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ABSTRACT

The resource manual provides guidelines and resources for individuals interested in integrating a substance abuse curriculum into existing programs for medical students and residents in internal medicine. Materials and resources appropriate for practicing physicians are also included. Three sections are: (1) a statement of minimum knowledge and clinical skills for all practicing physicians, medical students, practicing interns and internal medical residents, and medical students completing internal medicine clinical experiences (e.g., general concepts, prevention, pharmacology and pathophysiology, evaluation of patient, patient management, legal aspects, and impairment of health professionals); (2) a description of resources and activities for reaching selected goals and achieving the minimum knowledge and clinical skills desirable for general internists (including residents and students) in managing patients who abuse alcohol and other drugs; and (3) a list of model curricula. This document contains approximately 200 references and a list of 23 audiovisual material resources. (SM)

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

Society of
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CONTENTS

PREFACE

In 1985, four specialty organizations representing four primary care specialties—the Society of General Internal Medicine (SGIM), formerly the Society for Research and Education in Primary Care Internal Medicine (SREPCIM); the Society of Teachers of Family Medicine; the Ambulatory Pediatric Association; and the American Psychiatric Association—received contracts from the National Institute on Alcohol Abuse and Alcoholism and the National Institute on Drug Abuse to assess the status of education in alcohol and other drug abuse in their respective specialties. The organizations collaborated to develop a common questionnaire to assess current curricula in substance abuse and to develop a statement regarding skills, knowledge, and attitudes in substance abuse medicine desirable for practicing physicians. Each organization then developed competency statements unique to their particular disciplines.

This resource manual, developed by SGIM, provides guidelines and resources for individuals interested in integrating a substance abuse curriculum into existing programs for medical students and residents in internal medicine. Materials and resources appropriate for physicians beyond formal training are also included.

The statement of minimum knowledge and clinical skills for all practicing physicians, developed by representatives from the four specialty organizations, is presented first. Many of the skills, for example the interviewing skills, are desirable for managing other chronic medical problems commonly encountered by general internists.

This is followed by a set of goals for achieving the minimum knowledge and clinical skills desirable for general internists, including residents and students, in managing patients who abuse alcohol and other drugs. These statements were developed by a group of internists who served as an advisory committee for the project. Representing broad interests and varied backgrounds, they included general internists, residency training program directors, and substance abuse specialists. The Committee's draft statement was reviewed by residency program directors, residents, practicing internists, and substance abuse specialists and was revised according to their suggestions.

Resources and activities that might prove useful in accomplishing the goals are suggested, but they are not meant to be all inclusive. Rather, they provide guidelines to help individuals integrate alcohol and other drug abuse education into existing programs. Appropriate resources and activities are listed for students, residents, and practicing physicians. In general, the resources and activities for students are appropriate for first- and/or second-year students during a physical diagnosis or similar clerkship or experience. Activities appropriate for third-year students during the traditional required internal medicine clerkship are specified. Resources and activities for residents are intended for both traditional and primary care residency

programs. Resources for students (learners) as well as for teachers are included. Suggestions for evaluating the effectiveness of a program in achieving the desired goals are also given.

Several model curricula on alcohol and other drug abuse are described in this manual. They were identified through a survey on substance abuse education in internal medicine by the Society for Research and Education in Primary Care Medicine. Only a few curricula are included at each level of training in internal medicine. Program selection was based in part on curriculum assessment by two educational consultants to the program who evaluated the following:

1. Background assessment of learners
2. Statement of rationale
3. Clarity of program goals
4. Range of concepts addressed
5. Appropriateness of learning opportunities for goals
6. Progression from dependent, instructor-directed learning to independent, self-directed learning
7. Adequacy of time and emphasis devoted to each concept
8. Diversity and flexibility of instructional activities
9. Logical relationship of topics and activities
10. Comprehensiveness of curriculum plan including goals, learning opportunities, and learner and program evaluation
11. Adequacy of personnel, resources, and time devoted to the program

A bibliography of further potentially useful materials is included at the end of the manual.

INTRODUCTION

Alcoholism and other drug abuse occur in very significant numbers among patients seen by internists. The adverse effects of substance abuse cost our society more that $200 billion annually through lost productivity, crime, and health care expenditures. It is estimated that 1 in every 10 deaths in the United States is alcohol related, 20 percent of total national expenditures for hospital care are alcohol related, 12 percent of total health care expenditures for adults are for alcohol-related problems, 10–20 percent of patients in the typical internist's practice have alcoholism, and 20–40 percent of patients hospitalized on general medical and surgical services have alcoholism. Abuse of prescription drugs is common, and estimates of other drug use in America include more than 500,000 heroin addicts, more than 10 million cocaine users, and more than 13 million marijuana users. Health professionals are at similar risk for alcoholism and opioid drug abuse.

Treatment of patients with substance abuse has been demonstrated to be of some benefit. Short-term effects of treatment include reductions in hospital days, health care center visits, days absent from work, and industrial accidents.

The long-term benefits of treatment are less clear. Some data suggest that treatment works, but other data show no benefit from treatment or are ambiguous. Most treatment studies included late-stage alcoholics or drug abusers; some data suggest that patients are more likely to benefit from treatment intervention in the early stages of their illness.

In spite of the prevalence of alcohol and other drug abuse among patients, physicians of all specialties, including internal medicine, frequently miss the diagnosis, especially in patients in the early to middle stages. Physicians frequently fail to acknowledge substance abuse as the primary problem or to offer treatment to patients when it is recognized.

Among the many reasons for physicians' traditionally poor performance in caring for patients with substance abuse is a lack of knowledge and adequate skills. A recent survey of internal medicine training programs throughout the country indicated that only 40 percent of traditional residency programs include any formal training in the diagnosis and management of alcoholism or other drug abuse. Only 50 percent of primary care internal medicine residency programs include formal teaching on this subject. The quality and content of the curricula are variable. Treatment of medical complications of alcohol and other drug abuse is emphasized, rather than treatment of the primary problem of substance abuse. Furthermore, most programs do not offer clinical experience and supervision.

Factors responsible for the lack of integration of substance abuse education into the mainstream of internal medicine training include physician attitudes toward patients who abuse alcohol and other drugs, the orientation of internal medicine training toward the diagnosis and medical management of acute problems, the concept that substance abuse is not an illness that internists should treat, and the lack of faculty role models interested in the subject. However, it seems imperative that internists be well trained in the diagnosis and management of alcohol and other drug abuse, given the prevalence of this problem among their patients. Internists are in a unique position to identify early substance abuse; with appropriate training, they can become adept at diagnosing and managing patients with these problems.

MINIMUM KNOWLEDGE AND CLINICAL SKILLS IN ALCOHOL AND OTHER DRUG ABUSE

FOR ALL PRACTICING PHYSICIANS

The purpose of this statement is to broadly describe the minimum knowledge and skills in alcohol and other drug abuse desired for practicing physicians, including general internists, psychiatrists, family physicians, and pediatricians. This body of knowledge is presented because the practicing physician is at the forefront of prevention and management of this important problem.

Physicians should accept alcohol and other drug abuse as medical disorders. They should be informed about substance abuse disorders; recognize the effect on the patient, the family, and the community; and be able to diagnose and treat these disorders. Physicians should recognize their own personal strengths and limitations in managing patients with substance abuse.

General Concepts

The practicing physician should understand the following general concepts related to alcohol and other drug abuse:

1. Common definitions
2. Diagnostic criteria
3. Epidemiology and natural history
4. Risk factors, including familial and sociocultural factors and current genetic and biologic theories
5. The relationship of this group of disorders to the functioning of the family

Prevention

Practicing physicians should understand their role in prevention of alcohol and other drug abuse problems through patient education, risk identification, and prescribing practices.

Pharmacology and Pathophysiology

The practicing physician should understand the following:

1. The pharmacology and behavioral effects of commonly abused substances
2. The physiology of intoxication, dependence, tolerance, and withdrawal
3. Pathological effects of acute and chronic drug and alcohol abuse on organ systems

Evaluation of the Patient

The practicing physician should be aware of specific presenting complaints suggestive of alcohol or other drug abuse. In addition, physicians should be able to screen effectively for the early and late manifestations of substance abuse, including behavioral manifestations.

Once substance abuse is suspected in an individual patient, physicians should be able to confirm the diagnosis by obtaining a detailed alcohol and drug history, identifying physical findings suggestive of substance abuse, and interpreting the results of selected laboratory tests.

The practicing physician should be aware that substance abuse disorders may present as other medical or psychiatric disorders or may be complicated by the presence of psychiatric or medical comorbidity.

