Because of their unique responsibilities, physicians are under close societal scrutiny concerning their physical and mental functioning. Physician impairment refers to situations in which they are rendered unable to perform their professional responsibilities adequately because of a variety of health problems, including medical disease, psychiatric problems, or substance abuse. This article focuses exclusively on physician impairment because of substance abuse.

Similar to other conditions that may cause physician impairment, substance abuse is a chronic disease characterized by exacerbations that are responsive to treatment. Among the defining elements of substance abuse disorders are the resultant behavioral dysfunction, medical complications, and psychiatric disease. Each of these clinical sequelae has a potential to impair a physician's ability to carry out professional responsibilities in patient care. In addition, characteristics of substance abuse, such as loss of control, overuse, intoxication, and withdrawal, can result in poor occupational functioning and negative patient outcomes. Obviously, physicians are not alone as an occupational group in this regard. In a sense, almost all occupations receive some degree of scrutiny concerning job dysfunction because of substance abuse. Groups such as physicians, airline pilots, subway train operators, and others whose dysfunction on the job may lead directly to harm to individuals, however, are under special scrutiny.

The report of the American Medical Association's (AMA) Council on Mental Health stated that 'it is the physician's ethical responsibility to take cognizance of a colleague's inability to practice medicine adequately by reason of physical or mental illness including alcoholism and drug dependence.' [3] This report emphasized that a national effort was necessary to identify and help impaired physicians return to optimal functioning and to safeguard the health of patients from the care of impaired physicians. Subsequent to the AMA report, the identification of impaired physicians with mental and physical handicaps, alcoholism, and drug dependency has received wide attention. Hospital boards under close scrutiny for potential legal exposure have explored protective measures against litigation for care provided by impaired physicians. In addition, these boards have established procedures to identify impaired physicians and refer them for rehabilitation, enabling them, it is hoped, to return to work in the future. [33] [49]

Rehabilitation of the alcohol-impaired or drug-impaired physician is a serious
concern of state medical societies as well. All 50 states have developed procedures to identify and bring to treatment physicians who are alcohol or drug dependent. Because American physicians represent a resource of trained medical personnel, successful rehabilitation of these physicians is a national priority. Comprehensive treatment procedures and close monitoring of addicted physicians after treatment have proven to be successful with 75% to 85% of physicians who enter treatment returning to their professional position. [2] [13]

This article provides an overview of physician impairment because of substance abuse, including a discussion of what is known about the epidemiology of substance abuse in various physicians' groups, special characteristics of impaired physicians, medicolegal issues regarding impaired physicians, and specific treatment approaches for physicians impaired by substance abuse.

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EPIDEMIOLOGY AND RISK FACTORS

Much of the discussion about substance abuse among physicians has been based on folklore. As the story is commonly told, physicians, because of job-related stress and increased access to prescription drugs, have higher rates of substance abuse than the general population. Although no one would argue that being a physician is not often stressful, the degree to which physicians differ from other occupational groups or segments of the population has not been clearly demonstrated, perhaps with the exception of physicians in postgraduate training. Thus, the basis of some aspects of this folklore is in question.

Methodologic limitations of published studies have led to uncertainty concerning the epidemiology of substance abuse among physicians. Prevalence data concerning substance abuse among physicians is generally lacking. With few exceptions, most of the literature on this topic has been based on data collection methods that are unsuitable for comparing physicians to other populations. There have been no large systematic studies using appropriate sampling techniques that provide data concerning physician substance abuse. Most published data are based on descriptive data of convenience samples, which may be biased for reasons such as the selection of subjects from treatment populations. In addition, variable definitions of substance abuse and levels of impairment make comparison
between studies particularly problematic. Thus, it is difficult to say clearly that physicians as a group have an enhanced risk for substance use disorders or that they do, in fact, experience substance abuse at rates that differ from the general population or other occupational groups. [10] Despite this problem, a limited number of studies (typically performed on samples of physicians or trainees at specific career points) are available that provide some insight into substance use among physicians.

**Medical Students**

Because substance use disorders are commonly evidenced early in adult life, examining substance abuse in medical students may provide some information concerning substance abuse patterns among physicians as a whole. Clark and colleagues [11] performed a longitudinal study of one class of medical students during their time at a Midwestern medical school. Over the 4 years of medical school, 11% met criteria for excessive drinking for at least one 6-month period, and 18% met criteria for alcohol abuse during the first 2 years. Family history of alcoholism was associated with alcohol misuse. The authors proposed that intervention and treatment programs be designed specifically for medical school settings.

