Narcotics and the Anesthetist: Professional Hazards

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PREFACE

When we accepted the request of the A.A.N.A. Program Committee‡ to prepare a paper on the subject of narcotics and the anesthetist, we did so without much reluctance and with no misgivings concerning what lay ahead of us. Each of us in his professional capacity has had some small knowledge of persons who had taken drugs that should have been forbidden.

We have become possessed of a degree of missionary zeal to make available to others what we have learned over and above our beginning knowledge of the problem of medical and paramedical addiction. We have become devoted to the problem of the nurse and physician addict initially through pity for them and secondly because of the threatened destruction of the professional stature of people in the healing professions and arts when they become personally involved in this habit.

ACKNOWLEDGMENTS

As a result of the difficulties that we encountered in getting reliable or factual information from the literature, most of what we are presenting we have gleaned from others.

Among those persons who were of help to us were: L. B. Slotnik, Federal Narcotics Bureau, Chicago; Lt. Morgan Gardner, Head of the Narcotic Division, Chicago Police Department; William A. Massett, Narcotic Inspector, Edgar F. Peoples, Narcotic Inspector, Dr. James Service, Resident, Presbyterian Hospital, Chicago, and others of the State of Illinois Narcotic Control Division whose names we did not learn; Gilbert H. Marquardt, M.D., Chicago; Morris J. Nicholson, M.D., Boston, Massachusetts; Ralph M. Tovell, M.D., West Hartford, Connecticut; Jacob E. Reisch, M.D., Chairman, Committee on Narcotics, Illinois State Medical Society, Springfield, Illinois; M. Annie Leitch, Associate Executive Secretary of the American Nurses' Association for the State Boards of Nursing, New York; John Maginnis, President of Maginnis & Associates, Chicago, and Harris Isbell, M.D., Director, NIMH Addiction Research Center, United States

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‡ A.A.N.A. Program Committee. (See p. 172.)
Public Health Service Hospital, Lexington, Kentucky, who not only provided us with a wealth of material from his works but also in telephone conversation and in letters, encouraged and aided us in this project which, without his encouragement, would have seemed futile.

Assistance was sought from the headquarter offices of the American Medical Association, the American Dental Association, the American Veterinary Medical Association and the American Society of Hospital Pharmacists. From the information we received from the American Dental Association, addiction is a relatively small problem among dentists, and according to our contact in the American Veterinary Medical Association there were no records of addiction among veterinarians.

THE SEARCH

An extensive study of the literature failed to reveal one specific instance of a nurse anesthetist involved in drug addiction and contacts with physicians and law enforcement officers who work with narcotic addicts resulted in no report of a nurse anesthetist as distinguishable from other nurses.

What we had originally assumed to be a simple search soon developed into a rather complex maze. At times we found ourselves following paths that did not specifically apply to the problem as we had originally conceived it. However, each of these paths added to our knowledge.

As we worked our way through the maze we came out with much less real knowledge of the subject than we had hoped to find. Such knowledge as we did accumulate we are presenting here so that others may appreciate this problem that confronts professional people.

In addition to reviewing the literature, we contacted many people including the city, state and federal narcotics agents, professional organizations and an insurance consultant. We made a sample survey of the State Boards of Nurse Examiners and members of the American Association of Nurse Anesthetists, as well as contacting some individuals who had personal knowledge of friends who were addicted. In each instance we received information, encouragement and many useful facts, few of which particularly applied to the nurse anesthetist.

Early in our study we realized that we had to adjust semantically to learn even the language of the addict in order to understand the literature on addiction. We found a dictionary on narcotic lingo and lore which was helpful to us. According to the prolegomenon of Schmidt's book, "In the recondite climate of narcoticdom, words — simple, innocent familiar words—lead a double life not unlike that of Dr. Jekyll and Mr. Hyde, with Mr. Hyde always in the ascendancy. This is to say that many common, everyday words are used not for their general sense but for their occult meaning. Then there are words which sound like the gibberish of a vaudevillian double-talker and are apparently no words at all, but which, nonetheless, carry meanings and messages to those in the know."

We were reminded of the semantic barrier that surrounded the word leprosy which certain individuals could not accept but these same individuals could speak of Hansen's disease without repugnance.
ADDICTION DEFINED

In order that we might more clearly outline the purpose of this study, we sought a definition for the term addiction. Even here we found some difficulty. Webster’s Collegiate Dictionary defines the verb addict as: “to apply habitually, as one’s mind to speculation; to give (oneself) up or over as to versifying as a constant practice.” The noun is defined as “one who is addicted to a habit, especially to the taking of some drug.” The term addicted has become commonly used when referring to bad habits and the term devotion in the sense of addiction to good habits.

Wikler, for clinical purposes, defines drug addiction “as the compulsive use of chemical agents which are harmful to the individual, to society, or to both.”

Vogel, Isbell and Chapman use the following definition: “drug addiction may be defined as a state in which a person has lost the power of self-control with reference to a drug, and abuses this drug to such an extent that the person or society is harmed.” While this definition covers the slum addict, as well as medical and paramedical addicts, the treatment of these groups is almost unrelated.

According to Isbell, “The term drug addiction has different meanings to different persons. Pharmacologists usually limit the definition of drug addiction to chronic intoxications which are followed by the appearance of a characteristic illness after abrupt and complete withdrawal of the particular intoxicant being used. Psychiatrists are likely to define drug addiction in terms of personalities, or in terms of the psychodynamics which underlie the addiction. Social workers and law enforcement officers are inclined to define addiction in terms of the effects on the individual’s relationship to society and the effects the intoxication may have upon propensities to commit crimes. A comprehensive definition of drug addiction must take into account all these various points of view.”

According to Schmidt the slum addict defines the drug habit as “bunk habit; chippy habit; coffee- and-habit; cotton habit; Dr. White [habit]; hit-and-miss habit; ice-cream habit.”

The World Health Organization uses the following definition: “Drug addiction is a state of periodic and chronic intoxication detrimental to the individual and to society, produced by the repeated consumption of a drug (natural or synthetic). Its characteristics include: (1) An overpowering desire or need (compulsion) to continue taking the drug and to obtain it by any means; (2) A tendency to increase the dose; (3) A psychic (psychological) and sometimes a physical dependence on the effects of the drug.”

Maurer and Vogel caution against the use of the word addiction loosely because of the stigma that is attached to the term.

Early in the interviews with narcotic law enforcement officers, we found the tendency was to distinguish between the professional person who has become addicted and the “dope addict” as we commonly conceive the term, by using the classifications “professional addict” and “street or slum addict.” Although we may refer
to the "street addict" in this paper, it will be only in connection with lessons that may be learned or for purposes of comparison or contrast. Our primary purpose is to discuss the professional person who becomes addicted to the use of drugs that are harmful to him, to society and to the profession that he practices.

In treating slum addicts one has to realize their peculiarities as illustrated by their language. To most people the nurse in her white uniform is a familiar image. The definition of her in Schmidt's \textsuperscript{1} book on lingo reads: "a nurse who smuggles narcotics to an addict in a hospital—a white angel."

The phrase "monkey on the back" is said to be the outgrowth of the expression "monkey on my back" which was used by an old-time vaudevillian morphine addict who presented on the stage an act consisting of a dog turning cartwheels with a monkey riding on the dog's back. When the producer was asked about the act he said he too had a monkey on his back, meaning that he was saddled with the morphine habit.