The practicing physician should be aware that denial in the patient, family, and physician delays recognition and treatment.

Patient Management

Practicing physicians should be able to directly manage or refer patients for treatment of acute intoxication, overdose, and withdrawal. They should be able to motivate the patient for further treatment and select an appropriate management plan from available treatment options, bearing in mind the patient's needs and community resources. They should know about the various treatment alternatives and the expected outcomes of treatment.

Physicians should recognize their responsibility in the long-term management and followup of patients who abuse alcohol or other drugs.

The practicing physician should be familiar with the philosophy and availability of self-help groups for the patient and family, such as Alcoholics Anonymous and Al-Anon.

Legal Aspects

The practicing physician should know the legal aspects of informed consent, release of information, and obtaining blood, urine, and breath tests in screening for alcohol and other drug use.

The physician should be knowledgeable about the laws and regulations governing the use of controlled substances.

Impairment of Health Professionals

The practicing physician should be aware of health professionals as a group at risk for alcohol and drug problems and informed about the resources available for impaired colleagues.

FOR ALL MEDICAL STUDENTS

Medical students should be aware of the prevalence of patients with alcohol and other drug abuse problems in all medical settings. Students should have the same fund of knowledge in this area as practicing physicians. Students should also be able to screen for substance abuse when taking a history and conducting a physical examination and should be able to take a detailed alcohol or drug use history when appropriate. Students should be aware of different treatment modalities and their expected outcomes. They are not expected to have the skills necessary to treat patients for their primary problem.

FOR PRACTICING INTERNISTS AND INTERNAL MEDICINE RESIDENTS

General Concepts

The internist should:

1. be able to distinguish alcohol and other drug abuse and addiction/dependence from other forms of substance use;

2. be familiar with current criteria (e.g., DSM, WHO, NCA) for making a diagnosis of alcohol or other drug abuse/dependence;

3. have knowledge of the natural histories of alcoholism and other drug abuse; the epidemiology of substance abuse, including populations at risk (including health professionals), prevalence, prognostic factors, and the overall costs to society; and hereditary and sociocultural factors that play a role in the syndrome of substance abuse;

4. be aware that defense mechanisms in the patient, family, and physician delay recognition and treatment of substance abuse; and

5. realize that physician prescribing practices can contribute to the potential for substance abuse in patients.

Pharmacology and Pathophysiology

The internist should have knowledge of or ready access to information about the following:

1. The basic pharmacologic properties of the classes of commonly abused drugs (stimulants, depressants, opiates, inhalants, hallucinogens, and cannabinols)

2. The half–life and duration of pharmacologic effects of commonly abused substances

3. The drug interactions among commonly abused drugs and between them and prescription drugs

4. The principles of the physiology of dependence, withdrawal, and tolerance and how they apply to clinical practice

5. The pathologic effects of acute and chronic drug and alcohol use on the various organ systems

Evaluation of the Patient

The internal medicine resident should have access to a consultant or preceptor to assist with the following management skills. The resident should know how to use a preceptor or consultant effectively.

1. By being aware of the early behavioral manifestations of alcohol and other drug abuse and the features in the history, physical examination, and laboratory tests that suggest this disorder, the internist should be able to screen effectively for its presence in the same framework as screening for other problems such as cancer and hypertension.

2. The internist should know the symptoms, physical findings, and laboratory abnormalities present in patients with late–stage alcoholism and other drug abuse.

3. The internist should be able to take a detailed alcohol and drug use history (e.g., quantity, duration of use, route of administration, and evidence for development of tolerance) when indicated.

4. The internist should be aware of the relationship between alcohol and other drug abuse and other medical and psychiatric problems and how the former may masquerade as or mask the latter.

Management Knowledge and Skills

The internist should know the following:

1. The signs and symptoms, differential diagnoses, and management of overdose, intoxication, and withdrawal from commonly abused substances

2. The utility of blood, urine, and breath tests in screening for or monitoring treatment of alcohol and other drug abuse

3. The principles of the diagnosis and management of the medical complications of acute and chronic substance abuse

4. How to discuss the diagnosis with the patient and the family, and how to formulate a treatment plan

5. How to establish realistic treatment goals, be aware of available treatment modalities and their limitations, and determine the need for inpatient versus outpatient treatment

6. The philosophy and organization of self–help groups (e.g., Alcoholics Anonymous, Narcotics Anonymous)

7. The indications for and side effects of disulfiram and naltrexone

8. How to maintain a continuing primary care relationship with a substance abusing patient, either assuming or coordinating treatment of the patient for this problem or following the patient in conjunction with a specialist in substance abuse

9. How to educate patients about potentially addictive or abused substances

10. How to provide consultative service to physicians in the surgical or nonmedical specialties for patients who possibly or definitely abuse alcohol or other drugs

Legal Aspects

1. The internist should have knowledge of the medical-legal principles (including informed consent) involved when obtaining breath, blood, and urine tests for abused substances.

2. The physician should be aware of the laws and guidelines that ensure patient confidentiality and how they apply to release of medical information regarding alcohol and other drug abuse.

3. The physician should be aware of the laws that apply to the prescription of controlled substances and, specifically, to methadone maintenance.

FOR MEDICAL STUDENTS COMPLETING INTERNAL MEDICINE CLINICAL EXPERIENCES

The medical student should be aware of the high prevalence of alcoholism and other drug abuse among patients commonly seen by internists.

General Concepts

The student should have current knowledge of the following:

1. Definitions of abuse, addiction/dependence, and tolerance

2. Criteria (e.g., DSM, WHO) for making a diagnosis of alcohol or other drug abuse

3. Sociocultural and hereditary factors that affect the use of potentially addictive or abused substances

4. Defense mechanisms in the patient, family, and physician that may lead to delayed recognition and treatment of substance abuse

5. How physician prescribing practices can contribute to the potential for substance abuse in patients

Pharmacology and Pathophysiology

The student should have current knowledge of the following:

1. Classifications of commonly abused drugs (stimulants, depressants, opiates, inhalants, hallucinogens, and cannabinols)

2. The half-life and duration of the pharmacologic effects of commonly abused substances

3. The physiology of dependence and withdrawal and its clinical application

4. The pathological effects of acute and chronic drug and alcohol use on the major organ systems

Patient Evaluation

The student should be able to do the following:

1. Effectively screen for alcohol and other drug abuse in the course of performing a routine history and physical examination by being aware of the early behavioral manifestations and features of the history, physical exam, and laboratory data that suggest such a diagnosis.

2. Work intelligently with specific screening tools such as the CAGE and MAST questionnaires.

3. Take a detailed alcohol and drug use history, when indicated.

4. Formulate a differential diagnosis when considering drug or alcohol abuse and be aware of how substance abuse disorders may present as other medical or psychiatric disorders.

Management Knowledge and Skills

1. The student should understand the principles of the diagnosis and treatment of overdose, withdrawal, and acute intoxication.

2. The student should know the signs and symptoms of the common medical complications of acute and chronic alcohol and other drug abuse.

3. The student should know how to discuss the diagnosis with the patient.

4. The student should be aware of the issues regarding long-term treatment of patients who abuse alcohol or other drugs.

5. The student should understand the philosophy and organization of self-help groups (e.g., Alcoholics Anonymous, Narcotics Anonymous).

Legal Aspects

1. The student should have knowledge of the medical-legal principles (including those of informed consent) involved when physicians obtain breath, blood, and urine to test for abused substances.

2. The student should be aware of the laws that apply to the prescription of controlled substances and, specifically, to methadone maintenance.

RESOURCES AND ACTIVITIES TO ACHIEVE DESIRED GOALS

Training in alcohol and other drug abuse for students, residents, and practicing physicians can be effectively integrated into existing educational programs. The resources and activities suggested here are intended to give learners the skills necessary to identify patients who abuse alcohol or other drugs, present the diagnosis to the patient, formulate a treatment plan, and manage any complications of the disorder.

A basic fund of knowledge pertaining to substance abuse in disciplines such as epidemiology, pharmacology, and pathophysiology is required to develop and use the desired skills. These topics can be incorporated into the preclinical training of medical students.

Clinical skills in substance abuse can be developed along with basic interviewing, physical examination, and other diagnostic skills during medical school and residency training. Because of the prevalence of patients who abuse alcohol or other drugs in all medical settings, clinical training need not be limited to specialized treatment units. At a minimum, internists should be able to manage the most common problems in patients, seen in the ambulatory and inpatient settings, who abuse alcohol or other drugs.