The AMA supported a study of substance abuse on medical students in 23 medical schools. [6] Substance use rates were measured for a period including 30 days before the survey. The most commonly used substances were alcohol (87.5%), cigarettes (10%), marijuana (10%), cocaine (2.8%), tranquilizers (2.3%), and opiates (1.1%). Fewer students reported using lysergic acid diethylamide (LSD), amphetamines, and barbiturates, and no students reported heroin. Fewer than 1% felt that they were dependent on any substance other than tobacco at the time of the survey. [6] Although this information is based on self-reports, it does include a more representative sample of medical students than any published previously. Unusually perfectionistic behavior and high academic rank in the graduating class may be significant risk factors for substance abuse. [7] In addition, a study on the relationship between occupational stress and psychological vulnerability to alcohol-related problems in medical students noted that a sizable portion of medical students 'matured out' of drinking patterns established during college. [32] Although data are sparse, there is little to suggest that medical students differ significantly from the general population of their age-matched peers in terms of substance use.

**Resident Physicians**

Residency training represents the most intense period of training for physicians and may well be the most stressful because of the long hours and rapid acceleration in clinical care responsibilities assumed. Few studies have assessed the prevalence of substance use disorders among resident physicians. Hurwitz and colleagues [21] began a study in 1981 that assessed
the presence of previous psychiatric disorders, stressors, and alcohol and substance abuse in a cohort of 215 resident physicians from British Columbia, Canada. Concerning alcohol use, 14% of the sample were believed to exhibit pathologic alcohol use, 3% exhibited social or occupational impairment, and 3% exhibited both. A total of 3% of this population met Diagnostic and Statistical Manual of Mental Disorders (DSM-III) criteria for alcohol abuse. Concerning the use of other drugs, cannabis was the most common one followed by mild tranquilizers. Only a minority of residents (5%) reported relieving stress through alcohol. [21]

Hughes and associates [20] performed a national survey examining drug use patterns among resident physicians in the United States. This study used a stratified random sample of 1785 physicians in the third year of residency training who graduated from medical school in 1984. Alcohol was the most common substance used by this group, with 87% of subjects reporting use within the past month and 5% reporting daily use. In contrast, marijuana, the second most commonly used substance, was used by only 7% of the population in the past month and 0.3% on a daily basis. Overall, 1.4% reported using cocaine in the last month and 3.7% reported using benzodiazepines. No resident reported using either of these drugs on a daily basis. The regular use of substances such as amphetamines, psychedelics, LSD, barbiturates, and opiates was seen in fewer than 1% of the surveyed population for each drug. [20]

These authors went on to compare substance use patterns in resident physicians with age-matched peers using data from a national survey that was similar to those that were used in this study. Male residents had statistically significant lower rates of use of marijuana, cigarettes, cocaine, amphetamines, psychedelics, LSD, and barbiturates than their age-matched peers. Male residents did exhibit higher rates of alcohol use in the past year and past month in comparison to age-matched peers who were high school graduates and had higher rates of benzodiazepine and opiate use, although these differences were not statistically significant. Similarly, female residents were significantly more likely to use alcohol and benzodiazepines for the past year and past month than their age-matched peers but less likely to use marijuana, cigarettes, cocaine, and amphetamines. Of concern in this study was the fact that a significant minority of resident physicians began using benzodiazepines and prescription opiates at a time that corresponded to their receiving prescribing privileges.

In a related study, Hughes and associates [18] analyzed substance use by medical specialty among resident physicians. These results demonstrated that emergency medicine and psychiatry residents showed higher rates of substance use than residents in other specialties. In particular, emergency medicine and psychiatry residents were more likely to use marijuana than residents in other specialties. Unsupervised benzodiazepine use was noted in 9.4% of all residents. Unsupervised benzodiazepine use was highest among
psychiatry residents, with 50% reporting using unsupervised benzodiazepines at some time in their life and 27% reporting such use within the year before this survey. [18] In addition, Hughes and associates reported that surgeons had lower rates of substance abuse except alcohol than other residents. Another survey by Hyde and Wolf [22] confirmed that drug use by surgery residents appeared low. Hyde and Wolf [22] did note, however, that cocaine, when used by surgery residents, was obtained from hospital sources.