Literature and statistical information on the slum or street addict is plentiful. Information concerning the physician addict is beginning to be accumulated in sufficient quantity to be important. There is less literature on the nurse addict, and as we mentioned earlier, none that we could find on the nurse anesthetist as an addict.

Information concerning the medical and paramedical addict seemed to be difficult to gather because of passivity, evasiveness and unwillingness on the part of his non-addict colleagues. We gained the impression that they wanted no part of their experience to be known. They did not want to become involved even in reporting addiction because of a strong fear of personal implication. It seems that the subject itself is distasteful. It resembles speechlessness in the presence of a skunk because of breathlessness from the environmental stench associated with addiction. We are convinced that this attitude must be dispelled and this presentation is an effort to endorse the subject as one worthy of discussion.

**WORLD SIGNIFICANCE**

The United States has given energetic leadership to a world-wide movement to stamp out opium smoking and has supported international efforts to stop the illicit traffic in drugs. The United States has been active in the narcotic drug section of the League of Nations, and its successor, the Commission on Narcotic Drugs of the United Nations Economic and Social Council. Different countries have sought different methods to solve the problem of addiction.

In Great Britain, for instance, they have the same controls as has the United States for importation, manufacture and retail distribution. These particular functions are centered in the narcotics control section of the Home Office and are carried out by law enforcement officers. The Ministry of Health does conduct continuous monitoring of the prescribing of narcotics by the panel physicians who are permitted to decide to maintain an addict on narcotics if it has been shown that the addict can lead a useful and productive life with the drug and is unable to do so without it.\textsuperscript{11}
In the United States the method is essentially one of police control. We are inclined to believe that at least in this country we need the best of both the medical and police systems.

We well realize that in many fields custom is more binding than regulation. There are countries where custom countenances one's use of hashish without the loss of face, whereas chronic alcohol intoxication is taboo. In this country alcohol pervades our society—narcotics are taboo.

**FEDERAL NARCOTICS ACTS**

The Harrison Narcotic Act was established in 1914. "This law controls the importation, manufacture, processing, buying, selling, dispensing or giving away, of opium, coca leaves, and all their compounds, derivatives, and preparations. It requires registration and an occupational tax for all persons who deal in these drugs. . . . Exceptions are made only for physicians, druggists, veterinarians, and other practitioners, to prescribe narcotics in accordance with medical needs other than to support addiction, and to druggists and pharmacists selling such drugs pursuant to legal prescriptions."

The Bureau of Narcotics, which was established in 1930, is a function of the Treasury Department and is responsible to the Secretary of the Treasury. It is under the guidance of H. J. Anslinger, Commissioner of Narcotics, Washington, D. C., who recently indicated that he has 280 agents who, during the past five years, have worked with more than 8,000 cases of violation of the narcotic act. The activities of this bureau are many but principally it is charged with the regulation of the importing and retailing of harmful drugs. The Commissioner of Internal Revenue is also directly concerned with this problem.

Under the federal law the actual taking of drugs in self-abuse is not considered a crime, and the reporting of such use is not compulsory. The pilfering or theft of a narcotic or other reportable drugs, however, according to federal law must be reported by the holder of the narcotic tax stamp.

**STATE LAWS**

Most states have some law pertaining to the control of narcotics. These laws vary from state to state. A few of the more active states attempting to control the abuse of drugs are: California, Florida, Illinois and New York. In Illinois it is considered a misdemeanor to take a drug in self-abuse.

The difference between the federal and state laws will make a difference to the reader who may be reporting an incident, since the agency to which it is reported may differ in its recommendations concerning the treatment.

Operating under the Department of Public Safety of the State of Illinois, an active program is conducted on narcotic addicts who are on probation or on parole. Some idea of the magnitude of the problem within a city such as Chicago may be obtained from the estimated figures. There are approximately 30,000 addicts in Chicago alone, and at least that number in New York City. One of the major problems with the slum addict is the crimes that are committed in his efforts to obtain money for purchasing the drugs. It has been esti-
mated that the retail value of goods necessary to sustain an addict for one day is $45.00. This, multiplied by the number of addicts and the number of days in the year, becomes an astronomical economical loss by theft. It becomes a full time job for the law enforcement officers to control this phase alone.

Since most physicians and nurses obtain their narcotics by pilfering from the hospital or physician's supplies they are not subjected to the pressures of the street addict and in this respect the economic implications are not so great.

The problem of the medical, nursing and other paramedical addict does not often confront the law enforcement officer at the local and state level. Each of the persons with whom we visited suggested that professional groups should "take care of their own."

Since there was little in print concerning the addiction of nurses, we read the literature pertaining to the addiction of physicians in the hope that lessons could be learned that would apply to nurses.

THE PHYSICIAN ADDICT

According to Jan Marks, author of the book Doctor Purgatory, "of all professional groups, doctors have the highest incidence of addiction to narcotics. . . . It is estimated roughly that one out of every hundred physicians in the United States has been, or is, addicted to narcotics. . . ."

"In addition to human weakness and the lack of adequate knowledge, each physician must cope with two major occupational hazards which are conducive to the use of narcotics and the development of addiction.

\[\text{J. Am. A. Nurse Anesthetists}\]

"The first hazard is the professional awareness of the sedative properties of narcotics. Repeated administration of these drugs to patients for short periods with gratifying results and few complications tends to inculcate in the physician a false sense of security relative to the dangers of addiction.

"The second hazard is simply availability. Temporary relief from any and all noxious or unpleasant situations is no further away from the doctor than his medical bag. Unlike the street 'junkie' who must face all sorts of tribulations to support his habit, the physician-addict must make the decision to use illegally what is already in his possession legally.

"What actually drives the physician to administer the first 'shot' of narcotics to himself? Despite individual variations, most physicians fall into one of three main groups.

"The first group is composed of physicians who are unable to endure the irregular hours and loss of sleep that are part of any busy medical practice. Seeking relief, they first try sleeping pills. Sooner or later, when these become ineffective, they resort to 'just one shot' of a narcotic to enable them to relax and obtain the needed sleep.

"The second group is made up of physicians who suffer from recurring attacks of pain caused by some chronic disease, such as arthritis or kidney stones. Eventually, the pain returns at some inopportune time; either their own physician is away, or the attack comes on suddenly at night. Reluctant to confide in another
doctor or to bother a colleague during the night, they decide to administer a narcotic to themselves.

"The third group includes the physicians who are heavy drinkers, or alcoholics. At some time in the course of their alcoholism, they are forced to administer a narcotic to themselves to allay the distress of a hang-over or to stop the jitters and tremors that would be detected by their patients.

"Underlying the apparent causes to use narcotics, there is usually a serious emotional disturbance."

Louis E. Jones, Secretary-Treasurer of the California State Board of Medical Examiners, reported the experience of the California Medical Board in working with physicians. "The California Board, which licenses some 2,000 doctors of medicine a year, annually considers an average of 50 to 60 cases of narcotics violations involving physicians found guilty of prescribing drugs for themselves or being addicted to their use." In 1958, at the time of Jones' report, the studies of the California Board of Medical Examiners indicated that approximately 92 per cent of the doctors placed on probation because of the use of or addiction to narcotics had not returned to the use of the drugs. This is in marked contrast to the experience with all classes of patients at the Lexington and Fort Worth hospitals where "64 per cent of all the patients who have been treated have been treated once only, and 36 per cent have been treated more than once, several cases having been treated as many as 20 times."