Training in substance abuse for students and residents will not be limited to curricula offered by the Department of Medicine in most institutions, because it frequently requires a multidisciplinary effort. Some institutions have established committees composed of representatives from various departments to coordinate teaching about alcohol and other drug abuse to avoid duplication or significant omissions in the curriculum.

GOAL

To have knowledge of the natural history and epidemiology of alcohol and other drug abuse and the role of sociocultural and hereditary factors in the syndrome of substance abuse.

Knowledge Desirable

Clinical students, residents, and practicing physicians:

1. The natural history of untreated and treated alcoholism and other drug abuse
2. Important risk factors
3. Prevalence rates
4. Socioeconomic and ethnic differences
5. Overall costs to society including health care costs
6. Genetic theories regarding alcoholism
7. Other theories regarding the etiology of alcohol and other drug abuse disorders

Activities to Accomplish Goal

Clinical students:

1. Incorporate material in didactic presentations in preventive medicine, community medicine, social medicine, or epidemiology courses.
2. Include a summary of the prevalence rates, costs to society, etc., in any

discussion regarding rationale for substance abuse education.

3. Self-instruction (reading)

Residents:

1. Discuss epidemiologic studies in literature review conferences.

2. Include information regarding risk factors, prognosis for patients, natural history, etc. in rounds related to patients who abuse alcohol or other drugs.

3. Self-instruction (reading)

Practicing physicians:

1. Self-instruction (reading)

Resources for Instructor

Clinical students, residents, and practicing physicians:

1. Vaillant, G.E. *The Natural History of Alcoholism.* Cambridge, MA: Harvard University Press, 1983.

2. Department of Health and Human Services. *First Statistical Compendium on Alcohol and Health.* DHHS No. (ADM) 81-1115. Rockville, MD: the Department, 1981.

3. Richards, L.G., ed. *Demographic Trends and Drug Abuse, 1980-1995.* DHHS Pub. No. (ADM) 81-1069. Rockville, MD: U.S. Department of Health and Human Services, 1981.

4. Putman, S.L. Alcoholism, morbidity and care-seeking. *Medical Care* 20:97-121, 1982.

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7. Clark, W.B., and Midani, K.L. Alcohol use and alcohol problems among U.S. adults. Results of the 1979 national survey. In: *Consumption and Related Problems.* DHHS Pub. No. (ADM) 82-1190. Washington, DC: U.S. Department of Health and Human Services, 1982.

8. Kandel, D.B., and Logan, J.A. Patterns of drug use from adolescence to young adulthood: I. Periods of risk for initiation, continued use, and discontinuation. *American Journal of Public Health* 74:660-66, 1984.

9. Morrant, J.C.A. Use and abuse of psychoactive drugs in the elderly. *Canadian Medical Association Journal* 129:245-48, 1983.

10. Anonymous. Natural history of opiate addiction (editorial). *Lancet* 2:404, 1981.

11. Hughes, P.H.; Barker, N.W.; Crawford, G.A.; and Jaffe, J.H. The natural history of a heroin epidemic. *American Journal of Public Health* 62:995-1001, 1972.

12. Robins, L.N. The natural history of drug abuse. In: Lettieri, D.J.; Sayers, M.; and Pearson, H.W., eds. *Theories on Drug Abuse: Selected Contemporary Perspectives.* Research Monograph 30. Rockville, MD: National Institute on Drug Abuse, 1980.

13. Hasday, J.D., and Karch, F.E. Benzodiazepine prescribing in a family medicine center. *JAMA* 246:1321-5, 1981.

Resources for Trainees

Clinical students and residents:

1. Niven, R.G. Alcoholism—A problem in perspective. *JAMA* 252:1912-14, 1984.

2. Vaillant, G.E. The course of alcoholism and lessons for treatment. In: *Psychiatry Update*, Vol. III Washington, DC: American Psychiatric Association Press, 1984. pp. 311–319.

3. Goodwin, D.W. Alcoholism and heredity. A review and hypothesis. *Archives of General Psychiatry* 36:57–61, 1979.

4. Nicholi, A.M. The nontherapeutic use of psychoactive drugs: A modern epidemic. *New England Journal of Medicine* 308:925–33, 1983.

5. Quayle, D. American productivity. The devastating effect of alcoholism and drug abuse. *American Psychologist* 38: 454–58, 1983.

6. Spickard, A., and Billings, F.T. Alcoholism in a medical school faculty. *New England Journal of Medicine* 305: 1646, 1981.

7. Schuckit, M.A. Genetics and the risk for alcoholism. *JAMA* 254:2614–17, 1985.

8. Anonymous. Epidemiology of drug usage (editorial). *Lancet* 1:147, 1985.

9. Scheibel, W.R. Abuse of office drugs. *Seminar on Family Medicine* 1:297–98, 1980.

10. 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. *JAMA* 255:2054–57, 1986.

Practicing physicians:

1. All of the above.

2. *The Physician's Role in Rocognizing Substance Abuse.* Produced by Illinois State Medical Society, Illinois Department of Alcoholism and Substance Abuse.

Evaluation of Trainees/Program

Clinical students:

1. Formal testing of knowledge

Residents:

1. Demonstrate ability to discuss risk factors, prognosis, and natural history in individual patients

2. Demonstrate understanding of sociocultural factors in presenting patients

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GOAL

To be familiar with diagnostic criteria for alcohol and other drug abuse.

Knowledge/Behavior Desirable

Clinical students, residents, and practicing physicians:

1. Use criteria to help organize features of the history, examination, and laboratory tests to assist in making a decision about the diagnosis.

2. Be aware that even though no diagnostic tests or complex of signs and symptoms will confirm a diagnosis of substance abuse, criteria exist to help to make the diagnosis.

Activities to Accomplish Goal

Clinical students and residents:

1. Review criteria when discussing patients with a possible diagnosis of alcohol or other drug abuse.

2. Self-teaching (reading)

Practicing physicians:

1. Self-teaching

Resources for Instructor

1. Criteria Committee, National Council on Alcoholism. Criteria for the diagnosis of alcoholism. *Annals of Internal Medicine* 77:249–58, 1972.

2. Edwards, G.; Arif, A.; and Hodgson, R. Nomenclature and classification of drug- and alcohol-related problems: A WHO memorandum. *Bulletin of the World Health Organization* 59:225–242, 1981.

3. *Diagnostic and Statistical Manual for Mental Disorders, Third Edition.* Washington, DC: American Psychiatric Association Press, 1980. pp. 163–170.

Resources for Trainees

Same as for instructor.

GOAL

To provide patient education regarding the use of potential abused drugs.

Knowledge Desirable

Clinical students, residents, and practicing physicians:

1. Accept responsibility for providing patient education.

2. Be aware of impact of alcohol and other drug abuse on the individual, family, and community.

Activities to Accomplish Goal

Clinical students:

1. Assess risk in individual patients and discuss appropriate educational topics.

Residents and practicing physicians:

1. Same as above.

2. Make risk assessment in patients and discuss risk-reduction techniques with patients.

Resources for Instructor

Clinical students, residents, and practicing physicians:

1. Hewitt, L.E. Current status of alcohol education programs for youth. In: National Institute on Alcohol Abuse and Alcoholism. *Special Population Issues*. Alcohol and Health Monograph No. 4. DHHS Pub. No. (ADM) 82–1193. Washington, DC: Supt. of Docs., US Govt. Print. Off., 1982. pp. 227–260.

2. Omens, G.S. Preventing injuries, disability, and death at work. *JAMA* 248:723–24, 1982.

3. Council on Scientific Affairs. Automobile-related injuries: Components, trends, prevention. *JAMA* 249:3216–22, 1983.

4. Anonymous. Need pleasure be harmful? (editorial). *Lancet* 1:350, 1980.

5. Anonymous. Alcohol and the fetus—is zero the only option? (editorial). *Lancet* 1:682, 1983.

Resources for Trainees

Clinical students and residents:

1. Council on Scientific Affairs. Marijuana. Its health hazards and therapeutic potentials. *JAMA* 246:1823–27, 1981.

2. Goodwin, D.W. Alcoholism and heredity. A review and hypothesis. *Archives of General Psychiatry* 36:57–61, 1979.

3. Food and Drug Administration. Surgeon General's advisory on alcohol and pregnancy. *FDA Drug Bulletin* 11:9–10, 1981.

4. Relman, A.S. Marijuana and health. *New England Journal of Medicine* 306:603–5, 1982.

5. Lieber, C.S. To drink (moderately) or not to drink? *New England Journal of Medicine* 310:846–8, 1984.

6. Rapp, C.E. The adolescent patient. *Annals of Internal Medicine* 99:52–60, 1983.

7. Consensus Development Panel. Drug concentrations and driving impairment. *JAMA* 254:2618–21, 1985.

8. Mills, J.L; Graubard, B.I; Harley, E.E.; et al. Maternal alcohol consumption and birth weight: How much drinking during pregnancy is safe? *JAMA* 252:1875–79, 1984.

