):194-197, 1985. 13 ref.

General issues

1. epidemiological aspects
2. substance abuse in prehospital and emergency department
4. implications of denial
9. groups to educate, strategies and needs
11. maintaining up-to-date knowledge

Diagnosis and recognition

2. diagnostic methods for early stages
3. associated medical, surgical, and psychiatric conditions
5. blood, urine, and breath tests

Management

1. clinical presentation and treatment of acute intoxication
8. physician attitudes

Special populations

1. age, gender, culture, occupation
3. medical and surgical conditions and development of abuse

Of 4,056 consecutive trauma patients studied, 2,961 were older than 15. These were analyzed, and 9.5 percent had BAL > 80 mg/dl. Eight of the nine trauma fatalities were alcohol-related. Forty percent of the patients with injuries severe enough to necessitate admission were under the influence of ethanol. Advice to the surgeons: Identify the young problem drinker, screen patients with minor injuries for alcoholism, and look for the treatable. ED staff and surgeons do not look for and recognize

alcoholics. When recognized, get the patient into treatment.

Undergraduate and graduate

Reynolds, E.S. Marijuana and health. *Texas Medicine* 79:42-44, 1983. 2 ref.

Complications

2. acute and chronic manifestations
4. pharmacological vs. toxicological manifestations

Special populations

2. pregnancy

This summary of a report presented by the Institute of Medicine of the National Academy of Sciences points out the relatively high prevalence of marijuana use in high school seniors and its effects on the nervous system and behavior, the cardiovascular and respiratory systems, the reproductive system, and the immune system. The report outlines the therapeutic uses of marijuana and the need for more research on marijuana. A major concern of the committee is the inadequacy of our knowledge about marijuana.

Undergraduate and graduate

Rund, D.A.; Summers, W.K.; and Levin, M. Alcohol use and psychiatric illness in emergency patients. *Journal of the American Medical Association* 245(12):1240-1241, 1981. 5 ref.

General issues

1. epidemiological aspects
2. substance abuse in prehospital and emergency department

Diagnosis and recognition

1. criteria for diagnosing
2. diagnostic methods for early stages

3. associated medical, surgical, and psychiatric conditions

This is a brief study of 200 emergency department patients subjected to a screening interview to detect alcoholism and other psychiatric disorders. The study indicated a 20-percent incidence of alcoholism, 29 percent of patients seen at night and 11 percent of those seen during the day. Twelve of 40 patients had alcoholism alone, whereas 28 patients had one to five concomitant psychiatric disorders diagnosed. Only 8 percent of the patients presented with a chief complaint directly related to alcohol, whereas 63 percent presented with trauma and 23 percent with vague neuropsychiatric complaints like fatigue. Affective disorders and sociopathic personality disorders were the most common psychiatric disorders diagnosed.

Graduate

Schaefer, J.M. Ethnic and racial variations in alcohol use and abuse. In: *Special Populations Issue*. Alcohol and Health Monograph No. 4, DHHS, 1982. pp. 293-311. 108 ref.

General issues

3. ethnic, socioeconomic, occupation, and other factors
4. implications of denial

Special populations

1. age, gender, culture, occupation

This paper explores some of the current evidence for both the biochemical (genetic) and psychosocial factors that may underlie the development of alcoholism in various ethnic and racial groups. Biochemical parameters discussed include ethnic differences in the metabolism of alcohol, particularly alcohol and acetaldehyde dehydrogenase, and how such differences may act as either a positive reinforcer or deterrent to alcohol abuse.

Graduate

Simpson, D.L., and Rumback, B.H. Methylenedioxyamphetamine: Clinical description of overdose, death, and review of pharmacology. *Archives of Internal Medicine* 141: 1507-1509, 1981. 40 ref.

Management

1. clinical presentation and treatment of acute intoxication
4. therapeutic and diagnostic intervention
7. present diagnosis and need for treatment

Complications

2. acute and chronic manifestations
3. complications of pharmacotherapy
4. pharmacological vs. toxicological manifestations

Methylenedioxyamphetamine is a street drug that has characteristics of mescaline and an amphetamine. This article is a case report.