The causes usually given by the doctors who were called before the California Board for their abuse of narcotics were: "(1) Overwork and fatigue, usually attributed to the size of the practice and to night calls, (2) a painful disease usually chronic in nature, or for relieving of pain after an operation, (3) domestic difficulties or unsolved personal problems."

Quinn, in reporting the medical and legal problems of narcotic addiction with physicians, points out that of the 8 per cent of California physicians who returned to addiction, a large number commits suicide.

Pescor, in 1942, reported the experience with physician addicts in the United States Public Health Service Hospital in Fort Worth, Texas. Follow-up studies showed that 50 per cent of physicians who had been out of the institution for six months or longer were still not using drugs, 27 per cent had relapsed, the
others were dead or unheard from. Two had committed suicide. Pescor outlines seventeen ways in which the physician addict differs from other addicts: “(1) The average age of the physician addict is 52 in contrast to 39 for the ordinary addict. (2) He is a voluntary patient rather than a prisoner. (3) He began using drugs at the age of 39 instead of 27. (4) He began using drugs for the relief of a painful or distressing physical condition in contrast to simple curiosity and association. (5) He confined himself to the use of morphine instead of using many narcotic drugs. (6) He has been an addict for 13 years in contrast to 10 years. (7) He has made at least three attempts at voluntary cure, while the ordinary addict has made none. (8) He remained abstinent for 32 months after his most successful treatment, in contrast to 24 months for the ordinary addict. (9) He relapsed for medical reasons or through alcoholism instead of through association with other addicts. (10) The physician addict was arrested for the first time at the average age of 45; the ordinary addict at the average age of 28. (11) His parents were in comfortable economic circumstances in contrast to marginal. (12) He has a college education; whereas the ordinary addict has an eighth-grade education. (13) He comes from a small city or rural section rather than a large metropolitan area. (14) He was able to earn sufficient income to support himself and his habit in contrast to the average addict who had to supplement his income through illegal methods. (15) He is happily married and has two children, whereas the ordinary addict is divorced and has no children. (16) He has a mental age of 16 years; the ordinary addict has a mental age of 13 years 8 months. (17) Upon release he has his practice to look forward to while the ordinary addict has no prospect of employment.”

Wall,20 in discussing the results of hospital treatment of addiction in physicians at the New York Hospital, Westchester Division, studied 44 physicians who were patients during a thirty year period, 1927 to 1957. Thirty-six of the patients were certified on their own petition, eight others were admitted as voluntary patients and each left before any good was accomplished. Outstanding personality traits were “sensitive tendermindedness, with a tendency toward hypochondriasis, to tire easily, and inability to stand life when the going was rough or hard. Twenty-eight [of thirty-six] were immature, felt inadequate and withdrawn, somewhat irresponsible and unreliable and lacking in staying power, qualities commonly met with in the so-called psychopathic personality. Twelve were of the neurotic type with a long history of generalized tension, visceral tension, headaches and insomnia, and periods of neurasthenia and depression. Four were definitely retiring, shut-in and schizoid in make-up.” Of the original forty-four patients in the study, twelve had been off the drug for one to 29 years. Several of those cured had died after leaving the hospital, but they had not returned to the use of drugs. The other thirty-two had not done well. Four of them committed suicide within five years after discharge from the hospital and the others were in and out of treatment and unable to work.

Maurer and Vogel,15d after listing some of the ruses used by pharmacists, nurses and physicians to obtain
drugs for their own use, comment: "If publicity sometimes focuses the public's attention upon the misuse of drugs by physicians, nurses, and pharmacists, it must be remembered that these professions are constantly exposed to drugs and that their work is sometimes done under physical conditions which make the use of narcotics or stimulants very tempting; furthermore, not being criminals by nature, they are often not adept at concealing their illegal acts, and readily fall afoul of the law."

Having quoted these extracts from authorities who have worked with physician addicts, we may readily adapt much of the comment to the nurse who may become addicted. Early in our investigation we were guided to our clearest thinking by the statement that a drug addict who is otherwise a socially acceptable person should not be regarded as a criminal. The law may take the point of view that the use of narcotics is a crime, but psychiatrists and others who work with addicts take the attitude that addiction is a sickness. Over-eating, over-indulgence in alcohol, excessive use of tobacco, the use of narcotics — the basic problem is the same, according to some authorities — the means of trying to resolve it are different.

Glaspel,7 in discussing problems of narcotic addiction before the Federated State Medical Boards, suggested that "a thorough understanding of the problems relating to the individual addict as well as a background in the use of probation might well serve as a basis of approach to what the Federation could propose as a formal program of probation and rehabilitation." He points out the magnitude of the problem by comparing the number of addict physicians with addicts in the general population "while the incidence of addicts in the general population is one addict to every 3,000 people, among physicians it is one addict to every 100 people, or thirty times more prevalent. To state it in another more dramatic way, enough doctors to equal the entire annual output of one of our medical schools degenerate into addiction each year — not a pleasant thought.... It is interesting to note that over 50 per cent of the Demerol addicts admitted to the [United States Public Health Service Hospital in Lexington, Kentucky, during the past three years (1955-1958)]... were physicians and allied medical groups. Personal interviews with these patients relative to their selection of Demerol rather than opiates were as follows: (1) It was believed to be less toxic and easier to break off the habit. (2) Demerol is often more readily available. (3) There is less stigma attached to the use of Demerol. (4) The signs of addiction and of withdrawal are less evident."

Isbell9 points out that statistics may not always be comparable because the entire professional lifetime of physicians may be included in a study, whereas only an annual statistic may be used in other studies of the general population. "To put it another way, 1 per cent of physicians become addicts at some time in their professional careers, but at any given moment and time, 1 per cent of physicians are not actively addicted. Because of the generally favorable prognosis for physician addicts, the rate on any given day might even be less than the rate in the general population."
The concluding statement in an editorial in the Federation Bulletin exemplifies the willingness of professional groups to assume responsibility for helping professional colleagues. "The Federation has the obligation, in sponsoring a national program which might incorporate the factor of probation, to make a specific recommendation as to what type of case might be suitable for probation, just as it has an obligation to develop a satisfactory method of follow up and supervision for the probationer."

There is less evidence of efforts to analyze or control addiction among its members by the nursing profession.

THE NURSE ADDICT

Dr. Harris Isbell,9th Director, NIMH Addiction Research Center of the United States Public Health Service Hospital, Lexington, Kentucky, recognized the paucity of information concerning nurse addicts "unfortunately no detailed study has ever been made of our nurse addicts, though several studies on addict physicians have been completed."

Dr. Isbell has prepared for use in this paper a table showing the number of nurses in relation to other female patients discharged from Lexington during a five year period.

The number of nurses as indicated by the records of the Lexington and Fort Worth federal narcotic hospitals is almost equal to the number of physicians but percentage-wise would not be as great. We found no specific statistics on the number of nurse anesthetists who were involved in addiction. We attempted to find this information.

In this paper the word nurse includes all nurses, but when we say nurse anesthetist we exclude all other nurses.

STATE BOARDS OF NURSE EXAMINERS

In an incomplete survey by Leitch (1960), 42 state boards of nurse examiners replied to a questionnaire concerning the current practices in regard to the recording of disciplinary action of nurses by the state boards of nursing.