Residency directors may pay insufficient attention to potential alcohol abuse among their residents. In a survey of 67 emergency medicine residency program directors, 33% had identified a chemically dependent resident in their program, although as a group they estimated that only 1% of their current residents were impaired by alcohol. [27] This estimate contrasted sharply with the results of a survey of emergency medicine residents that yielded screening test results (CAGE scores) consistent with presumed or suspected alcoholism in 12.5% of residents surveyed. [27] In a study by Jex and co-workers, [23] the authors confirmed the previous finding that substance use was not a major response to the stress associated with residency training. When substances were used, benzodiazepines were the substance most strongly related to relieving the strains associated with residency training. [23] Concern about substance use among residents led to the development of a position paper by the Association of Program Directors in Internal Medicine. [1] Five specific recommendations were made for residency program directors and their staff for addressing problems of substance use in resident physicians:

1. Establish an organized process to address substance use.
2. Educate housestaff and attending faculty about medical center policies concerning substance use.
3. Orient residents and their families concerning substance use among physicians.
4. Define a process for referral and self-referral of residents with substance use problems.
5. Educate residents and staff physicians on how to seek help for a resident who is suspected of substance abuse.

Although the extent to which these recommendations have been put into practice is unknown, they provide a sensible template on which to approach substance abuse in residents.

Although residency is a stressful period for physicians, there are few data to support the concept that substance use in general is highly prevalent in this group. Alcohol use is similar to that reported in the general population, whereas the use of illicit drugs may be lower. Unsupervised use of prescription drugs is a concern, however, although the degree and severity
of this problem is poorly characterized.

**Practicing Physicians**

Most public attention focused on substance abuse among physicians has concerned physicians in practice. It is reasonable to expect that substance use among practicing physicians is based on behaviors during and before medical training. Valliant and co-workers [46] studied the childhood of 47 physicians in comparison to 79 socioeconomically matched controls to assess psychological vulnerability in physicians. In their sample, Valliant and co-workers found that the physician group, especially those involved in direct patient care, were more likely to use alcohol and drugs heavily. The results of this study suggested that alcohol and drug use among physicians was related to life adjustment (e.g., unstable childhood) difficulties before medical school. In a related prospective study of a group of 45 physicians followed for more than 20 years, Valliant and co-workers [45] found that physicians were more likely to take tranquilizers, sedatives, and stimulants than matched controls, although they drank alcohol and smoked cigarettes to the same extent as the controls. In another report, however, Valliant's nonphysician subjects with an alcoholic parent, but with an otherwise stable family, were five times as likely to develop alcoholism as subjects from problem families without an alcoholic parent. Clearly, parental alcoholism plays a significant role in the development of alcoholism in a family. Subsequent studies have demonstrated that physicians now smoke significantly less than the general population. In general, studies of alcohol use have not demonstrated that physicians are at increased risk for alcoholism over the general population. [16]

In a more recent study, Hughes and colleagues [19] performed a survey of substance use among physicians and compared the results of this survey with results of the National Household Survey on Drug Abuse. In this study, a randomly selected sample of 9600 physicians stratified by specialty and career stage were surveyed by mail concerning their substance use (59% response rate). The authors examined subjects' self-reported use of 13 substances and found that physicians were more likely to have used alcohol and two types of prescription medications (opiates and benzodiazepines) than matched controls. Concerning alcohol use, the authors point out that higher rates of alcohol use among physicians may have been associated with higher socioeconomic status of the physicians surveyed. They did note, however, that 6% of physicians reported lifetime alcohol abuse, and 1.6% of physicians reported alcohol abuse or dependence within the past year. They concluded overall that their data did not suggest that physicians were at higher risk for alcohol abuse than the general population. [19]

Concerning prescription drugs, Hughes and colleagues [19] found that 11.4% of physicians had used benzodiazepines in the past year in an unsupervised fashion, whereas 17.6% had engaged in unsupervised use of opioids.
Clearly, this results in part from the enhanced access physicians have to these substances as compared to the general population. At a minimum, these data suggest that a substantial minority of physicians are using these medications in what would often be considered to be a clinically inappropriate fashion. In contrast, this study showed that physicians were less likely than the general population to have used tobacco and a variety of illicit substances, including marijuana, cocaine, and heroin, than community controls. Valliant, [47] in an editorial commenting on the Hughes article says, 'the most important finding by Hughes et al is that, compared with controls, physicians are five times as likely to take sedatives and minor tranquilizers without medical supervision.'