Graduate

Skinner, H.A.; Holt, S.; and Israel, Y. Early identification of alcohol abuse: 1. Critical issues and psycho-social indicators for a composite index. 2. Clinical and laboratory indicators. *Canadian Medical Association Journal* 124:1141-1152, 1279-1299, 1981. 119 ref.

General issues

1. epidemiological aspects
2. substance abuse in prehospital and emergency department
3. ethnic, socioeconomic, occupation, and other factors
4. implications of denial
5. disease concept vs. other models or theories
8. responsibilities and limitations in treating patients
9. groups to educate, strategies and needs
10. educational offerings
11. maintaining up-to-date knowledge
13. providing patient education

Diagnosis and recognition

1. criteria for diagnosing
2. diagnostic methods for early stages
4. differential diagnosis
5. blood, urine, and breath tests

Management

4. therapeutic and diagnostic intervention

Special populations

1. age, gender, culture, occupation

Early identification of alcoholism could result in early intervention, which could allow effective intervention with low-cost educational and motivational programs.

Undergraduate and graduate

Skinner, H.A.; Holt, S.; Schuller, R.; Roy, J.; and Israel, Y. Identification of alcohol abuse using laboratory tests and a history of trauma. *Annals of Internal Medicine* 101:847-851, 1984. 29 ref.

General issues

1. epidemiological aspects
2. substance abuse in prehospital and emergency department

Diagnosis and recognition

1. criteria for diagnosing
2. diagnostic methods for early stages
3. associated medical, surgical, and psychiatric conditions
5. blood, urine, and breath tests

Management

1. clinical presentation and treatment of acute intoxication

Complications

1. environmental, athletic, and/or occupational illness
2. acute and chronic manifestations

A simple paper with a very consequential message: A good history with

regard to previous trauma will more successfully and more reliably predict a problem drinker than a battery of laboratory tests (GGT, MCV, HDL). The normality of the laboratory tests was valuable in ruling out alcoholism.

Undergraduate and graduate

Small, J.; Wilbains, M.; Johnson, N.; and Russell, L.F. Alcohol and the elderly. *Alcohol Health and Research World* 8:39-47, 1984.

General issues

1. epidemiological aspects
3. ethnic, socioeconomic, occupation, and other factors
4. implications of denial
9. groups to educate, strategies and needs
13. providing patient education

Diagnosis and recognition

3. associated medical, surgical, and psychiatric conditions

Management

3. management prehospital vs. emergency department
4. therapeutic and diagnostic intervention

Special populations

1. age, gender, culture, occupation

This compilation of brief reports describes six treatment programs across the country that deal exclusively with the elderly (over 55, average age 60-62). A common theme is the need to address more than just substance abuse in the programs. They stress the importance of determining general health needs and the need for restoring self-determination and independence in daily living. The point is made that elderly alcoholics are not a homogenous group, but are composed of early- and late-onset drinkers, the latter about 33 percent of the total.

These two groups require different approaches. The long-term drinkers seem to respond to standard treatments, while the late-onset abusers often drink because of the loss of a spouse, child, or friends, or because of familial turmoil. Feelings of isolation and depression turn them to alcohol; therefore, the treatment is geared more toward encouraging the patient to become reinterested in life and the community at large. In general, success rates of treatment are good, ranging from 40 to 52 percent. All programs emphasize the importance of discharge preplanning to ensure reasonable living situations upon leaving the facility and the need for maintaining contact with the center upon discharge for support and reinforcement.

Undergraduate and graduate

Smith, J.W. Diagnosing alcoholism. *Hospital and Community Psychiatry* 34(11):1017-1021, 1983. 23 ref.

General issues

1. epidemiological aspects
5. disease concept vs. other models or theories

Diagnosis and recognition

1. criteria for diagnosing
3. associated medical, surgical, and psychiatric conditions
6. negative attitudes

Management

7. present diagnosis and need for treatment

This article discusses definitions of alcohol dependency and abuse, followed by a system-by-system testing of signs and symptoms supporting the diagnosis of alcoholism. It concludes with how to best inform the patient of the diagnosis of alcohol abuse.