Of the incidents of narcotic addiction, the 42 replies included 14 revocations of license, 8 suspensions of license, one probation and 52 refusals to renew licenses. For violations of narcotic laws, 2 licenses were revoked, 2 suspended and 3 renewals were refused. For alcoholism, 1 license was revoked, 2 suspended and 16 renewals were refused. Narcotic addiction accounted for the largest number of revocations, being 14 of the total of 26. The combination of narcotic addiction, violation of narcotic law and alcoholism accounted for 17 of the 26 revocations. Licenses were suspended in 12 instances of 78 suspended for all causes, probation only one of 7 under one of these three classifications. Renewal of licenses refused in the three classifications were 71 of the total of 133 for all causes. Only 14 of the 45 Boards of Nurse Examiners that returned questionnaires reported the incidence of the misuse of narcotics or narcotic addiction to state law enforcement agencies.

In reply to the question, "Do you consider your present methods [of managing disciplinary problems] satisfactory?"—31 replies were Yes and
<table>
<thead>
<tr>
<th>First Drug of Choice</th>
<th>Female Totals</th>
<th>Female Nurses</th>
<th>Female Totals</th>
<th>Female Nurses</th>
<th>Female Totals</th>
<th>Female Nurses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>803</td>
<td>52</td>
<td>905</td>
<td>38</td>
<td>916</td>
<td>46</td>
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<tr>
<td>Opium</td>
<td>1</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>19</td>
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<td>—</td>
<td>—</td>
<td>—</td>
<td>1</td>
<td>—</td>
</tr>
<tr>
<td>Morphine</td>
<td>135</td>
<td>15</td>
<td>146</td>
<td>11</td>
<td>102</td>
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<tr>
<td>Pantopon</td>
<td>13</td>
<td>3</td>
<td>9</td>
<td>—</td>
<td>12</td>
<td>4</td>
</tr>
<tr>
<td>Paregoric</td>
<td>26</td>
<td>1</td>
<td>33</td>
<td>3</td>
<td>37</td>
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<tr>
<td>Dilaudid</td>
<td>42</td>
<td>1</td>
<td>55</td>
<td>5</td>
<td>32</td>
<td>2</td>
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<tr>
<td>Heroin</td>
<td>490</td>
<td>6</td>
<td>579</td>
<td>4</td>
<td>632</td>
<td>3</td>
</tr>
<tr>
<td>Codeine</td>
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<td>1</td>
<td>18</td>
<td>2</td>
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<td>1</td>
<td>7</td>
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<td>Cocaine</td>
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<td>—</td>
<td>3</td>
<td>—</td>
<td>1</td>
<td>—</td>
</tr>
<tr>
<td>Marihuana</td>
<td>—</td>
<td>—</td>
<td>2</td>
<td>—</td>
<td>1</td>
<td>—</td>
</tr>
<tr>
<td>Demerol</td>
<td>43</td>
<td>17</td>
<td>36</td>
<td>12</td>
<td>52</td>
<td>17</td>
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<tr>
<td>Dolophine</td>
<td>16</td>
<td>1</td>
<td>7</td>
<td>—</td>
<td>13</td>
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<td>Barbital</td>
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<td>1</td>
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<td>—</td>
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<td>Seconal</td>
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<td>—</td>
<td>—</td>
<td>—</td>
<td>1</td>
</tr>
<tr>
<td>Barbiturate, unspecified</td>
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<td>3</td>
<td>—</td>
<td>—</td>
<td>1</td>
<td>—</td>
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<td>8</td>
<td>3</td>
<td>6</td>
<td>—</td>
<td>4</td>
<td>2</td>
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<tr>
<td>Observation—not addicted</td>
<td>2</td>
<td>—</td>
<td>—</td>
<td>—</td>
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Source: Inpatient Records (PHS-2539 and PHS-2540).

Credit: This table was provided through the courtesy of the Public Health Service Hospital, Lexington, Kentucky.
No. Some of the comments expressed a need for education, authority and definite policies. 1. “We need a law with teeth and we need an educational campaign so that hospitals and other agencies will understand their own responsibilities as well as the function of the board in dealing with offenders." 2. “When new legislation is secured which will provide authority for the Board to suspend or revoke licenses after publishing hearings, action can be more prompt and thus more effective.” 3. “We should have more definite policies and a more definite method or system of handling this type of case.”

<table>
<thead>
<tr>
<th>State</th>
<th>Misuse of Drugs</th>
<th>Proved Addiction</th>
<th>Demerol</th>
<th>Barbiturates</th>
<th>Morphine</th>
<th>Alcohol</th>
<th>Codeine</th>
<th>Heroin</th>
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<td>x</td>
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<td>x</td>
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<td></td>
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</table>

Fifty-two questionnaires were sent to Boards of Nurse Examiners. Replies were received from 46. Twenty-one of the 46 reports (see Table 2) gave information concerning nurses who had been reported for addiction or for misuse of narcotics. Fifty-three instances of misuse of narcotics had been reported during 1960; 55 instances of revocation of license for proved addiction in the same period.

The question was asked, “Do you have facts on the drugs most often
implicated?" In the inquiry there was no leading question naming a specific drug. The question as to the drug most often implicated in the reports of nurses who become addicted or otherwise misuse narcotics brought replies from 24 states. In each one in which the question was answered at all, Demerol was named as the most often misused drug.

The drugs that were mentioned were:

- Alcohol* 2
- d-Amphetamine 1
- Barbiturates 4
- Codeine 1
- Demerol 24
- Heroin 1
- Morphine 6
- Tranquilizers 1

* However, one report included the statement that "alcohol is the offending drug oftener than the narcotic drugs."

AANA QUESTIONNAIRE
TO SELECTED MEMBERS

One hundred questionnaires were sent to selected members of the American Association of Nurse Anesthetists. These were directed to the officers of the affiliated associations: the fifty states and the District of Columbia. The purpose for sending this questionnaire to these particular people was with the hope that they, as officers of the component state groups, would have knowledge of incidents within their own states. For this reason, the questionnaire could not be classified as a random sampling.

Of the 100 questionnaires mailed, 72 were returned. The 72 returns represented all but three states (Minnesota, Rhode Island, Wyoming). Of the 72 returned questionnaires, 55 answered all questions with a categorical "no information." Information was provided by the remaining seventeen. The question was asked whether within the past two years the individual had known of an incident of narcotic (including anesthetic) addiction or suspected addiction. The professional status and the initials of the individual so addicted or suspected were asked for the purpose of eliminating duplications. No instance of duplication was reported. Table 3 summarizes the reports from the 17 questionnaires.

In one of the reports, five incidents were reported all involving operating room personnel. The comment was made that other areas of the hospital may have had cases unknown to the anesthesia department and "the rest of the hospital does not know about ours."

The summary shows 6 nurse anesthetists who have been reported as having misused drugs. Four of the 6 were known to have taken Demerol, one took "anything she could get" and the other one inhaled Fluothane.

Of all of the medical and paramedical personnel reported (25) Demerol was the drug used by 17; morphine, 3; methedrine, 2; cocaine, 1; barbiturates, 1; "any anesthetic gas," 1 and nitrous oxide, 1.