Practicing physicians:

1. Stoudamire, A., and Rhoads, J.M. When the doctor needs a doctor: Special considerations for the physician patient. *Annals of Internal Medicine* 98:654–59, 1983.

2. Wells, K.B., et al. Do physicians preach what they practice? A study of physicians' health habits and counseling practices. *JAMA* 252:2846–48, 1984.

3. Brunton, S.A. Physicians as patient teachers. *Western Journal of Medicine* 141:855–60, 1984.

GOAL

To prescribe medications appropriately.

Knowledge Desirable

Clinical students, residents, and practicing physicians:

1. Basic pharmacologic properties of the classes of commonly abused drugs including the half-life and duration of the pharmacologic effects

2. How physician prescribing practices can contribute to the abuse of drugs

3. Laws regulating the prescription of controlled substances

Activities to Accomplish Goal

Clinical students:

1. Include information in pharmacology courses.

2. Discuss with preceptors rationale for prescribing drugs in individual patients.

Residents and practicing physicians:

1. Assess prescribing practices by chart review and/or peer review with appropriate feedback to individual.

2. Familiarize self with local, State and Federal regulations of prescription of controlled substances.

3. Self-instruction.

Resources for Instructor

1. Health and Policy Committee, American College of Physicians. Chemical dependence. *Annals of Internal Medicine* 102:405–408, 1985.

2. Scheibel, W.R. Abuse of office drugs. *Seminars in Family Medicine* 1:297–8, 1980.

3. Rickels, K.; Case, G.; Downing, R.W.; et al. Long-term diazepam therapy and clinical outcome. *JAMA* 250:767, 1983.

4. Elliott, J. Physician prescribing practices criticized; solutions in question. *JAMA* 241:2353–4, 2359–60, 1979.

Resources for Trainees

1. Drug Enforcement Administration and the DEA/Practitioners Working Committee. Guidelines for prescribers of controlled substances. *JAMA* 244:234, 1980.

2. Council on Scientific Affairs. Drug

abuse related to prescribing practices. *JAMA* 247:864–6, 1982.

3. Solomon, F.; White, C.C.; Parron, D.L.; et al. Sleeping pills, insomnia, and medical practice. *New England Journal of Medicine* 300:803–08, 1979.

4. Gilman, A.G.; Goodman, L.S.; and Gilman, A., eds. *The Pharmacological Basis of Therapeutics*. 7th ed., New York: Macmillan, 1985.

Evaluation of Trainees

Residents and practicing physicians:

1. Peer review

GOAL

To screen effectively for substance abuse/addiction in the course of taking a medical history and performing a physical examination.

Knowledge, Clinical Skills Desirable

Clinical students:

1. What questions to ask about alcohol and drug use during routine history

2. How to take a detailed alcohol and drug use history when appropriate

3. The early and late manifestations of substance abuse including behavioral manifestations, symptoms, physical signs, and laboratory abnormalities

4. Screening tests such as the CAGE and MAST questionnaires

Residents and practicing physicians:

1. Same as for clinical students

2. How to distinguish abuse and addiction from tolerance and dependence

Activities to Accomplish Goal

Clinical Students:

In physical diagnosis course or introduction to clinical medicine or similar experience:

1. Lectures—how to take an alcohol and other drug use history, signs and symptoms of substance abuse with emphasis on early manifestations, current criteria for making a diagnosis.

2. Clinical demonstrations—live interview with patient, videotaped interview, role playing with recovering patient or with simulated patient.

3. Discussion of cases in clinical pathologic conference format.

4. Case Management Problems (an existing computer program).

5. Preceptors—review alcohol and drug histories and demonstrate history taking at bedside.

6. Students—administer CAGE and/or MAST questionnaires to at least one patient and interpret results.

7. Have students take an alcohol and drug history from every patient.

Residents:

1. Lectures—ambulatory/primary care resident teaching conferences on signs and symptoms of substance abuse, how to take a substance abuse history, review of current criteria for diagnosis

2. Preceptor/instructor confirmation of history, physical findings; have you ruled out substance abuse in this patient?

3. Chart review reminders

4. Rounds—invite residents' questions regarding difficult patients, remember to include substance abuse in differential diagnosis when patients with symptoms consistent with substance

abuse are presented (e.g., hypertension, depression)

Practicing physicians:

1. Continuing medical education
2. Case discussions
3. Self-teaching

Resources for Instructor

Clinical students:

1. *Alcoholism and the Physician* (video cassette or 16mm film). *Early Diagnosis* (20 minutes). *Confirming the Diagnosis/Initiating Treatment* (18 minutes). San Diego, CA: Project Cork, 1981.

2. Liepman, M.R. *Identification of the Alcoholic Patient* (22 minute video cassette). Biomedical Media Production Unit, University of Michigan Medical Center, 1979.

3. Kinney, J., and Severinghaus, J. Use of recovering alcoholics in teaching settings. In: Kinney, J.; Price, T.R.; Whybrow, P.C.; and Linsey, S., eds. *Project Cork. A Case Study in Designing and Implementing an Alcohol Curriculum for Medical Education.* Hanover, NH: Project Cork Institute Dartmouth Medical School, 1986.

4. Ewing, J.A. Detecting alcoholism: The CAGE questionnaire. *JAMA* 252:1905-7, 1984.

5. Seltzer, M.L. The Michigan Alcoholism Screening Test: The quest for a new diagnostic instrument. *American Journal of Psychiatry* 127:1653-8, 1971.

6. Skinner, H.A.; Holt, S.; Schuller, R.; et al. Identification of alcohol abuse using laboratory tests and a history of trauma. *Annals of Internal Medicine* 101:847-851, 1984.

7. Self Learning in Alcohol and Alcoholism for Undergraduate Students in Family Medicine. Instructional Software package for the Apple Computer. University of Missouri-Kansas City School of Medicine, Evaluation Resource Center.

Residents:

1. See 3, 4, 5, 6 listed above.

2. Cohen, S. The diagnosis of dysfunctional drinking. *Archives of Internal Medicine* 142:2081-2, 1982.

3. Eckardt, M.J.; Ryback, R.S.; Rawlings, R.R.; et al. Biochemical diagnosis of alcoholism: A test of discriminating capabilities of gamma-glutamyl transpeptidase and mean corpuscular volume. *JAMA* 246:2707-10, 1981.

4. Ryback, R.S., et al. Discriminant analysis as an aid to interpretive reporting of clinical laboratory tests. *JAMA* 248:2342-5, 1982.

5. Wikler, A. Diagnosis and treatment of drug dependence of the barbiturate type. *American Journal of Psychiatry* 125:758, 1968.

6. Tennant, F.S.; Day, C.M.; and Ungerleider, J.T. Screening for drug and alcohol abuse in a general medical population. *JAMA* 242:533-5, 1979.

Resources for Trainees

Clinical students:

1. Whitfield, C.L.; Davis, J.E.; Barker, L.R. Alcoholism. In: Barker LR, Burton JR, and Zieve PD, eds. *Principles of Ambulatory Medicine* 2nd edition. Baltimore, MD: Williams and Wilkins, 1986.

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

3. Johnson, V.E. I'll quit tomorrow. New York: Harper and Row, 1973.

4. 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 124:1141–52, 1279–99, 1981.

5. Weinberg, J.R. Interview techniques for diagnosing alcoholism. *American Family Physician* 9(Mar):107–15, 1974.

6. Benforado, J.M. The office diagnosis of "street" drug abuse. *Seminars in Family Medicine* 1:287–95, 1980.

7. O'Brien, C.M.; Wesson, D.; and Schnoll, S. Diagnosis and evaluation of the drug abusing patient. *NDAC Medical Monograph Series* 1:1, 1977.

Residents:

1. See 1–8 above.

2. Drum, D.E.; Goldman, P.A.; and Jankowski, C.B. Elevation of serum uric acid as a clue to alcohol abuse. *Archives of Internal Medicine* 141:477–9, 1981.

Practicing physicians:

1. *The Physician's Role in Recognizing Substance Abuse*. Produced by Illinois State Medical Society, Illinois Department of Alcoholism and Substance Abuse.

Evaluation of Trainees/Program

Clinical students:

1. Direct observation of trainee performance by preceptor/instructor

Residents:

1. Same as above

2. Residents voluntarily discuss/present alcohol or other drug abusing patients, refer patients for treatment, participate in education of medical students.