Undergraduate and graduate

Sokol, R.J.; Miller, S.L.; and Martier, S. *Preventing Fetal Alcohol Effects: A Practical Guide for Ob/Gyn Physicians and Nurses*. DHHS Pub. No. (ADM) 83-1163, U.S. Department of Health and Human Services, 1983. 9 ref.

General issues

8. responsibilities and limitations in treating patients
11. maintaining up-to-date knowledge
13. providing patient education

Diagnosis and recognition

1. criteria for diagnosing
2. diagnostic methods for early stages
3. associated medical, surgical, and psychiatric conditions

Management

4. therapeutic and diagnostic intervention

Complications

2. acute and chronic manifestations

Special populations

2. pregnancy

This is a practical guide for diagnosing alcohol abuse in pregnant women. It also covers complications.

Graduate

Solomon, J.; Vanga, N.; Morgan, J.F.; and Joseph, P. Emergency-room physicians' recognition of alcohol misuse. *Journal of Studies on Alcohol* 41(5):583-586, 1980. 12 ref.

General issues

2. substance abuse in prehospital and emergency department
4. implications of denial
8. responsibilities and limitations in treating patients

Diagnosis and recognition

2. diagnostic methods for early stages
6. negative attitudes

Management

8. physician attitudes

This study helps define the extent to which emergency physicians diagnose and refer patients with alcoholism and/or alcohol misuse. The results indicate only about one-third of patients are accurately diagnosed, and less than 1 in 10 appropriately referred. This study emphasizes that (1) physicians' negative attitudes toward the alcoholic patient impair their ability to accurately diagnose this problem and (2) through physician education on the problem and knowledge of referral, a significant improvement in diagnosis and treatment can be realized.

Undergraduate and graduate

Spector, I. AMP: A new form of marijuana. *Journal of Clinical Psychiatry* 46(11):498-499, 1985. 2 ref.

Diagnosis and recognition

1. criteria for diagnosing
4. differential diagnosis

Management

1. clinical presentation and treatment of acute intoxication
7. present diagnosis and need for treatment

Complications

2. acute and chronic manifestations
3. complications of pharmacotherapy
4. pharmacological vs. toxicological manifestations

AMP is marijuana soaked in formaldehyde. Psychiatrists and emergency physicians should be alerted to AMP's unique symptom profile. This article presents five case reports.

Graduate

Spickard, A., and Billings, F.T. Alcoholism in a medical school faculty. *The New England Journal of Medicine* 305(27):1646-1649, 1981. 4 ref.

Management

7. present diagnosis and need for treatment
8. physician attitudes

Complications

1. environmental, athletic, and/or occupational illness
2. acute and chronic manifestations

Special populations

1. age, gender, culture, occupation
3. medical and surgical conditions and development of abuse

Physician impairment

1. signs and symptoms
2. unable to ask for help
3. identifying and preventing impairment
4. reporting and intervening
5. risk factors

In a 10-year period, 7 of 500 Vanderbilt Medical School faculty members were identified as alcoholics. Colleagues were shown to identify the disease in their peers, who progressed to advanced disease states before intervention occurred. This paper calls for education so that alcoholism is recognized in its early stages and early intervention can begin.

Undergraduate and graduate

Stephenson, J.N.; Moberg, P.; Daniels, B.J.; and Robertson, J.F. Treating the intoxicated adolescent. A need for comprehensive services. *Journal of the American Medical Association* 252(14):1884-1888, 1984. 14 ref.

General issues

1. epidemiological aspects
2. substance abuse in prehospital and emergency department
9. groups to educate, strategies and needs

10. educational offerings
13. providing patient education

Special populations

1. age, gender, culture, occupation

This article focuses on the special problems of the intoxicated adolescent. In most clinical settings, assessment is not done for the underlying substance abuse and psychosocial problems of the adolescent. In this Wisconsin study, emergency department patients were at greater risk, but the control population had a substantial risk. These substance abusers used social service interventions for family and school-related problems.