The source of supply for the nurse anesthetists and other operating room personnel was in each instance from the operating room and anesthesia drug supply. Most other registered nurses obtained the drug from the drug supply available for patients in the hospital or, if the nurses worked in the operating room, from the operating room supply.
<table>
<thead>
<tr>
<th>Persons</th>
<th>Drug</th>
<th>Source of Supply</th>
<th>Fate of the Individual</th>
<th>Authority notified</th>
<th>Prescribed</th>
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<td>N.A. *</td>
<td></td>
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<td></td>
<td></td>
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<tr>
<td>P.A. *</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RN’s* &amp; Others</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RN</td>
<td>1</td>
<td>1</td>
<td>patient dosage</td>
<td>position changed within hospital</td>
<td>No</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>OR drug supply</td>
<td>resigned</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>OR drug supply</td>
<td>resigned (psychiatric treatment)</td>
<td>No</td>
<td>Yes</td>
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<tr>
<td>Pract. nurse</td>
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<td>dismissed</td>
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<td>No</td>
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<tr>
<td>Maid</td>
<td></td>
<td>OR drug supply</td>
<td>dismissed</td>
<td>No</td>
<td>No</td>
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<td>Orderly</td>
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<td>dope peddler</td>
<td>jailed</td>
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<td>No</td>
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<tr>
<td>RN</td>
<td>1</td>
<td>patient supply</td>
<td>treated (position changed in hospital)</td>
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<td>No</td>
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<tr>
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<td>left town</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
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<td>1</td>
<td>floor drug supply</td>
<td>dismissed</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>1</td>
<td></td>
<td>“anything she could get”</td>
<td>OR drug supply dismissed</td>
<td>No</td>
<td>Yes</td>
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<tr>
<td>RN</td>
<td>1</td>
<td>narcotic records altered</td>
<td>dismissed</td>
<td>No</td>
<td>No</td>
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<td>1</td>
<td>1</td>
<td>OR drug supply</td>
<td>resigned—under psychiatric treatment</td>
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<td>No</td>
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<tr>
<td>RN</td>
<td>1</td>
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<td>No</td>
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<tr>
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<td></td>
<td>floor drug supply</td>
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<td>Med. sec’y</td>
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<td>treated in hospital, later dismissed</td>
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<td>No</td>
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<td>1</td>
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<td>No</td>
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<tr>
<td>RN</td>
<td>1</td>
<td>OR drug supply</td>
<td>retained (supply cut off)</td>
<td>No</td>
<td>Yes</td>
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<tr>
<td>1</td>
<td></td>
<td>OR drug supply</td>
<td>dismissed (now studying psychiatry)</td>
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<td>No</td>
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<tr>
<td>Surg. tech.</td>
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<td>“any anesthetic gases”</td>
<td>OR drug supply dismissed (psychiatric treatment)</td>
<td>No</td>
<td>No</td>
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<tr>
<td>1</td>
<td>1</td>
<td>OR drug supply</td>
<td>retained (supply cut off)</td>
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<td>Yes</td>
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<tr>
<td>Dentist</td>
<td></td>
<td>own office</td>
<td>psychiatric treatment (continues his practice)</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>1 (student)</td>
<td>1</td>
<td>OR supply</td>
<td>dismissed</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>RN</td>
<td></td>
<td>unknown</td>
<td>retained (under medical care)</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>RN</td>
<td>1</td>
<td>substituted placebo in floor supply</td>
<td>dismissed (may have taken for her ill sister)</td>
<td>Yes</td>
<td>No</td>
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</table>

* N.A.—nurse anesthetist  P.A.—physician anesthetist  RN’s—not nurse anesthetists
For the purpose of this report the orderly who used cocaine and obtained it from a dope peddler could be classified as a slum addict rather than a paramedical addict, since his source of supply was not from within the hospital.

Of the 25 persons listed, only five had been reported to either federal or state authorities. Of the 5 who were reported, 3 were registered nurses, one was a physician and the other was the orderly. No instance of a nurse anesthetist having been reported to the authorities was listed in the replies. Five of the 25 persons had been introduced to the use of narcotics by prescription while under treatment.

The effect on the employment of the person whose addiction had been discovered is indicated in the column "Fate of the Individual." Eighteen were dismissed or resigned. The word resigned was often put into quotes when it was reported on the questionnaires. Six of the persons were retained within the hospital. In some instances the position was changed so that there would be less temptation in a department of the hospital where drugs were not so readily available. In only one instance was arrest a consequence of the action taken by the employer and this was in the case of the slum addict.

Of the persons who were dismissed, 5 were referred to psychiatric or institutional treatment. Of the 6 who were retained in their positions, three were under psychiatric treatment according to the reports.

There is a tendency on the part of anesthetists and apparently of other hospital personnel to try to cover for a co-worker who may have given every evidence of pilfering and/or use of narcotics. This type of action may be of questionable value. If the person is addicted to the use of drugs or is stealing drugs for someone else it may be harmful to the culprit for his colleague to try and cover up or give amateurish help. However, if the person is innocent of any wrongdoing in connection with narcotics it would be good to have the matter investigated and clear the individual of suspicion. That the practice of protecting his colleague is fairly universal is attested to by replies to the AANA member questionnaire.

As the analysis of the results shows, there were relatively few reports of incidents. However, on several occasions since the questionnaires were mailed we have talked with persons who filled them out and find that they do know of cases, but were reluctant to put them even in so general a questionnaire as was submitted to them. In each instance, it was reported that "someone was doing something about it" within the hospital. The amateur psychiatrist, the amateur narcotic specialist and the well meaning friends of suspected addicts within the hospital are legion. If our small experience is projected into the total hospital field, a true understanding of the problem will help to allay the fears of persons who are reluctant to report the incidents. Discreetly conducted inquiries with the proper persons making the inquiry could, in the long run, do more good than harm. It is a paradox that although we may look with loathing upon the practice of drug addiction, the individuals suspected are often of such likeable personality that their
friends and colleagues are reluctant to involve them in reports to authorities in the fear that such action may reflect on the good name or professional integrity of both the suspect and the suspecter.

It may be that one of the reasons that it is so hard to get anybody to admit that they are suspicious that someone else is addicted is, because once such a suspicion has been announced the person under suspicion is forever suspected. Such a suspicion was cast upon one of our colleagues and ten years after his death the rumor still clings to his name. Our advice would be that one should be very certain. In dealing with this problem we would caution against the publicizing of suspicion without proof.

AANA PERSONAL FILES

The incidents of addiction or misuse of narcotics that have been reported to the American Association of Nurse Anesthetists' Board of Trustees during the past ten years were reviewed. With deliberate distortion of location, sex, and other factors that might serve as identification, they are reported here.

Case A. A member was dismissed from the hospital because of suspected drug addiction. No written confirmation of the action that led to the dismissal or proven addiction could be obtained. No action was taken by the AANA Board of Trustees.

Case B. A report was received from two members that a member had been "picked up for stealing narcotics from physicians' cars." The rumor could not be confirmed. The Federal Narcotics Bureau investigated the incident, but no charge was placed. No action was taken by the AANA Board of Trustees.

Case C. An incident of a member who was reported by the State Board of Nurse Examiners as having been committed to a state hospital as a drug addict could not be confirmed. The employer did not admit to any disruption in the employment of this person, and there had been no break in continuity in her contacts with the AANA. For lack of written information or complaint, no action was taken by the AANA Board of Trustees.

Case D. A member reported three instances of suspected narcotic addiction, naming only one person. Contacts with the employers could not confirm the suspicions of the member who had made the original report. One physician sent a letter denying that the allegations were true, stating that the so-called addiction was actually the use of drugs under prescription for a painful condition, and that the member was in no way a hazard to patients, being constantly under medical supervision. No action was taken by the AANA Board of Trustees.