3. Estimate rate of detection through quality assurance and peer review measures.

Practicing physicians:

1. Peer review

GOAL

To know how to approach the patient who denies the problem and how to discuss the diagnosis of alcohol or other drug abuse with the patient and family.

Knowledge Desirable

1. How psychological defense mechanisms in the patient, family, and physician delay recognition and treatment.

2. Meaning of denial and confrontation.

Activities to Accomplish Goal

Clinical students:

1. Lecture on denial and how to present diagnosis to the patient as part of physical diagnosis or similar experience

2. Role playing with simulated patients

3. View videotapes or films

4. Observe preceptor confronting patient

Residents:

1. Role playing with simulated patients

2. Review of videotapes of residents with patients

3. Consultation with preceptors or attending physicians

4. Observe formal intervention

Practicing physicians:

1. Self-instruction
2. Peer review
3. Continuing medical education

Resources for Instructor

Clinical students:

1. Lisansky, E.T. Why physicians avoid early diagnosis of alcoholism. *New York State Journal of Medicine* 75: 1788–92, 1975.

2. *Alcoholism and the Physician* (video cassette or 16mm film). *Confirming the Diagnosis/Initiating Treatment.* San Diego CA: Project Cork, 1981.

3. Ewing, J. *Recognizing, Confronting and Helping the Alcoholic* (video cassette, 40 minutes). Medical Sciences Teaching Laboratories, University of North Carolina School of Medicine, Carrboro, NC.

Residents and practicing physicians:

1. Anonymous. Drunks and denial. *JAMA* 252:1869, 1984.

2. Deitch, R. Doctors' attitudes toward drug abusers. *Lancet* 1:354, 1986.

3. Bean, M.H. Denial and the psychological complications of alcoholism. In: Bean, M.H., and Zinberg, N.E., eds. *Dynamic Approaches to the Understanding and Treatment of Alcoholism.* New York: The Free Press, 1981. pp. 55–96.

4. Miller, W.R. Motivational interviewing with problem drinkers. *Behavioral Psychotherapy* 1:147–172, 1983.

Resources for Trainees

Clinical students:

1. Chappel, J.N. Confronting the alcohol and drug abusing patient. *Seminars in Family Medicine* 1:249–54, 1980.

2. Clark, W.D. Alcoholism: Blocks to diagnosis and treatment. *American Journal of Medicine* 71:275–86, 1981.

Residents and practicing physicians:

1. See 1 and 2 above for students.

2. DiCicco, L.; Unterberger, H.; and Mack, J.E. Confronting denial: An alcoholism treatment intervention strategy. *Psychiatric Annals* 8(11): 54–64, 1978.

Evaluation of Trainees/Program

Clinical students and residents:

1. Direct observation of performance with patients

GOAL

To negotiate a treatment plan and set realistic treatment goals with the patient.

Knowledge Desirable

Clinical students, residents, and practicing physicians:

1. Available treatment modalities and expected effectiveness of treatment

2. Philosophy and organization of self-help groups, such as Alcoholics Anonymous, Narcotics Anonymous

3. Available community resources

4. How to use consultants effectively

Activities to Accomplish Goal

Clinical students:

1. Discuss treatment options and strategies during rounds.

2. Teach at bedside.

3. View videotaped patient-physician interactions.

4. Attend self-help group meetings.

Residents and practicing physicians:

1. Case presentations with discussion of treatment options

2. Clinical teaching rounds

3. Consultation with experienced colleague or substance abuse expert

4. Reading

5. Self-help group meetings

Resources for Instructor

Clinical students:

1. *Alcoholism and the Physician. Confirming the Diagnosis/Initiating Treatment* (video cassette, 18 minutes). San Diego, CA: Project Cork, 1981.

2. *I'll Quit Tomorrow* (videotape, 30 minutes). The Johnson Institute .

Residents and practicing physicians:

1. Edwards, G., and Grant, M., eds. *Alcoholism Treatment in Transition.* Baltimore, MD: University Park Press; 1980.

2. McLellan, A.T.; Luborsky, L.; O'Brien, C.P.; et al. Is treatment for substance abuse effective? *JAMA* 247:1423–28, 1982.

3. Jones, K.R., and Vischi, T.R. Impact of alcohol, drug abuse and mental health treatment on medical care utilization. A review of the literature. *Medical Care* 17(S):1–82, 1979.

4. Emrick, C.D. A review of psychologically oriented treatment of alcoholism. II. The relative effectiveness of different treatment approaches and the effectiveness of treatment versus no treatment. *Journal of Studies on Alcohol* 36:88–108, 1975.

5. Rousaville, B.J., and Kleber, H.D. Untreated opiate addicts: How do they differ from those seeking treatment? *Archives of General Psychiatry* 42: 1072–77, 1985.

6. Kosten, T.R.; Rounsaville, B.J.; and Kleber, H.D. A 2–5 year follow-up of depression, life crisis, and treatment effects on abstinence among opioid addicts. *Archives of General Psychiatry* 43:733–38, 1986.

7. Goldstein, A. Heroin addiction: Sequential treatment employing pharmacologic supports. *Archives of General Psychiatry* 33:353–58, 1976.

8. Stimmel, B.; Hanbury, R.; Sturiano, V.; et al. Alcoholism as a risk factor in methadone maintenance. A randomized controlled trial. *American Journal of Medicine* 73:631–36, 1982.

9. Martin, W.R.; Jasinski, D.R.; Haertzen, C.A.; et al. Methadone. A reevaluation. *Archives of General Psychiatry* 28:286–95, 1973.

Resources for Trainees

Clinical students:

1. Bean, M. Alcoholics Anonymous. Psychiatric *Annals* 5(2):7–61; 5(3):7–57, 1975.

2. Clark, W.D. Alcoholism: Blocks to diagnosis and treatment. *American Journal of Medicine* 71:275–86, 1981.

3. Helzer, J.E.; Robbins, L.N.; Taylor, J.R.; et al. The extent of long-term moderate drinking among alcoholics discharged from medical and psychiatric treatment facilities. *New England Journal of Medicine* 12:1678–82, 1985.

Residents and practicing physicians:

1. See above.

2. Shuckit, M.A. Treatment of alcoholism in office and out-patient settings. In: Mendelson, J.M., and Mello, N.K., eds. *Diagnosis and Treatment of Alcoholism.* New York: McGraw Hill, 1979. pp. 229–57.

3. Vaillant, G.E.; Clark, W.D.; Cyrus, C.; et al. Prospective study of alcoholism treatment. Eight-year follow-up. *American Journal of Medicine* 75:455–63, 1983.

4. Whitfield, C.L.; Davis, J.E.; and Barker, L.R. Alcoholism. In: Barker, L.R.; Burton, J.R.; and Zieve, P.D., eds. *Principles of Ambulatory Medicine* 2nd ed. Baltimore, MD: Williams and Wilkins, 1986.

5. Tennant, F.S., and Rawson, R.A. Outpatient treatment of prescription opioid dependence: Comparison of two methods. *Archives of Internal Medicine* 142:1845–47, 1982.

6. Vaillant, G.E. Suggestions for would be helpers. In: *Natural History of Alcoholism.* Cambridge, MA: Harvard University Press, 1983. pp. 295–305.

7. Freedman, D.X., and Senay, E.C. Methadone treatment of heroin addiction. *Annual Review of Medicine* 24:153–64, 1973.

GOAL

To prescribe disulfiram and naltrexone effectively.

Knowledge Desirable

Clinical students:

1. The pharmacology of and indications for disulfiram and naltrexone

Residents and practicing physicians:

1. Same as above
2. When and how to prescribe disulfiram or naltrexone for an individual patient

Activities to Accomplish Goal

Clinical students:

1. Cover material in pharmacology courses.

Residents and practicing physicians:

1. Manage patients in outpatient and inpatient setting with appropriate supervision by consulting/precepting physician.

2. Self-teaching (reading)

Resources for Instructor

Clinical students:

1. *Antabuse: A Second Chance for Choosing* (21 min. video cassette). Toronto: Addiction Research Foundation.

Residents and practicing physicians:

1. Kwentus, M.D., and Major, L.F. Disulfiram in the treatment of alcoholism. A review. *Journal of Studies of Alcohol* 40:428–46, 1979.

2. Kleber, H.D. Naltrexone. *Journal of Substance Abuse Treatment* 2:117, 1985.

Resources for Trainees

Clinical students:

1. Gilman, A.G.; Goodman, L.S.; and Gilman, A., eds. *The Pharmacological Basis of Therapeutics.* 7th ed. New York: Macmillan, 1985.