Limited data exist concerning the relationship of medical specialties and substance use. Because anesthesiologists regularly employ the use of opioids and benzodiazepines in their work, they have been under particular scrutiny. Most data concerning the specialty differences in substance use patterns have come from state impaired physicians programs or treatment program sources. For example, in a report of Georgia's impaired physicians program, although anesthesia was the third most frequent specialty among impaired physicians, they represent only 3.5% of the AMA population of physicians as a whole. [14]

Gravenstein and colleagues [15] focused specifically on anesthesia in their study of 15 southeastern academic departments. These authors surveyed the chairmen of anesthesia departments as well as departmental faculty and third-year medical students. They found that chairmen reported between 1% and 2% of anesthesia personnel in their departments came to their attention because of drug or alcohol abuse. Among those anesthesia personnel known to abuse drugs, it was found that opioids were the most commonly abused, followed by nitrous oxide, barbiturates, and alcohol. It is difficult to draw conclusions from this study regarding the prevalence of substance abuse among anesthesiologists, and it appears likely that anesthesiology chairmen underreported alcohol and substance abuse problems among their personnel.

Both this study and another point to the fact that death (either from suicide or lethal overdose) may be the initial presentation of substance abuse among anesthesiologists. Menk and associates [29] surveyed 159 anesthesiology training program directors (73% response rate). The prevalence of substance abuse among trainees was 2%. Of 180 cases of substance abuse submitted, 26 residents died of substance abuse, and there were 14 cases of suicide or lethal overdose among trainees who were allowed to reenter anesthesiology training. The success rate of reentry into training after treatment in the parenteral opioid abuser group was 34% and the nonopiate abuser group 70%. Death as an initial relapse symptom occurred in 16% of the parenteral opioid abusers who were allowed to reenter training. The authors recommended that trainees with drug abuse
from parenteral opiates enter another specialty after rehabilitation. [29] Although other studies have highlighted the prevalence of substance use and abuse among anesthesiologists and other specialties, because of their larger numbers, specialties such as internal medicine are likely to contribute a higher absolute number of individuals to the pool of impaired physicians.

Lutsky and colleagues [26] sent questionnaires to more than 1600 physicians in medicine, surgery, and anesthesia who had trained at a single academic institution to determine the prevalence of psychoactive substance abuse. Among the 58% of physicians who responded, the authors found that there were no statistically significant differences in the prevalence of impairment between these three specialties. Among surgeons, 14% of respondents met criteria for impairment as compared to 20% of internists and 17% of anesthesiologists. Perhaps of most concern was the finding that 73% of surveyed physicians had used psychoactive drugs at some point that were not prescribed. In addition, the physicians surveyed believed that available counseling programs concerning substance abuse were inadequate. [26] In another study that focused specifically on anesthesiologists, responses from 183 anesthesiologists graduating from the Medical College of Wisconsin identified 29 (15.8%) who were substance dependent. [25] The majority (19) were dependent on alcohol alone, 6 were dependent on other drugs, and 4 were dependent on both alcohol and other drugs. In addition to these epidemiologic data, the authors demonstrated that substance-using anesthesiologists were more likely to be divorced. As with their later study, Lutsky and colleagues [25] found that anesthesiologists in this group received little advice or counseling concerning substance abuse.

In a study of male physicians in Scotland, researchers found that physicians as a group were at increased risk for alcoholism when compared to other professionals. [17] This study found that the preponderance of heavy drinking among male physicians in Scotland was in physicians over the age of 45.

Physicians who come to psychiatric attention because of substance abuse are commonly dependent on narcotics such as meperidine. [30] Of the 10 most frequently abused drugs in the Medical Association of Georgia impaired physicians program, meperidine was the most frequently abused narcotic. [14] Meperidine is a particularly serious risk for physician impairment as illustrated by the following case.