Undergraduate and graduate

Summers, W.K.; Rund, D.A.; and Levin, M. Psychiatric illness in a general urban emergency room—daytime versus nighttime population. *Journal of Clinical Psychiatry* 40:340, 1979. 19 ref.

General issues

1. epidemiological aspects
9. groups to educate, strategies and needs

Diagnosis and recognition

1. criteria for diagnosing
4. differential diagnosis

Management

8. physician attitudes

This study reports the frequency of major psychiatric illnesses in patients presenting to an urban emergency department. Patients were evaluated using a Renard Psychiatric Research Interview, which includes the diagnoses alcohol abuse and drug dependence. The study demonstrated that a relatively high percentage of patients presented with psychiatric illnesses (approximately 20 percent being diagnosed as drug dependent and 35 percent with alcoholism).

Undergraduate and graduate

Tabakoff, B.; Cornell, N.; and Hoffman, P.L. Alcohol tolerance. *Annals of Emergency Medicine* 15:1005-1012, 1986. 95 ref.

General issues

14. medical-legal aspects

Complications

2. acute and chronic manifestations

This review article relates the importance of tolerance (a diminished response after prior consumption of a drug) in the genesis of alcoholism. The article presents evidence that the development of tolerance allows for the intake of larger doses of ethanol to attain the desired reinforcing effect of the drug. The attenuating effect of environmental factors on tolerance, as well as the development of tolerance to specific cognitive and psychomotor tasks, are also reviewed.

Graduate

Talbott, G.D.; Gallegos, K.V.; Wilson, P.O.; and Porter, T.L. The Medical Association of Georgia's impaired physician program review of the first 100 physicians: Analysis of speciality. *Journal of the American Medical Association* 257(21):2927-2930, 1987. 22 ref.

Physician impairment

5. risk factors

This report of 1,000 impaired Georgia physicians compares the age, speciality, license status, and professional activity of the study group with the expected demographics for the group based on the AMA masterfile. It also surveys the drugs used, the route, number of drugs, and previous treatment. It seems anesthesiology and family practice are at particular risk; there were more men and fewer older than 65 in the general physician population. The authors propose a larger scale study of impaired physicians to discover factors predisposing to impairment.

Graduate

Tennant, F.S., and Pumphrey, A. Management of patients dependent upon prescription opioids. *Resident and Staff Physician* 32(4):41-47, 1986. 9 ref.

General issues

4. implications of denial
8. responsibilities and limitations in treating patients
13. providing patient education
14. medical-legal aspects

Diagnosis and recognition

1. criteria for diagnosing

Management

2. clinical presentation and treatment of withdrawal
6. detoxification as first step in treatment
13. drug-seeking behavior

This review article covers the long-term management of the patient dependent on prescription opioids. In addition, clinical recognition and management of opioid dependence/ withdrawal, including treatment of relapse, are covered. Most importantly for the education of the emergency physician, this article provides a concise approach to the differentiation of opioid abuse from therapeutic opioid use. This article also provides some useful legal and prescribing information on opioids.

Undergraduate and graduate

Twerski, A.J. Early intervention in alcoholism - confrontational techniques. *Hospital and Community Psychiatry* 34:1027-1030, 1983. 8 ref.

General issues

4. implications of denial
8. responsibilities and limitations in treating patients
9. groups to educate, strategies and needs
12. patient and family education as part of treatment

Management

4. therapeutic and diagnostic intervention
6. detoxification as first step in treatment
7. present diagnosis and need for treatment
10. agencies and facilities
11. effects of patient or family
12. roles of people assisting in treatment

This article provides a concise explanation of the confrontational technique. It details how the technique can be applied in a standard medical/psychiatric encounter and as a collaborative, guided effort by family members and significant others in the alcoholic's life. Complications of this direct approach, including suicide, are briefly presented, but the technique is defended based on the serious, even life-threatening, effects of long-term alcohol abuse.