Case E. A report was sent that a young graduate was using portions of the patients' doses of Demerol. When questioned, he admitted that it was taken for pain. From three physicians in different parts of the country reports came to the Association concerning the search of the member's automobile by narcotic agents, needle marks on his arms and substitution of water for Demerol solution in the operating room of the hospital in which he was employed. No written statements could be obtained from members or employers concerning these charges. He was permitted to continue his membership with the understanding that if there was another complaint, membership would be withdrawn forthwith. For four years there have been no additional complaints.

Case F. A young lady was operated on for a malignant condition and after a long recovery period had some difficulty in withdrawing from the use of Demerol which had been prescribed. Within a few weeks after she had discontinued the use of any narcotic drugs she suffered a fractured arm, and again Demerol was prescribed for her by the same physician who had cared for her during the first operation. Upon recovering from the fracture, she realized that she was addicted and committed herself to a federal hospital. The inci-
dent was reported to the State Board of Nurse Examiners and her license was revoked. However, after discharge from the federal hospital as no longer being addicted she could not obtain employment in the state in which her license had been revoked. She was then placed on probation by the State Board of Nursing. A good opportunity to obtain employment in another state was dependent upon her receiving a license and because of the probationary status in her home state she could not obtain a license in the state where employment was offered. Although apparently recovered from the addiction, and although she complies with every term of her probation, this individual is forced to accept a position far beneath her professional ability until the term of her probation has been completed.

Action of AANA Board of Trustees: Membership was revoked and revocation held in abeyance. Frequent contacts with this individual have been made for the purpose of encouraging and assisting where possible. Efforts are continuing to try to adjust the matter of licensing in the state where a good position is still being held.

Case G. This individual came to the attention of the Association while a student in one of the approved schools of anesthesia. Following psychiatric examination for "abnormal behavior" she voluntarily withdrew from the school. A notice was sent to all schools of anesthesia to contact the director of the original school if the individual applied. In spite of this she gained admission to a second school. After several months during which there seemed to be no problem a secretary noticed the old note in the files and the individual was summarily dismissed from the second school. Threats were made against the Association of a suit for "blackmail." However, again, in spite of the original memo, she gained admission to a third school. Again on the advice of a psychiatrist she withdrew. The next that was heard of this individual was two years later when a director submitted letters to the Association from a psychiatrist in a large university center assuring the director in the fourth school that this individual was "completely normal in every respect." In spite of misgivings the director accepted her as a student and, with above average performance, the course in anesthesia was completed. Application was made for the qualifying examination for membership in AANA. After study by the Credentials Committee, the Board of Trustees, and legal counsel, the student was assigned for examination. On the day that the examination was taken, a report was sent from the hospital administrator by whom she was employed that the individual was involved in narcotic theft and had been proved to be addicted. The report of the qualifying examination was withheld while the incident was investigated thoroughly. Although the individual protested vehemently, and under oath, that all charges were false, the state narcotic bureau made a thorough investigation. After being accosted with direct statements which refuted her own previous replies to questions, and upon recommendation of the parole board, the individual was committed to a state prison without recommendation for parole.

Case H. A newspaper article was mailed to the AANA Executive Office concerning the conviction of a member for illegal procurement of narcotics. A direct letter of inquiry to the member brought a statement that the charge would be dismissed if she would leave the state. This individual moved into another state and practices anesthesia there. She is on probation to the law enforcement officers of the state in which the conviction was made. Upon evidence that all terms of the probation were being met, the AANA Board of Trustees permitted this individual to continue membership. After two years, no additional difficulty has been encountered.

Four cases of alcoholism have been reported to the AANA Board of Trustees during the past ten years. Two of these could not be confirmed and two of the members appeared before the Board of Trustees to be heard. In each case membership was withdrawn and contacts were made through the Executive Office to help in the rehabilitation of the two. In each individual the rehabilitation was apparently completely successful, and
after three years in one instance and four years in the other, letters were received from doctors, ministers and sponsors in Alcoholics Anonymous that so far as they were able to determine the individuals were no longer addicted to alcohol.

Membership has been reinstated. One of the members no longer practices anesthesia, having selected a less stressful type of nursing; the other practices anesthesia, having worked under supervision for more than a year. Each still keeps in close touch with the Executive Office.

These instances are reported to show that it can happen to you, and they account in some measure for the interest of one of the authors (F.A.M.) in the problem of addiction as a professional hazard.

That the individual case of addiction may not come to the attention of the professional organization can be attested to by the fact that in the first year and a half after the senior author (J.S.L.) moved to Chicago, two physicians, each formerly competent anesthesiologists, came for help. One had become addicted to alcohol, and one to Demerol. A position was obtained for the one who had become alcoholic, but he promptly lost the position by reverting to his alcoholism. He was advised to leave the locality and to make a fresh start elsewhere. When last heard from, the Demerol addict had been out of the country but was planning to return. Whether he has discontinued the use of Demerol we do not know but he has been advised to make a new beginning in a new environment.

One of the problems that must be explored before calling in expert help is that of the possibility of coincidence. An example of the danger that may exist if precipitate action is taken is that of a graduate nurse who was found asleep on the job. With great difficulty the supervisor roused her, and with help she was taken to her apartment where she was left alone. An immediate search disclosed that a considerable quantity of narcotics was missing from the medicine cabinet in the hospital. The administrator notified the registry that the nurse would no longer be acceptable for cases in the hospital and the registry in turn removed her name from the list of persons available for work. The following day when the incident came to the attention of the nursing group, one nurse inquired as to the side of the story which may have been told by the nurse who had been found asleep. No one had asked for her side of the story nor had they inquired about her condition after they had left her in her apartment. A visit to the apartment disclosed that the nurse was in bed still ill and upon being examined by a physician it was discovered that she was in a diabetic coma. Later the hospital found that another person had taken the drugs. This is but one of several circumstances in which an innocent person may be suspected of, or accused of, having stolen drugs.

WHO MAY BECOME AN ADDICT

Our search failed to reveal a specific class of persons or type of person who could be identified as a potential "addict." The descriptions in this paper that apply to physicians could well be applied to nurses. Wikler\(^{22b}\) in attempting to explain the emotional dependence upon addicting drugs, described the opiate addict
population of the USPHS Hospital in Lexington, Kentucky in four categories: "(i) 'normal' individuals, accidentally addicted (rare); (ii) 'constitutional' psychopaths, or individuals with 'character disorders'; (iii) 'psychoneurotics'; and (iv) 'psychotics' (rare). From the psychodynamic standpoint, a relationship has been demonstrated between opiate addiction and the orally fixated, narcissistic, passive receptive personality. Predilection to the use of opiates has been correlated with recurrent depressions and with inability to endure discomfort, whatever its source. The addictive process has been described in terms of cycles of 'elation' and 'depression' or 'pharmacothymia.'

"Common to all of these formulations, however, is the hypothesis that certain drugs, including opiates, relieve 'anxiety' and produce a feeling of 'euphoria' which the individual seeks to experience repeatedly by continued use of the drug. Whether or not he will do so appears to depend on other factors—the availability of the drug, suggestion by associates, legal restrictions, painful illnesses, attitude of social groups, etc., as well as the state of the individual's own internalized controls."