A 40-year-old surgeon developed severe flank pain consistent with a renal stone. His friend, an internist, went to his home and gave him an injection of meperidine with instant relief of the pain. The internist friend left a vial of 10 mL of meperidine (100 mg/mL) with his patient with instructions to give himself a shot if the pain returned. The pain returned, and the patient physician gave himself an injection every 4 hours with immediate relief. His relief was so remarkable and pleasurable that he remembered this feeling
even after the renal stone pain subsided. The physician ordered some meperidine for his medical bag and began to medicate himself for even the most trivial discomfort. Soon he was dependent on the medication and began to remove meperidine from his office supplies. Finally, he was confronted by his colleagues and the Impaired Physicians' Committee and was sent to rehabilitation.

This case emphasizes the serious risk of self-medication with controlled substances, especially narcotics. Physicians have a sense of invulnerability. Their previous training may give them an attitude that they know the effects of drugs and will be able to stop when they are developing dependence. They may suffer from denial about the consequences of addiction. In the case summarized here, the physician who left the meperidine vial and the patient himself believed he was safe and could limit the use only to the one episode. Unfortunately, both physicians were setting in motion a set of behaviors that ultimately led to addiction.

Alcoholism in women has been the subject of special interests by two authors. [8] [9] In Bissell's [8] survey of 100 alcoholic women in medicine, few of the physicians were identified or helped by their colleagues despite displaying behavioral clues that suggested alcoholism. The conspiracy of silence by colleagues who ignore clues to impairment in a physician is present in all groups, including academic physicians. [36]

Unsupervised use of prescription drugs is probably more prevalent among practicing physicians than among the general population. Limitations in the number and quality of published studies make it difficult to draw conclusions about the prevalence of alcohol and other drug abuse among practicing physicians in comparison to the general population.

**MEDICOLEGAL ISSUES**

Legal aspects of physician impairment are handled primarily at the state level. Laws and legislative action relevant to this topic may vary from state to state. State medical societies typically play a major role in addressing physician impairment. Despite this variability, common themes underlie state efforts to address physician impairment.

State licensing organizations function primarily to ensure that minimal criteria are met by individuals who are issued a license to practice medicine. In addition, they have the authority to withdraw a license from a physician who is deemed incompetent or unsuited to practice within their jurisdiction. As such, the primary goal of licensing organizations is to protect the public from the unqualified physician. In contrast, state medical societies have an additional interest—to identify and assist impaired physicians in need of treatment. Although they may coordinate some of their activities with state license boards, because medical societies also have the physician's welfare
in mind, conflicts may arise.

Because most physicians have hospital privileges, hospitals have become increasingly involved in issues related to physician impairment. A history of substance abuse is typically asked about on applications and renewal forms for hospital privileges. [38] In one survey of 272 physicians, Lemon and colleagues [24] found that 45% of respondents agreed with mandatory hospital-based drug screening of physicians and 34% disagreed, although 87% would submit to testing if required. As more physicians become employees of large organizations such as health maintenance organizations, the movement toward employer-based drug testing may increase.

The move toward managed care and competition has also increased the public and health care organizations' interest in knowing more about physicians' performance profiles. The National Practitioner Data Bank (NPDB) began operation in 1990 and was designed to maintain files about individual physicians concerning actions taken by state licensing boards, hospital medical staff offices, and state medical societies along with documenting medical malpractice claims. Physician impairment may result in actions that are reported to this data bank. Physician understanding of how the NPDB works appears to be low. For example, in a survey of 1410 physicians by Ankney and co-workers, [4] 69% did not know that voluntary entrance into a substance abuse treatment program was not reportable.

Medicolegal aspects of physician impairment because of substance abuse is handled primarily at the state level. In addition, the NPDB may contain information on individual physicians who have had reportable actions that may have resulted from substance abuse. Increasingly, hospitals and managed care organizations are focusing on the issue of substance abuse as it relates to physician credentialing and performance.

IDENTIFICATION, INTERVENTION, TREATMENT, AND AFTERCARE

In 1981, Spickard and Billings [36] reported their concern about alcoholism in a medical school faculty. Seven members of the Vanderbilt faculty (five professors, one associate professor, and one assistant professor) in both the basic science and clinical departments had typical behavior of alcoholics that was ignored by their colleagues. This conspiracy of silence was a form of enabling--the cover-up tactics that family, colleagues, and employers use to avoid the label of alcoholic. Physician behaviors included neglect of responsibilities, domestic breakdown, and bizarre spells of uncontrolled anger (Table 1). When the diagnosis of alcoholism gradually emerged, the patients were severely ill. Some were referred for treatment, but most were incapacitated by their illness and left the faculty.