Undergraduate and graduate

Westermeyer, J. The psychiatrist and solvent-inhalant abuse: Recognition, assessment and treatment. *American Journal of Psychiatry* 144:903-907, 1987. 94 ref.

General issues

1. epidemiological aspects
3. ethnic, socioeconomic, occupation, and other factors

Management

1. clinical presentation and treatment of acute intoxication

Complications

2. acute and chronic manifestations

Special populations

1. age, gender, culture, occupation

This brief overview of inhalant abuse includes a list of commonly inhaled substances and at-risk populations. A diagnostic approach is outlined, and treatment is discussed.

Undergraduate and graduate

Whitney, R.B. Alcoholics in emergency rooms. *Bulletin of the New York Academy of Medicine* 59(2):216-221, 1983. 7 ref.

General issues

1. epidemiological aspects
2. substance abuse in prehospital and emergency department
3. ethnic, socioeconomic, occupation, and other factors
9. groups to educate, strategies and needs
10. educational offerings

Diagnosis and recognition

1. criteria for diagnosing

Management

6. detoxification as first step in treatment
7. present diagnosis and need for treatment
10. agencies and facilities

Erie County Medical Center established an emergency department consultation service to meet needs of alcoholics seen in the emergency department and to provide for detoxification and appropriate referral. The relatively moderate cost can be partially offset through improved efficiency in emergency departments.

Graduate

Yago, K.B.; Pitts, F.N.; Burgoyne, R.W.; Aniline, O.; Yago, L.S.; and Pitts, A.F. The urban epidemic of phencyclidine (PCP) use: Clinical and laboratory evidence from a public psychiatric hospital emergency service. *Journal of Clinical Psychiatry* 42(5): 193-196, 1981. 16 ref.

General issues

1. epidemiological aspects

Diagnosis and recognition

3. associated medical, surgical, and psychiatric conditions
4. differential diagnosis

Management

1. clinical presentation and treatment

of acute intoxication

9. acute vs. chronic organic brain syndrome

Complications

2. acute and chronic manifestations

This study of 145 consecutive patients seen in an urban psychiatric emergency department determined the incidence of measurable PCP blood levels in the patient sample. Despite the absence of telltale symptoms of PCP ingestion in many of the patients, 43.4 percent of all patients had PCP detected. The significance of the PCP level in causing the psychotic disorders that prompted the visit is not clear. It is unknown whether the PCP was causative, contributory, or coincidental to the aberrant behavior.

Graduate

Zornetzer, S.F.; Walker, D.W.; Hunter, B.E.; and Abraham, W.C. Neurophysiological changes produced by alcohol. In: *Biomedical Processes and Consequences of Alcohol Use*, Alcohol and Health Monograph No. 2. DHHS, 1982. pp. 95-127. 171 ref.

General issues

7. common terminologies

Complications

2. acute and chronic manifestations

This paper discusses the broad spectrum of neurophysiological alterations caused by ethanol. The paper reviews some of the current theories elucidating the mechanism of ethanol's acute effects at the cellular level (i.e., membrane fluidity) as well as the current concepts of the development of tolerance and physical dependence/withdrawal. Other neurophysiological complications produced by alcohol are explored, including sleep disturbances and the possible relationship between chronic alcohol abuse and brain damage.