Maurer and Vogel,\textsuperscript{15e} in discussing the psychological effects of opiate drugs, recognized two psychological classes of addicts. "These two groups are those which might be considered 'normal' at the time of addiction on the one hand, and those which would be classed as addiction-prone on the other. However, in both groups certain identical phenomena are observed. These are the development of physical dependence on the drug, the development of tolerance to the drug, and habituation.

"Among 'normal' individuals—that is those individuals with stable personalities—the reaction to drugs is usually negative. To this type of individual the first experience with opiate drugs, usually encountered during medical treatment, is distasteful, except insofar as they relieve pain. He does not experience the intense pleasure or euphoria which the addiction-prone personality seeks. However, the normal person will become psychologically addicted to opiates just as truly as the addiction-prone personality if he is exposed sufficiently to the drugs, except that his emotional dependence is not so marked, being chiefly related to the distress of withdrawal rather than to the positive pleasure effect. The normal personality, however, cooperates readily, as a rule, in withdrawal treatment and shows a lesser tendency to revert to drugs than does the addiction-prone individual.

"Persons considered to be addiction-prone usually experience intense pleasure on their first contact with opiates, and whether their first experience with drugs is under medical supervision or whether it occurs as a result of experimentation or the suggestion of addicted acquaintances, the results are usually dramatically pleasurable."

It would be helpful for persons who may be confronted with a questionable addicted colleague to know the signs that may indicate addiction. By special permission of the authors\textsuperscript{16f} we are quoting the following paragraphs because we believe they are most meaningful.
“The most significant signs which may (when supplemented by further objective evidence) indicate addiction are:

1. A statement by the individual that he is an addict.

2. The possession of addicting drugs (either medical or contraband) without adequate medical explanation.

3. A tendency on the part of the suspect to hide or conceal these drugs.

4. The presence of needle-marks in the form of black or blue spots resembling tattooing; these may indicate skin-shooting, and will usually appear on the arms and legs, or even on the backs of the hands. Fresh needle punctures, sometimes topped by minute scabs or crusts, are especially significant.

5. The presence of elongated scars (frequently of tattooed appearance) over the veins, especially those of the forearms, the insteps, or the lower legs; however, these may have a medical explanation unrelated to addiction.

6. The presence of boil-like abscesses over the veins or near the sites where veins approach the surface.

7. An appearance of drowsiness, sleepiness, or lethargy (‘on the nod’), especially if accompanied by a tendency to scratch the body as if itching. This sometimes indicates a slight overdose of opiates or their synthetic equivalents.

8. The tendency to develop withdrawal symptoms ... if isolated completely and observed constantly for a period of 12 to 24 hours. This applies only to the opiates and barbiturates.

9. Wide fluctuations in the size of the pupils of the eyes, with the pupil reaching a maximum of constriction immediately after the suspect may have taken an injection; this applies only to opiates.

10. The possession of equipment for smoking opium, unless, of course, this equipment has only a curiosity value, or is owned by a collector. If it is freshly or currently used, the odor will be characteristic.

11. The possession of hypodermic equipment, excepting those persons with a legitimate need for such equipment, such as diabetics who must take regular injections of insulin, or medical addicts. However, the legitimate user will invariably possess a standard medical syringe and needle, while the addict usually (but not always) tends to prefer the home made syringes...
12. An appearance of intoxication, but with no odor of alcohol present; this may indicate the use of marihuana, chloral hydrate, or the barbiturates. Marihuana tends to produce the hilarious type of intoxication, while the barbiturates tend to produce stupor when used in intoxicating quantities, but there are also all ranges of intoxication encountered. Persons who have recently smoked marihuana will have a characteristic 'cubeb' or 'weedy' odor of the breath. Marihuana tends to cause the impairment of judgment without impairing motor control in proportion, or at least to the extent that intoxicating doses of alcohol would impair motor control.

13. A tendency for the individual to sit looking off into space, known to young addicts as 'goofing'; this may indicate the use of heroin or barbiturates, or both.

14. The possession of a cooking spoon with handle characteristically bent backward, or a cooker made from a metal bottle cap with a wire handle; small glass vials are also sometimes used. They are all characteristically blackened from being held over a lighted match.

15. A tendency to laugh excessively, or to laugh at things which others do not think funny; a tendency for the metaphors used to reflect a distortion of time and space. This may be indicative of mild intoxication or marihuana, but is not observed among opiate users.

16. A knowledge of the argot of the underworld narcotic addict. . . . While some addicts who secure their drugs exclusively from medical sources never learn any of the argot, these addicts are decidedly in the minority; most addicts will know or respond to terms from the argot of the underworld addict, and especially to terms employed predominantly by users of the type of drug which the addict takes.

17. A tendency for the suspect to isolate himself at regular intervals (about four or five hours apart) in order to take hypodermic injections.

18. An obvious discrepancy between the amount of money the suspect earns, and the amount he spends for the necessities of life; if he makes $100 a week and is always broke, with no obvious expenditures for necessities, he may be supporting a drug habit.

19. The tendency for a person who has previously been reliable to resort to thievery, embezzlement, forgery, prostitution, etc. This may indicate that he or she needs the large amounts of money necessary to support a drug habit.
20. A new technique has been developed for proving addiction in cases deprived of opiate drugs but showing insufficient withdrawal signs to permit positive diagnosis. It has been shown at the Lexington Hospital that N-allylnormorphine administered hypodermically in 2.5 to 15 mg. dosage will precipitate or intensify latent withdrawal signs so that the diagnosis of opiate withdrawal can easily be made if the subject has been taking the opiates thus far tested in even small quantities. Usually within 15 minutes after the dose of N-allylnormorphine is given the patient dramatically and abruptly develops typical withdrawal signs, including sweating, goose-flesh, restlessness, aches and pains in the muscles and joints, nausea, and vomiting. The onset of the acute withdrawal symptoms is almost explosive in many cases. The new drug has been used in this manner for confirming addiction to morphine, heroin, and methadone. Patients who have been addicted to small doses of demerol have not consistently responded, but one case with a high-level demerol habit reacted typically to the drug. This effect of N-allylnormorphine has not yet been tested in cases of addiction to other opiate drugs.

"By way of precaution, it should be emphasized that the administration of N-allylnormorphine should be undertaken only by a physician familiar with the withdrawal syndrome. Large doses of this drug will precipitate signs of withdrawal so sudden and so severe that death may result. Therefore, the initial dose should always be small (not over 3 mg.) and the procedure should be closely watched by a physician who is prepared to take the necessary precautions.

"Again it should be emphasized that no one of these criteria is in itself indicative of addiction; when several are present, additional objective evidence should be collected in an effort to confirm or disprove addiction if this is important for any reason. On the whole, unless there is some justifiable reason for inquiring into the personal life of some other person, amateur sleuths and investigators should be discouraged from invading the privacy of individuals who might, by the manifestation of one or more of the above signs, be suspected of addiction. In fact, both of the authors might well manifest two or three of the signs enumerated above yet neither of them has ever used drugs. Proof of drug addiction in the last analysis boils down to the establishment, through evidence, of the following facts: that the individual uses a drug of addiction and that he uses it regularly and compulsively. These facts are not always easy to demonstrate, as for instance in the cases of addicts who have successfully simulated illnesses requiring the application of medical opiates; the fact that many experienced and ethical physicians have been deceived by addicts only goes to show the difficulty of differentiating a true medical need from addiction."
WHAT CAN BE DONE

The question of treating the professional addict is one which the law enforcement officers with whom we talked were unanimous in their recommendations that professional groups should help their own colleagues.