When an impaired colleague is identified, steps can be taken to initiate the process of intervention and treatment. These include being acquainted with
the policy on staff impairment because of substance abuse at the physician's home institution and seeking consultation from the institution's Employee Assistance Program (EAP). In addition, physicians should be familiar with the process of contacting the state impaired physician director in their area or a physician addiction specialist. Physicians should use addiction specialists to assess a colleague's impairment and be part of the intervention if necessary.

IDENTIFICATION OF THE IMPAIRED PHYSICIAN

- High-risk conditions for addiction
- Family history of addiction in first-degree relatives
- Access to mood-altering medications, particularly opioids, particularly in anesthesiology
- Domestic breakdown
- Unusual stresses in work
- Behaviors of addiction
- Use of large quantities of alcohol; frequent drunkenness
- Frequent medical complaints without specific diagnoses evident (fatigue, insomnia, indigestion, depression)
- Self-prescribing of sedative-hypnotic, opioid medications
- Neglect of responsibilities (missing appointments, late to rounds)
- Frequent outbursts of anger
- Staff concerns about a colleague's behavior
- Sexual promiscuity
- Driving under the influence citations
- Signs of addiction
- Smell of alcohol on breath
- Ataxic gait
- Slurred speech
- Unexplained tremor
- Disheveled appearance
- Somnolence
- Unexplained weight changes
- Depressed mood

Some institutions have worked to develop specific policies and procedures to aid in this process. For example, as a result of lessons learned at Vanderbilt, a policy to identify and refer faculty and resident employees of the medical center was adopted by the university and hospital. [37] The successful implementation of this policy is supported by the Vanderbilt Employee Assistance Program as part of the medical center employee health system. A comprehensive treatment center at Vanderbilt has been established (the Vanderbilt Institute for Treatment of Addiction) where medical school faculty members, residents, and their families are offered treatment for addiction. The identification of the impaired colleague, intervention procedures required, and rehabilitation treatment methods used have been described by
Spickard. [34] Hankes and Bissell [16] have outlined the ideal components of a comprehensive treatment program for physicians. These components include:

1. Immediate intervention.
2. Evaluation and triage to an appropriate facility.
3. Uninterrupted therapy.
4. Family involvement.
5. Rapid reentry into practice, close monitoring, disaster plan contingency.

**Immediate Intervention**

When a physician is found to be disabled by addiction to alcohol or drugs and his or her effectiveness as a physician is in doubt, there should be a caring, professional, well-organized intervention to prevent destruction of physical, emotional, spiritual, family, and professional life. The authors agree with Talbott and Martin [41] that impaired physicians for a variety of reasons cannot, will not, or do not, despite repeated and intensive intervention, reach out for help. Their behavior may be bizarre and is often ignored by their family, colleagues, and friends. Once the proper diagnosis is recognized, an intervention should be carried out by professionals trained in intervention methods. The approach is one of caring confrontation of behavior by peers, family, and clergy led by the professional intervenor. [39]

The approach is one of advocacy for the physician before his or her license to practice medicine is jeopardized. The intervention is carried out with intervenors who are trained in the method, usually members of the impaired physicians committee of the state medical society. Details of the training of intervenors and the results of the interventions in the Georgia's Disabled Doctors Program are reported. [39] A typical situation is described in the following case.

A 55-year-old surgeon was found slumped over his desk with an empty bottle of whiskey on the floor. A colleague found him when entering the surgeon's office to leave a paper to be reviewed. The impaired surgeon's habit was to operate early in the day and leave the building for 'errands.' In retrospect, he was going to the liquor store to purchase alcohol. He was under the care of a psychiatrist for depression. Alcohol dependence was never addressed. When confronted by a professional intervenor on the faculty, the chairman of his department, the Dean, and the director of the State Impaired Physicians committee, the surgeon promptly admitted his need for help and went to treatment. He confessed that the previous day he was about to commit suicide by driving into a bridge abutment. In tears, he was grateful that someone had intervened. He remains sober and is actively operating again with years of sobriety. At Vanderbilt, the intervention process has been successful for students, residents, and faculty physicians.