Graduate

MATERIALS/OBJECTIVES MATRIX

	GI	Dx	Mgt	Comp	S Pop	Imp
Anderson, C.T. <i>Minnesota's Chemically Dependent Physicians</i> . Office of Academic Affairs, Hennepin County Medical Center, 701 Park Avenue, Minneapolis, MN 55415. pp. 1-5.	•	•	•	•	•	•
Baker, F.M. ER "capture of the skid-row alcoholic." <i>General Hospital Psychiatry</i> 2:138-143, 1985.	•		•			
Bander, K.W.; Goldman, D.S.; Schwartz, M.A.; Rabinowitz, E.; and English, J.T. Survey of attitudes among three specialists in a teaching hospital toward alcoholics. <i>Journal of Medical Education</i> 62:17-24, 1987.	•	•	•		•	
Bean, M. Chapter principals and methods—Alcoholics Anonymous. <i>Psychiatric Annals</i> 5(2):6-13, 1975.	•		•			
Bernadt, M.W.; Mumford, S.; Taylor, C.; Smith, B.; and Murray, R.M. Comparison of questionnaire and laboratory tests in the detection of excessive drinking and alcoholism. <i>Lancet</i> 1:325-328, 1982.		•				
Beschner, G.M., and Friedman, A.S. Treatment of adolescent drug abusers. <i>International Journal of Addictions</i> 20(6-7):971-993, 1985.	•	•			•	
Bewley, T.H. Prescribing psychoactive drugs to addicts. <i>British Medical Journal</i> 281:497-498, 1980.	•		•			
Caruana, D.S.; Weinbach, B.; Goerg, D.; and Gardner, L.B. Cocaine—packet ingestion—diagnosis, management and natural history. <i>Annals of Internal Medicine</i> 100:73-74, 1984.	•	•	•		•	
Chappel, J.N., and Schnoll, S.H. Physician attitudes—effect on treatment of chemically dependent patients. <i>Journal of the American Medical Association</i> 237(21):2318-2319, 1977.	•	•	•			
Chitwood, D.D.; Wells, K.S.; and Russe, B.R. Medical and treatment definitions of drug use: The case of the adolescent user. <i>Adolescence</i> 16(64): 817-830, 1981.	•				•	
Clark, D.C.; Eckenfels, E.J.; Daugherty, S.R.; and Fawcett, J. Alcohol use patterns through medical school. <i>Journal of the American Medical Association</i> 257(1):2921-2926, 1987.						•



Clark, W.D. Alcoholism: Blocks to diagnosis and treatment. *The American Journal of Medicine* 71:275-286, 1981.

Coggan, P.; Davis, A.; and Rogers, J. Teaching alcoholism to family medicine students. *The Journal of Family Practice* 13(7):1025-1028, 1981.

Coggan, P.; Davis, A.; and Haddac, R. Alcoholism curriculum development: An examination of the process. *The Journal of Family Practice* 19(4):527-532, 1984.

Cohen, S. Marijuana use detection: The state of the art. *Drug Abuse and Alcoholism* 12(3), 1983.

Crowley, T.J. Alcoholism—identification, evaluation and early treatment. *Western Journal of Medicine* 140:461-464, 1984.

David, G. Early signs of alcoholism. *Journal of the American Medical Association* 238(2):161-162, 1977.

Dowling, G.P.; McDonough, E.T.; and Bost, R.O. "Eve and Ecstasy," a report of five deaths associated with the use of MDEA and MDMA. *Journal of the American Medical Association* 257(12):1615-1617, 1987.

Eckardt, M.J.; Harford, T.C.; Kaebler, C.T.; et al. Health hazards associated with alcohol consumption. *Journal of the American Medical Association* 246:648-666, 1981.

Ewing, J.A. Detecting alcoholism: The CAGE questionnaire. *Journal of the American Medical Association* 252:1905-1907, 1984.

Ficarra, B.J. Toxicology states treated in an emergency department. *Clinical Toxicology* 17(1):1-43, 1980.

Funkhouser, J.E., and Dennison, R.W. Preventing alcohol-related birth defects—suggestions for action. *Alcohol Health and Research World* 10(1):54-60, 1985.

Gallant, D.S. *Alcohol and Drug Abuse Curriculum Guide for Psychiatry Faculty*. U.S. Department of Health and Human Services, Curriculum Resource Series: Medicine 2, 1982.

Gay, G.R. Clinical management of acute and chronic cocaine poisoning. *Annals of Emergency Medicine* 11:562-572, 1982.

Gibb, K. Serum alcohol levels, toxicology screens, and use of the breath alcohol analyzer. *Annals of Emergency Medicine* 15:349-353, 1986.