Residents and practicing physicians:

1. Sbriglio, R., and Millman, R.B. Naltrexone in the treatment of narcotic addiction. *Internal Medicine* 7(6):105, 1986.

2. Sellers, E.M.; Naranjo, C.A.; and Peachey, J.E. Drugs to decrease alcohol consumption. *New England Journal of Medicine* 305:1255–62, 1981.

3. Fuller, R.K., and Roth, H.P. Disulfiram for the treatment of alcoholism: An evaluation of 128 men. *Annals of Internal Medicine* 90:901–4, 1979.

4. Charney, D.S.; Riordan, C.E.; Kleber, H.D.; et al. Clonidine and naltrexone. A safe, effective and rapid treatment of abrupt withdrawal from methadone

therapy. *Archives of General Psychiatry* 39:1327–32, 1982.

Evaluation of Trainees/Program

Residents and practicing physicians:

1. Peer review

GOAL

To use blood, urine, and breath tests effectively in screening for and following patients with substance abuse.

Knowledge Desirable

1. Accuracy of screening tests
2. Pharmacology of abused drugs
3. Legal and ethical implications of drug testing

Activities to Accomplish Goal

Clinical students:

Not applicable.

Residents and practicing physicians:

1. Self–teaching
2. Discussion sessions dealing with ethical–legal issues in medicine
3. Discussions in case presentations
4. Peer review

Resources for Instructor

Clinical students:

Not applicable.

Residents and practicing physicians:

1. Lundberg, G.D. Did he take something? What does the lab result mean? *JAMA* 248:83, 1982.
2. Brunk, S.F., and Delle, M. Morphine metabolism in man. *Clinical Pharmacology Therapy* 16:51–57, 1974.
3. Schwartz, R.H., and Hawks, R.L. Laboratory detection of marijuana use. *JAMA* 254:788–792, 1985.
4. Morgan, J.P. Problems of mass urine screening for misused drugs. *Journal of Psychoactive Drugs* 16:305–16, 1984.
5. Castro, A., and Mittleman, R. Determination of drugs of abuse in body fluids by radioimmunoassay. *Clinical Biochemistry* 11:103–105, 1978.

Resources for Trainees

Clinical students:

Not applicable.

Residents and practicing physicians:

1. Hanson, H.J.; Caudill, S.P.; and Boone, D.J. Crisis in drug testing. Results of CDC blind study. *JAMA* 253:2382–87, 1985.
2. Gibb, K. Serum alcohol levels, toxicology screens, and use of breath analyzer. *Annals of Emergency Medicine* 15:349–353, 1986.

Evaluation of Trainees/Program

Clinical students:

Not applicable.

Residents:

1. Review use of tests in individual patients.

GOAL

To know how to manage patients with overdose, acute intoxication, and withdrawal.

Knowledge Desirable

1. The pharmacology of the commonly abused substances.

2. The pathophysiology of dependence, withdrawal, and tolerance.

3. The signs and symptoms of overdose, withdrawal, and acute intoxication from the commonly abused substances.

Activities to Accomplish Goal

Clinical students:

1. Completion of pharmacology courses

2. Medicine rotation—include management of patients with overdose, intoxication, and withdrawal under supervision of resident, preceptor.

3. Emergency medicine rotation—include clinical evaluation and management of patients with supervision of resident, attending staff.

4. Clinical experience on substance abuse detoxification unit

5. Self-teaching (reading, audiovisual)

Residents:

1. Clinical experience on general medical inpatient and ambulatory units, substance abuse unit, and emergency room with supervision by staff physician

Resources for Instructor

Clinical students:

1. Van Tyn, R.A. *Overdose* (17 min video cassette). ECOM in conjunction with the St. Paul Dept. of Fire and Safety Services, 1977.

2. Sypker, D., and Reinstein, P. *Overdose —The Crucial Minutes* (28 min video cassette). National Clearinghouse for Poison Control, 1980.

3. Thomas, L.A. *Alcohol Withdrawal and Detoxification* (74 2x2 in. slides and cassette, 18 min.). Bowie, MD: Robert J. Brady Co., 1977.

4. Cox, A. *Behavioral Management of Intoxicated and Disruptive Patients in the Emergency Department* (20 min video cassette). Ontario: Addiction Research Foundation, 1979.

5. Gross, P.L. *Drug Overdose* (30 min video cassette). Boston, MA: Health Education Programs, Inc., 1978.

6. Coopwood, W.E; Bashir, L.L.; and Arrandondo, J.E. *The Emergency Management of Alcohol and Drug Abuse* (25 min video cassette). Nashville, TN: Meharry Medical College, 1977.

7. Aaronson, L.M.; Hinman, D.J.; and Okamoto, M. Effects of diazepam on ethanol withdrawal. *Journal of Pharmacological Experimental Therapeutics* 221:319–25, 1982.

Residents and practicing physicians:

1. Abernethy, D.R.; Greenblatt, D.J.; and Shader, R.I. Treatment of diazepam withdrawal syndrome with propanolol. *Annals of Internal Medicine* 94:354–5, 1981.

2. Simpson, D.L., and Rumack, B.H. Methylenedioxyamphetamine: Clinical description of overdose, death, and review of pharmacology. *Archives of Internal Medicine* 141:1507–9, 1981.

3. Lerner, W.D., and Fallon, H.J. The alcohol withdrawal syndrome. *New England Journal of Medicine* 313:951–2, 1985.

4. Caruana, D.S.; Weinbach, B.; Goerg, D.; et al. Cocaine-packet ingestion: Diagnosis, management, and natural history. *Annals of Internal Medicine* 100:73, 1984.

5. Stern, T.A.; Mulley, A.G.; Thibault, G.E.; et al. Life-threatening drug overdose: Precipitants and prognosis. *JAMA* 251:1983–5, 1984.

6. Taylor, C.D.; Cowart, C.O.; Ryan, N.T.; et al. Isopropanol intoxication:

Managing the coma. *Hospital Practice* 20(10):173–5, 1985.

7. Smith, D.E., et al. Phenobarbital technique for treatment of barbiturate dependence. *Archives of General Psychiatry* 24:56–60, 1971.

8. MacKinnon, G.L., et al. Benzodiazepine withdrawal syndrome: A literature review and evaluation. *American Journal of Drug and Alcohol Abuse* 9:19–33, 1982.

9. Charney, D.S.; Riordan, C.E.; Kleber, H.D.; et al. Clonidine and naltrexone. A safe, effective and rapid treatment of abrupt withdrawal from methadone therapy. *Archives of General Psychiatry* 39:1327–32, 1982.

Resources for Trainees

Clinical students:

1. Clark, W.D. Emergency treatment of the patient with alcoholism. In: Kravis, T., and Warner, C., eds. *Comprehensive Textbook of Emergency Medicine*. Rockville, MD: Aspen Press, 1983. pp. 517–531.

2. Brown, C.G. The alcohol withdrawal syndrome. *Annals of Emergency Medicine* 11:276–80, 1982.

3. Thompson, W.L. Management of alcohol withdrawal syndromes. *Archives of Internal Medicine* 138:278–283, 1978.

4. Goldfrank, L.; Flomenbaum, N.; Lewin, N.; et al. Toxicologic emergency: Withdrawal. *Hospital Physician* 18: 12–16, 21, 24, 29, 33–36, 1982.

Residents and practicing physicians:

1. Same as for students.

2. Krauss, M.L.; Gotlieb, L.D.; Horowitz, R.I.; et al. Randomized clinical trial of atenolol in patients with alcohol withdrawal. *New England Journal of Medicine* 313:905–9, 1985.

3. Gold, M.S.; Pottash, A.C.; Sweeney, D.R.; et al. Opiate withdrawal using clonidine: A safe, effective and rapid nonopiate treatment. *JAMA* 243:343–6, 1980.

4. Sellers, E.M., and Kalant, H. Alcohol intoxication and withdrawal. *New England Journal of Medicine* 294:757–62, 1976.

5. Thompson, W.L.; Johnson, A.D.; Maddrey, W.L.; et al. Diazepam and paraldehyde for treatment of severe delirium tremens: A controlled trial. *Annals of Internal Medicine* 82:175–80, 1985.

6. Lyon, L.J., and Anthony, J. Reversal of alcoholic coma by naloxone. *Annals of Internal Medicine* 96:464–5, 1982.

7. Feussner, J.R.; Linfors, E.W.; Blessing, C.L.; et al. Computed tomography brain scanning in alcohol withdrawal seizures: Value of the neurologic examination. *Annals of Internal Medicine* 94:519–22, 1981.