**Evaluation and Triage to the Appropriate Facility**
Once the intervention is complete and the physician agrees to go into treatment, a comprehensive evaluation determines the appropriate facility for care. For some physicians, a thorough psychiatric evaluation is required if severe depression, bipolar disease, or other psychiatric illness is suspected. In most patients, depression is usually a result of the addiction, and the symptoms subside during rehabilitation. Cognitive damage from the use of the substances can be assessed also by competent specialists. Associated medical illness is treated by internists or family practitioners.

**Uninterrupted Therapy**

The conventional treatment program for impaired physicians includes inpatient detoxification, medical and psychiatric evaluation, and rehabilitation with group therapy and attendance at Alcoholics Anonymous (AA) or Narcotics Anonymous (NA) meetings. Based on the full assessment, the dependent physician is transferred to continuing treatment with weekly outpatient sessions over a 2- to 3-year period.

Physician patients with severe illness and risk factors for relapse may progress to a structured living situation (a halfway house) in which they participate in *mirror therapy*. This experience involves a population of addicted patients who provide the physician patients with a mirror of their own behavior and treat the additional resistance to true recovery that may remain. This 2 months of therapy provides additional experiences for physician patients to see themselves in the patients they confront and counsel. [41]

**Family Involvement**

Including the family of an impaired physician in the treatment process is critical to reestablishing a support system for the recovery. Frequent meetings of the patient and the family with the treatment team encourages understanding of the disease concept, enabling, and the need for forgiveness and mutual respect for each other. Involvement of the family in the treatment process for addicted individuals has improved outcomes.

Arico and colleagues [5] reported a total of 198 alcoholic subjects recruited into a treatment program. Participation of the family in the beginning of the program led to a better prognosis in the alcoholic member of the family. Enders and Mercier [12] used regression analysis to test family systems theory as a fruitful approach in chemical dependency treatment. Results supported the importance of the family's perception of family life in outcomes of treatment. Including the family in treatment of the impaired loved one is critical to reestablishing the support system for the recovering physician.
Once the physician completes the initial rehabilitation process and is enrolled in a continuing treatment plan, the physician reenters his or her practice, administrative, or faculty position. Usually a memorandum of agreement or contract is written between the impaired physician and supervisor or group practice leader outlining what is expected from the parties involved.

This understanding may include frequency of AA or NA or Caduceus (a support group for impaired physicians and other medical personnel) meetings attended, continued psychiatric treatment, reports from the treating facility, and frequency of urine checks for drugs. This behavioral contract is monitored by an EAP of a hospital or medical center or the medical director of the state impaired physicians committee.

Aftercare including attendance at Caduceus meetings with other health professionals in recovery is encouraged. State medical boards require close monitoring of recovery with frequent urine screens for drugs and reports to the impaired physician committee. The requirement for close follow-up is believed to be responsible for the high recovery rates for physicians.

The overview of the treatment experience of chemically dependent physicians in New Jersey has been reported by Reading. [31] The New Jersey Physician's Health Program (PHP) has reported high success. Reasons for their favorable outcomes may include (1) formal, structured, outpatient aftercare counseling (post inpatient treatment) that continues for 1 to 2 years; (2) a highly structured urine monitoring program; and (3) personal, face-to-face contact with the PHP staff. The visit with the PHP staff benefits the recovering physician by developing a personal relationship with someone who is perceived as a friend as well as monitor of the treatment and recovery plan. Crisis counseling can be provided by the PHP staff once the formal counseling has been terminated. In the 9-year follow-up survey results, 78.3% of the physicians had no known relapses, and 12.6% had only one relapse.

Other authors have reported on the efficacy of treatment using these same approaches. In a survey of recovering Maryland physicians, 75% of respondents reported that they were in recovery, with a mean recovery duration of 88 months. [2] Gallegos and colleagues [13] reported that of 100 physicians who entered into a continuing care contract during a 5-year period with the impaired physicians program of the Medical Association of Georgia, 77 have maintained documentable abstinence from all mood-altering substances. One physician was lost to follow-up. Twenty-two relapsed, 18 of whom have undergone another treatment for chemical dependence. Only one physician in the relapse group has been involved in a pattern of chronic relapsing behavior. Meek [28] reported that of 128
Physicians referred to the impaired physician program of the Medical Society of the District of Columbia, 64 either have successfully completed the program or are in stable recovery.