Gold, M.S.; Potash, A.L.C.; and Extein, I.R.L. Clonidine: Inpatient studies from 1978 to 1981. *Journal of Clinical Psychiatry* 43(6 sec. 2):35-38, 1982.

	GI	Dx	Mgt.	Comp	S Pop	Imp
Clark, W.D. Alcoholism: Blocks to diagnosis and treatment. <i>The American Journal of Medicine</i> 71:275-286, 1981.	•	•	•			
Coggan, P.; Davis, A.; and Rogers, J. Teaching alcoholism to family medicine students. <i>The Journal of Family Practice</i> 13(7):1025-1028, 1981.	•	•	•		•	
Coggan, P.; Davis, A.; and Haddac, R. Alcoholism curriculum development: An examination of the process. <i>The Journal of Family Practice</i> 19(4):527-532, 1984.	•	•				
Cohen, S. Marijuana use detection: The state of the art. <i>Drug Abuse and Alcoholism</i> 12(3), 1983.		•				
Crowley, T.J. Alcoholism—identification, evaluation and early treatment. <i>Western Journal of Medicine</i> 140:461-464, 1984.	•	•	•			
David, G. Early signs of alcoholism. <i>Journal of the American Medical Association</i> 238(2):161-162, 1977.		•				
Dowling, G.P.; McDonough, E.T.; and Bost, R.O. "Eve and Ecstasy," a report of five deaths associated with the use of MDEA and MDMA. <i>Journal of the American Medical Association</i> 257(12):1615-1617, 1987.	•		•			
Eckardt, M.J.; Harford, T.C.; Kaebler, C.T.; et al. Health hazards associated with alcohol consumption. <i>Journal of the American Medical Association</i> 246:648-666, 1981.	•	•	•	•	•	
Ewing, J.A. Detecting alcoholism: The CAGE questionnaire. <i>Journal of the American Medical Association</i> 252:1905-1907, 1984.		•				
Ficarra, B.J. Toxicology states treated in an emergency department. <i>Clinical Toxicology</i> 17(1):1-43, 1980.	•	•	•	•		
Funkhouser, J.E., and Dennison, R.W. Preventing alcohol-related birth defects—suggestions for action. <i>Alcohol Health and Research World</i> 10(1):54-60, 1985.	•	•	•	•	•	
Gallant, D.S. <i>Alcohol and Drug Abuse Curriculum Guide for Psychiatry Faculty</i> . U.S. Department of Health and Human Services, Curriculum Resource Series: Medicine 2, 1982.	•	•	•	•		•
Gay, G.R. Clinical management of acute and chronic cocaine poisoning. <i>Annals of Emergency Medicine</i> 11:562-572, 1982.	•	•	•	•	•	
Gibb, K. Serum alcohol levels, toxicology screens, and use of the breath alcohol analyzer. <i>Annals of Emergency Medicine</i> 15:349-353, 1986.	•	•	•			
Gold, M.S.; Potash, A.L.C.; and Extein, I.R.L. Clonidine: Inpatient studies from 1978 to 1981. <i>Journal of Clinical Psychiatry</i> 43(6 sec. 2):35-38, 1982.			•			

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Griffin, J.B.; Hill, I.K.; Jones, J.J.; Keeley, K.A.; Krug, R.S.; and Pokorny, A. Evaluating alcoholism and drug abuse knowledge in medical education: A collaborative project. *Journal of Medical Education* 58(11):859-63, 1983.

Holt, S., and Skinner, H.A. Early identification of alcohol abuse: 2 clinical and laboratory indicators. *Canadian Medical Association Journal* 124:1279-1299, 1981.

Hughes, J.H.; Schernitzki, P.; Byers, J.; and Likes, K. Trauma in patients influenced by drugs and alcohol. *Annals of Emergency Medicine* 9(1):7-11, 1980.

Jankowski, G., and Drum, D.E. Criteria for the diagnosis of alcoholism. *Archives of Internal Medicine* 137:1532-1536, 1977.

Kamerow, D.B.; Pincus, H.A.; and MacDonald, D.I. Alcohol abuse, other drug abuse, and mental health disorders in medical practice. Prevalence costs, recognition, and treatment. *Journal of the American Medical Association* 255:2054-57, 1986.