8. Gay, G.R. Clinical management of acute and chronic cocaine poisoning. *Annals of Internal Medicine* 11:562–72, 1982.

9. Naranjo, C.A., and Sellers, E.M. Clinical assessment and pharmacotherapy of the alcohol withdrawal syndrome. In: Galanter M, ed. *Recent Developments in Alcoholism*. New York: Plenum Press, 1986.

GOAL

To manage the complications of acute and chronic substance abuse.

Knowledge Desirable

Clinical students, residents, and practicing physicians:

1. The pathologic effects of acute and chronic substance abuse on various organ systems

Residents and practicing physicians:

1. How to recognize the complications of substance abuse

Activities to Accomplish Goal

Clinical students:

1. Discuss patient cases on rounds during medicine and emergency room rotations.

Residents and practicing physicians:

1. Manage patients with medical complications.
2. Self-teaching (reading)
3. Continuing medical education

Resources for Instructor

Clinical students, residents, and practicing physicians:

1. *The Medical Aspects of Alcohol Use.* 350 slides accompanied by a detailed text. Developed by Project Cork, Dartmouth Medical School.
2. Geokas, M.C., ed. Symposium on ethyl alcohol and disease. *Medical Clinics of North America* 68:1-255, 1984.
3. See extensive list of references in bibliography.

Resources for Trainees

Clinical students, residents, and practicing physicians:

1. Eckardt, M.J.; Harford, T.C.; Kaelber, C.T.; et al. Health hazards associated with alcohol consumption. *JAMA* 246:648-66, 1981.
2. See extensive list of references on specific organ systems in bibliography.

GOAL

To provide consultation regarding possible or definite alcohol and other drug abuse.

Knowledge Desirable

Residents and practicing physicians:

1. How to recognize alcohol and other drug abuse and complications of substance abuse in surgical patients requiring medical consultation
2. Drug interactions between abused substances and anesthetic agents
3. How to manage acute pain syndromes in patients with a history of substance abuse

Activities to Accomplish Goal

Residents and practicing physicians:

1. Self-instruction
2. Rotation on medical consultation service
3. Manage own patients on nonmedical services

Resources for Instructor

Residents and practicing physicians:

1. Jewett, J.F. Alcoholism, ectopic pregnancy and cardiopulmonary failure. *New England Journal of Medicine* 307:621-3, 1982.
2. Thal, E.R.; Bost, R.O.; and Anderson, R.J. Effects of alcohol and other drugs on traumatized patients. *Archives of Surgery* 120:708-12, 1985.

Resources for Trainees

Residents and practicing physicians:

1. Fultz, J.M., and Senay, E.C. Guidelines for the management of hospitalized narcotic addicts. *Annals of Internal Medicine* 82:815, 1975.

2. Wolfson, B., and Freed, B. Influence of alcohol on anesthetic requirements and acute toxicity. *Anesthesia and Analgesia* 59:826–30, 1980.

3. Lerner, W.D., and Barr, M.A. The substance abuser as a high risk surgical patient. *Problems in General Surgery* 3:346–65, 1984.

MODEL CURRICULA

Faculty Development

Early Detection and Management of Alcoholism

Produced by the Commonwealth Harvard Alcohol Research and Teaching Program

The components of this program include training internists to act as consultants and teachers on alcoholism for medical residents in the outpatient setting. The program is designed for general internists with precepting responsibilities in medical residency programs. The course provides the opportunity to increase the trainee's interviewing skills and knowledge of alcoholism, treatment modalities, and effective teaching techniques. The program uses didactic lectures, exposure to recovered alcoholics, case presentations, practice teaching, and attendance at an Alcoholics Anonymous meeting. A manual for the trainee includes an outline of the curriculum goals and objectives; brief outlines of the didactic presentations; sections on treatment of medical complications, outpatient withdrawal, and disulfiram; and an annotated bibliography. The program has not been evaluated. The content is limited to alcohol abuse.

For information contact:

Thomas L. Delbanco, M.D.
Commonwealth Harvard Alcohol Research and Teaching Program
Beth Israel Hospital
330 Brookline Avenue
Boston, MA 02215

Practicing Physicians (Continuing Medical Education)

The Physician's Role in Recognizing Substance Abuse

Produced by Illinois State Medical Society, Illinois Department of Alcoholism and Substance Abuse

This self-directed learning package comprises the second part of a comprehensive program for physicians practicing in the State of Illinois. (The first part of the program is of a series of 2-hour educational seminars.) This notebook contains information on a variety of topics including toxicology, the signs and symptoms of psychoactive drug use, and individual sections on narcotics, stimulants, cocaine, barbiturates, cannabis, hallucinogens, and inhalants. Case presentations and discussions, information on impaired physicians, and treatment resources are included. The sections on drugs are generally well written but do not follow a uniform format nor contain enough detailed information on each class of drug to serve as a reference source.

A 60-minute audio cassette in the package includes four modules: the nature and extent of substance abuse in Illinois, diagnosis and identification of substance abuse, the primary physician's role in treatment, and a series of questions and answers reviewing the other three modules. The information is presented by substance abuse experts and is well done. The material is appropriate for physicians with little knowledge and expertise in substance abuse.

For information contact:

Violet Eggert, M.D.
Chairman of Substance Abuse Education Program
Interventions, Inc.
1234 S. Michigan
Chicago, IL 60605

Alcoholism Education Program for Physicians

Received from California Medical Association

This program was designed as a pilot to test a method of educating physicians about the diagnosis and management of alcoholism. The goals of the program are clearly stated. The program consists of four 1-hour

modules, each containing an introductory statement, viewing of a videotape, a lecture and case presentation, and discussion. The program uses the *Alcoholism and the Physician* series of four videotapes: *Attitudes, Early Diagnosis, Confirming the Diagnosis/Initiating Treatment*, and *The Physician's Role in Rehabilitation.*

The program provides physicians with a bibliography of materials on alcohol and other drugs. The program has been pilot tested in 15 hospitals. It will be available to all hospitals in California.

The program was evaluated by reviewing charts of physicians before and after the program to determine the number of times a patient's use of alcohol was recorded. After the program, the number of charts that recorded the patient's use of alcohol increased. Participants evaluated the program as useful in their practice and judged the teaching technique effective. Over 90 percent felt they would recommend the program to a colleague.

The formal program does not contain any information on drugs other than alcohol, though the bibliography includes references to such materials. Instructional opportunities in a clinical or simulated clinical setting are not provided by the program.

For information contact:

Laurie A. Soman
Staff Coordinator
California Medical Association
P.O. Box 7690
San Francisco, CA 94120-7690

Alcohol, Drug, and Related Mental Health Problems: A Pilot Curriculum for Primary Care Providers

Developed by The National Center for Alcohol Education

This curriculum for primary care physicians, nurse practitioners, and physician assistants was developed by a group of experts in education and substance abuse. The curriculum covers recognition, motivation, interviewing, and management of patients who abuse alcohol and other drugs. Methods for presenting the curriculum include lectures, case studies, small group discussions, and audiovisual materials. The curriculum is designed for a 2- or 3-day workshop. Recommendations for implementation of the curriculum, resources for the instructor, and a precourse and postcourse assessment are included.

For information contact:

National Institute on Alcohol Abuse and Alcoholism
5600 Fisher's Lane
Rockville, MD 20857
DHHS Publication No. (ADM) 80-983
or
National Center for Alcohol Education
1601 N. Kent Street
Arlington, VA 22209

Residency Programs

Medical-Psychiatry Rotation, Division of General Internal Medicine, Internal Medicine Residency

Received from Francis Scott Key Medical Center, Johns Hopkins University School of Medicine

This 1-month rotation, required of all PGY-1 residents, is designed to help residents develop important skills in interviewing, psychosocial assessment, office psychotherapy, and psychoactive drug use. Alcoholism and the management of harmful health habits such as smoking are among the major topics covered in the curriculum. Residents are provided with a curriculum and a list of major objectives to accomplish during the month.

Residents videotape all their interactions with patients, many of whom are alcoholic, and these are reviewed by a faculty internist. One interaction is with a simulated patient who plays an undiagnosed alcoholic; skill in identifying and confronting the alcoholism is the focus of this interaction. The residents are required to attend two or more Alcoholics Anonymous meetings and two or more Al-Anon meetings and to visit an alcoholism rehabilitation program and a model residential alcoholism center. *The Enablers* and *The Intervention* are viewed by the residents, and they are provided with a list of required readings. Residents are evaluated using a communication skills rating form and are given feedback on their interviews with alcoholics.