Physicians addicted to drugs and alcohol progress through four stages of recovery to achieve sobriety or a drug-free state: denial, compliance, acceptance, and surrender. Tiebout [42] [43] [44] in a series of observations and publications described these stages, which the authors have observed in physicians undergoing treatment for addiction.

Once an intervention has been completed and the physician enters treatment, there remains major denial of the seriousness of the illness. The physician may agree on the illness at a cognitive level but is unable to accept the concept at a personal, emotional level. Methods to overcome denial with group process and assistance in understanding the first step of AA have been described. [35] This involves assisting the physician to identify the connections between the use of alcohol and drugs and the consequences of the addictive use. By listing categories of losses that the alcohol or drugs have produced, the physician begins to see the connection between the behavior and the chemicals.

The compliant impaired physician participates in the recovery program but never is quite sure he or she needs it. The physician remains distant in the process between compliance and acceptance. Once the addicted physician accepts at an emotional level the fact that he or she is ill and in need of help, progress in treatment proceeds. Concerning surrender, Tiebout [43] notes:

One fact must be kept in mind, namely the need to distinguish between submission (acceptance) and surrender. In submission, an individual accepts reality consciously but not unconsciously. He accepts as a practical fact that he cannot at that moment conquer reality, but lurking in his unconsciousness is the feeling, 'There will come a day'--which implies no real acceptance and demonstrates conclusively that the struggle is still going on. With submission, which at best is a superficial yielding, tension continues. When, on the other hand, the ability to accept reality functions on the unconscious level (surrender), there is no residual battle, and relaxation ensues with freedom from strain and conflict. In fact, it is perfectly possible to ascertain to what extent the acceptance of reality is on the unconscious level by the degree of relaxation which develops. The greater the relaxation, the greater the inner acceptance reality.

Surrender, peace, relaxation, and serenity are achieved by many addicted persons over time. Rarely does one experience it immediately. In fact, the inner peace or serenity may take months or years to experience. Attending Caduceus meetings, speaking with one's sponsor, and attending NA or AA meetings are support systems for the addicted physician. In the authors'
experience, the evidence of this serenity produces a person who is willing to forgive himself or herself for the pain the person may have caused self and others. The physician who is experiencing the surrender stage becomes teachable, relaxed, and optimistic. As physicians experience the positive changes in their life, however, they are warned of the formidable obstacles to recovery.

Talbott and Martin [40] identified factors in 675 physicians that contribute to relapse and Gallegos and colleagues [13] expanded the list, to which the authors have added other factors (Table 2). Recovery is a continuing process. Each relapse factor can be dealt with by the physician and family agreeing to work together with a counselor, sponsor, colleagues, and the impaired physician group in their state. Close monitoring, contingency contracts, a caring counselor, and colleagues assisting the physician and family in the complex recovery process usually results in successful reentry for the addicted physician into his or her previous professional life.

CONCLUSIONS

Physician impairment by alcohol and other drugs is a major concern of the profession and society as a whole. Although the prevalence of alcoholism and illicit drug abuse among physicians is in all likelihood similar to that of the general population, physicians may be at increased risk for prescription drug abuse. Specific interventions have been developed to approach physician impairment because of substance abuse that appear to be effective in addressing this problem for the well-being of both physicians and their patients.

FACTORS POTENTIALLY CONTRIBUTING TO RELAPSE

- Failure to understand and accept the disease concept
- Continued denial
- Dishonesty in the form of reality distortion and emotional concealment
- A dysfunctional family system
- Lack of a spiritual program
- Inability to cope with stress
• Unresolved anger about a person or situation

• Isolation and failure to become an active member of AA or NA

• Untreated secondary addictions (food, work, sex)

• Cross-addiction to more than one chemical

• Holiday syndrome (increased probability of relapse during holidays)

• Severe withdrawal

• Overconfidence

• A return to drinking or using friends and old habits

• Guilt over what one has done in the past

• Shame from early childhood experiences and feeling unworthy

• Medical problems

• Multiple relapses, not successfully completing treatment

• Poor continuing care monitoring

• Failure to treat comorbid psychiatric illness

• Not focusing on total abstinence
• Overdependence on intellectual understanding of
illness rather than commitment to the 12 steps

- Use of intravenous narcotics
- Poor relationship skills
- Occupational or legal difficulties

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