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Khantzian, E.J., and McKenna, G.J. Acute toxic and withdrawal reactions associated with drug use and abuse. *Annals of Internal Medicine* 90:361-372, 1979.

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Lewis, D.C., and Gordon, A.J. Alcoholism and the general hospital: The Roger Williams intervention program. *Bulletin of the New York Academy of Medicine* 59(2):181-197, 1983.

Long, W.A.; Brown, R.C.; Jenkins, R.R.; Sanders, J.M.; and Schenberg, S.K. The role of the pediatrician in substance abuse counseling. *Pediatrics* 72(2):251-252, 1983.

Lowenfels, A.B., and Miller, T.T. Alcohol and trauma. *Annals of Emergency Medicine* 13:1056-1060, 1984.

Ludwig, A.; Bendfeldt, F.; and Wikler, A. Loss of control in alcoholics. *Archives of General Psychiatry* 35:370-373, 1978.

	GI	Dx	Mgt	Comp	S Pop	Imp
Goldstein, D.B.				•		
Griffin, J.B.	•					
Holt, S.		•				
Hughes, J.H.	•	•			•	
Jankowski, G.	•	•	•	•		
Kamerow, D.B.	•	•	•			
Keller, M.	•					
Khantzian, E.J.			•			
Landers, D.F.		•	•	•		
Landesman-Dwyer, S.	•				•	
Lewis, D.C.	•	•	•			
Long, W.A.			•		•	
Lowenfels, A.B.	•	•		•	•	
Ludwig, A.	•					

McCarron, M.M.; Schulze, B.W.; Thompson, G.A.; Conder, M.C.; and Goetz, W.A. Acute phenylcyclidine intoxication: Incidence of clinical findings in 1,000 cases. *Annals of Emergency Medicine* 10(5):237-242, 1981.

MacDonald, D.I. How you can help prevent teenage alcoholism. *Contemporary Pediatrics* Nov:50-72, 1986.

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Morse, R.M., and Hurt, R.D. Screening for alcoholism. *Journal of the American Medical Association* 242(24):2688-2690, 1979.

Nace, E.P. Epidemiology of alcoholism and prospects for treatment. *Annual Review of Medicine* 35:293-309, 1984.

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Niven, R.G. Adolescent drug abuse. *Hospital and Community Psychiatry* 37(6):596-607, 1986.

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Reynolds, E.S. Marijuana and health. *Texas Medicine* 79:42-44, 1983.

Rund, D.A.; Summers, W.K.; and Levin, M. Alcohol use and psychiatric illness in emergency patients. *Journal of the American Medical Association* 245(12):1240-1241, 1981.

Schaefer, J.M. Ethnic and racial variations in alcohol use and abuse. In: *Special Populations Issue*. Alcohol and Health Monograph No. 4, DHHS, 1982. pp. 293-311.

	GI	Dx	Mgt	Comp	S Pop	Imp
McCarron, M.M.; Schulze, B.W.; Thompson, G.A.; Conder, M.C.; and Goetz, W.A. Acute phenylcyclidine intoxication: Incidence of clinical findings in 1,000 cases. <i>Annals of Emergency Medicine</i> 10(5):237-242, 1981.	•	•	•			
MacDonald, D.I. How you can help prevent teenage alcoholism. <i>Contemporary Pediatrics</i> Nov:50-72, 1986.	•	•	•		•	
MacDonald, D.I. Drugs, drinking, and adolescence. <i>American Journal of Diseases in Children</i> 138:117-125, 1984.	•	•	•		•	
Morse, R.M., and Hurt, R.D. Screening for alcoholism. <i>Journal of the American Medical Association</i> 242(24):2688-2690, 1979.		•				
Nace, E.P. Epidemiology of alcoholism and prospects for treatment. <i>Annual Review of Medicine</i> 35:293-309, 1984.	•				•	
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	GI	Dx	Mgt	Comp	S Pop	Imp
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