For information contact:
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Francis Scott Key Medical Center
4940 Eastern Avenue
Baltimore, MD 21224

The Early Detection and Management of Alcoholism

Produced by The Commonwealth Harvard Alcohol Research and Teaching Program

See description under faculty development. The goals of the curriculum are to provide residents with the knowledge and skills necessary to diagnose and manage patients with alcoholism. The curriculum includes formal didactic presentation, case presentation, and role playing with recovered alcoholics. The curriculum is integrated into the overall primary care residency program.

Alcoholism and Other Drug Abuse

Offered by New York University Medical Center, Primary Care Residency

This curriculum is offered in an elective half-time clinical experience of 1-2 months duration for primary care internal medicine residents and fellows. The goals of the curriculum are to provide the trainee with an adequate knowledge base in alcohol and other drug abuse including general concepts, clinical syndromes, and management; to provide the trainee with skills necessary for recognition and treatment of substance abuse; to address attitudes that are important in managing substance abuse; and to provide trainees with skills necessary to teach about substance abuse.

The goals of the curriculum are addressed by guided readings and discussions designed for individual trainees, supervision in the evaluation of patients admitted to a drug and alcohol treatment unit, personal tutelage by a preceptor, and attendance at grand rounds and conferences. The curriculum is taught by a psychiatrist and two general internal medicine faculty.

For information contact:
Charles Rohrs, M.D.
VA Hospital and Medical Center
408 East 23rd Street
New York, NY 10014

Student Programs

Project Cork—A Case Study in Designing and Implementing an Alcohol Curriculum for Medical Education

Developed by J. Kinney, M.S.W., T.R. Price, M.D., P.C. Whybrow, M.D., and S. Linsey, M.A., of the Project Cork Institute, Dartmouth Medical School

Dartmouth Medical School undertook a 4-year project (1977-81) to develop and implement a model curriculum for undergraduate medical education in alcohol and alcoholism. This manual describes the planning process in developing the curriculum and the implementation of the curriculum at the preclinical and clinical levels, and provides resources for teaching. The model curriculum is outlined in the appendices, and examples of trainee evaluation tools are provided.

For information contact:
Project Cork Institute
Dartmouth Medical School
Hanover, NH 03755

Alcoholism—A Clinical Perspective

Offered by Vanderbilt University, Department of Medicine

This elective 12-week course is offered to first- and second-year medical students. The goals of the course are to influence the attitudes of students about problem drinkers; to teach early symptoms, signs, and laboratory abnormalities of alcoholism; to review and visit inpatient and outpatient treatment resources; to review techniques of confrontation; to discuss the impaired health professional; and to review the metabolism of ethanol and its effects on the organ systems.

The course uses didactic lectures, presentations of patients with drinking problems, audiovisual aids, and treatment facility visits to achieve its goals.

For information contact:
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AUDIOVISUAL MATERIALS

Audiovisual resources listed were identified through respondents or by an AVLINE search. AVLINE is the National Library of Medicine's audiovisual, online catalog. This data base contains all audiovisuals catalogued by NLM since 1975 and is updated weekly. Selected AVLINE titles were reviewed and evaluated by the Association of American Medical Colleges. The rating by the AAMC is included for each resource if it is available.

Recommended by AAMC for students, residents, continuing education:

Alcoholism, Early Diagnosis and Management. American Medical Association, Council on Continuing Physician Education, 1981. (2 video cassettes, 120 mins.)
Available for purchase or loan from AMA, Department of Registration and Fulfillment, Chicago, IL 60611.

Please Let Us Help. Veterans Administration Drug Dependence Treatment Program, 1980. (video cassette, 18 mins.)
Available for purchase from National Audiovisual Center, Washington, DC 20502.

A Look to the Future. Office of Telecourses, Continuing Education and School of Social Work. University of Washington, 1976. (video cassette, 29 mins.)
Available for purchase or loan from the University of Washington Press, Seattle, WA 98195.

***Alcohol and Alcoholism.* Office of Telecourses, Continuing Education and School of Social Work. University of Washington, 1976. (video cassette, 29 mins.)
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Opiates and Cocaine. Office of Telecourses, Continuing Education and School of Social Work. University of Washington, 1976. (video cassette, 29 mins.)
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Is the United States an "Overmedicated Society"? Office of Telecourses, Continuing Education and School of Social Work. University of Washington, 1976. (video cassette, 29 mins.)
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Chemical Dependencies and Society, Problems and Prospects of Prevention. Office of Telecourses, Continuing Education and School of Social Work. University of Washington, 1976. (video cassette, 29 mins.)
Available for purchase or loan from the University of Washington Press, Seattle, WA 98195.

***Overdose: The Crucial Minutes.* National Clearinghouse for Poison Control, Bureau of Drugs, Food, and Drug Administration, 1980 (video cassette, 28 mins.)
Available for purchase from the National Audiovisual Center, Washington, DC 20502.

Women, Drugs, and Alcohol. MTI Teleprograms, Inc., 1980. (video cassette, 21 mins.)
Available for purchase from Coronet/MTI Film and Video, Northbrook, IL 60062.

Drug Overdose. Department of Continuing Education, Harvard Medical School, 1978. (video cassette, 30 mins.)
Available for purchase or loan from Video Training Resource, Inc., Edina, MN 55424.

* Highly recommended.

The Ambulant Alcoholic as a Challenge. Health Sciences Television Network, University of California, San Francisco Medical Center, 1972.

Available for loan from University of California, San Francisco, Education Television Division, San Francisco, CA 94122.

Recommended by AAMC for residents:

******Counseling the Economically Disadvantaged Alcoholic Client.* Addiction Research Foundation, 1979. (audio cassette, 20 mins.)

Available for purchase from Addiction Research Foundation of Ontario.

Recommended by AAMC for medical students:

The American Experience. Office of Telecourses, Continuing Education and School of Social Work, University of Washington, 1976. (video cassette, 29 mins.)

Available for purchase or loan from the University of Washington Press, Seattle, WA 98195.

Chemical Dependencies and Society. Office of Telecourses, Continuing Education and School of Social Work, University of Washington, 1976. (video cassette, 29 mins.)

Available for purchase or loan from the University of Washington Press, Seattle, WA 98195.

Marijuana and Hashish. Office of Telecourses, Continuing Education and School of Social Work, University of Washington, 1976. (video cassette, 29 mins.)

Available for purchase or loan from the University of Washington Press, Seattle, WA 98195.

Angel Dust. MTI Teleprograms, Inc., 1980. (video cassette, 25 mins.)

Available for purchase or loan from Coronet/MTI Film and Video, Northbrook, IL 60062.

* Highly recommended.

Recognizing Alcoholism in the Hospital Patient. Lauraine A. Thomas; Robert J. Brady Co., 1977. (90 2x2 slides and cassette, 25 mins.)

Available for purchase or loan from Robert J. Brady Company, Bowie, MD 20715.

The Addictive Personality: Who Uses Drugs and Why. Ibis Media, 1979.

Available for purchase or loan from Ibis Media, Pleasantville, NY 10570.

Behavioral Management of Intoxicated and Disruptive Patients in the Emergency Department. Education Resources, Addiction Research Foundation of Ontario, 1979. (video cassette, 20 mins., and manual)

Available for purchase from Addiction Research Foundation of Ontario.

Drug Abuse. Kathleen Doyle; Biomedical Communication and the Department of Preventive Medicine and Community Health, College of Medicine and Dentistry of New Jersey, 1978. (video cassette)

Available for purchase from New Jersey Medical School, Office of Biomedical Education, Rutgers, NJ 08903.

******Identification of the Alcoholic Patient.* University of Michigan Medical Center, Department of Postgraduate Medicine and Health Professions Education, 1979. (video cassette, 22 mins.)

Available for purchase or loan from the University of Michigan Medical Center Media Library, Ann Arbor, MI 48104.

******The Physician's Role: Diagnosis and Management of Alcoholism and Alcohol Related Disorders.* University of Tennessee Research Corporation, Southern Area Alcohol Education and Training Program, and Memphis Mental Health Institute, 1977. (6 video cassettes, 43 mins. each)

Available for purchase from the Southern Area Alcohol Education and Training Program, Inc., Atlanta, GA 30311.

Alcohol and Drug Abuse. The emergency management of alcohol and drug abuse. Coopwood, W.; Bashir, L.L.; and Arra-

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Available for purchase or loan from Robert J. Brady Co., Bowie, MD 20715.

* U. S. GOVERNMENT PRINTING OFFICE: 1989-241-256:81031