Drug addiction, per se, is not a federal crime. However, the theft or pilfering of the hospital or physicians’ supply of drugs is illegal. Although hospitals follow the regulations pertaining to record keeping as required by the Federal Narcotic Law, the usual practice is to dismiss a nurse who may have been suspected of using narcotics without prescription. The nurse then finds employment in another hospital, and again procures drugs until she is apprehended, and the same cycle is repeated.

In the field of anesthesia it would seem that the one spot to be watched most carefully is the handling of the ampules of narcotics in the operating room.

It has been suggested that to do the greatest good the employer who can name a suspected employee, or person working in the hospital who has misused narcotic drugs, should ask for help of law enforcement agents, either state or federal. Once the misuse of the drug has been confirmed, federal agents recommend that psychiatric help be given to the individual involved. The excellent records of the treatment at the USPHS hospitals would recommend the voluntary commitment of the individual for treatment. There are those who argue against the voluntary commitment in the belief that the judgment of the addict cannot be relied upon to initiate or complete treatment voluntarily.

According to Ausubel, “Effective and serious therapy of drug addiction is practically impossible outside of institutions that specialize in the treatment of this condition. Accurate diagnosis and skillful treatment require special facilities and trained personnel which are not available in physicians’ offices, out-patient clinics, or general hospitals. If an addict is to be taken off drugs he must be placed in a controlled, drug-free environment. Since most confirmed addicts are either insincere in their desire for cure or unwilling or unable to resist the temptation of relieving their distress during withdrawal, stringent precautions are necessary to prevent the smuggling of contraband narcotics into the hospital. Because addicts are experts in malingering, chicanery and subterfuge, responsibility for control measures should not be placed in the hands of neophytes. This among other reasons (such as lack of compulsion and the need for placating a well-paying patient) adds to the difficulty of treating addicts in private hospitals.”

With the excellent prospects of salvaging an individual who by education can contribute to the profession, it would seem that primary efforts should be made to direct the individuals into the proper channel for treatment rather than turn them out to continue their addiction habit and pilfering of drugs. All authorities with whom we conferred, or whose work we have read, agree that only with professional help by skilled workers in the field of treatment of addicts can the best salvage be obtained.
IATROGENIC ADDICTION

As evidenced by our survey among AANA members and by one of the cases reported, a growing number of addicts has become accidentally addicted following the prescription of drugs for the treatment of pain. Psychiatrists recognize that the claim for iatrogenic addiction may be more of an excuse than a reality. Physicians recognize, however, that this possibility exists. Woolmer cautions against the misuse of drugs following prescription. "The likelihood of addiction following the medicinal use of morphine for a painful condition lasting for days or for a week or two is very small, particularly if the subject does not know what drug he is being given and has no access to supplies of it. If, on the other hand, he is a doctor, a nurse, or a pharmacist, the danger is grave, and people in these professions, though not, by and large, of the stuff of which typical addicts are made, are specially at risk."

Maurer and Vogel, in discussing this phase of the problem, proposed that "the ideal answer to the problem of medical addiction would be a drug as pain relieving as morphine or heroin, without the pleasurable effects desired by the addict. It may be that the relief of physical pain (the nature of which is as yet imperfectly understood) is so closely associated with relief of emotional distress or anxiety that such an ideal drug will never be found. This association may be inherent in the structure of the molecule, and inseparable pharmacologically. However, intensive efforts have been made for years, and are continuing, in the synthesis of new drugs related to the opiates. As such drugs are prepared either by the chemists of the Public Health Service or by commercial drug houses, they are tested in the research department of the Lexington hospital for addiction liability. Many interesting drugs have been so tested, but none approached the ideal product. If this drug could be developed, addiction-prone individuals who make their initial acquaintance with drugs in the course of medical treatment might go for years or perhaps indefinitely without feeling the desire for drugs. Of course, the emotionally normal individual who has to have drugs during the course of an illness, in amounts necessary under present conditions to produce physical dependence and withdrawal illness, would be spared that ordeal if such a drug were available."

It is in this area that we would encourage research to find some antagonist that could be used with a drug such as morphine that would stop the euphoria only. Fraser et al have reported a recent test of isoquinoline. The manufacturers of Demerol have done extensive research along this line and feel that they have a promising drug in Alvodine.*

This company has also prepared an excellent moving picture, "Face of an Addict," which points out the hazard to a physician of taking the first dose of an addicting drug in self-abuse.

† Face of an Addict. 16mm, color, sound, 29 minutes. May be obtained from Winthrop Laboratories, Inc., New York, New York.
One Chicago physician has taken practical steps to eliminate the iatrogenic hazard to his professional patients. His solution to the problem is incorporated in his letter dated September 13, 1961.

Dear Dr. Lundy:

For the past 20 years over 80% of the patients with narcotic addiction admitted to my Service have been medical or paramedical personnel. Many of these were among nurses and young doctors who had either just finished their internship or had been in practice for one or two years.

Several of them have been iatrogenic following a long illness—particularly in the Orthopedic Department.

On account of the above facts and my long association with student health problems, I have for many years forbidden the use of narcotics on any of the medical or paramedical personnel admitted to my Service.

I am sure that the many frustrations and severe fatigue episodes associated with medical practice account for the frequency of addiction in these people.

Gilbert H. Marquardt, M.D.

Let us hope that this practice will become universal.

It is the experience of the senior author that in prescribing narcotics for patients with chronic pain, so long as they have the pain, they are unlikely to become addicted to the drug. However, the use of the drug must be discontinued as soon as the pain leaves.

DISCUSSION AND CONCLUSIONS

In this presentation we do not have space to tell you of the amount of reading we have done, the details of our visit with a federal narcotic agent, of the correspondence that has been carried out, of our visit to the state narcotic testing center in Chicago, of the professional organizations we have contacted. Nor can we review here the pharmacology or the physiology, for the information is too voluminous for a presentation such as this. The authors are now preparing a paper on the drug addict as a subject for anesthesia.

Each of the persons with whom we have talked seems to have come to a point at which they seem to want to make rules based on their own experiences. Each seems to want to preserve the so-called human dignity of the individual but they are handicapped by the laws that guarantee the rights of man. Instead of laying down hard and fast rules, it becomes a problem of personal decision whether we can afford to sacrifice the addicted individual without making a personal effort, not only to conserve his rights, but also to restore his dignity.

Following the dictionary definition, we believe that we have become both devoted and addicted to the cause of the professional addict. Progress may be slow. There are many devoted individuals and groups working throughout the world to eliminate the problem of dope addiction. If nurses and physicians, in addition to their contact with the patient addict, can become dedicated to the salvage prophylactically and therapeutically of their professional colleagues, we believe that they may add in no small way to the elimination of this professional hazard.

It is up to us to choose the proper course of action, not because the law
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says that we must but because we feel a moral obligation to do so. If we can convince others as we have become convinced following our study, we will feel that we will have made a beginning. A little help from each person in the professional field will make a great contribution to this problem which affects the individual, the profession and society as a whole.

If we will apply the golden rule in our contacts with the addict or suspected addict among us; if we will follow the advice of those experienced in the field of applying better methods for detection and treatment of this problem, we will have made a good beginning and we will have justified this presentation.

The pressures that are accepted by most nurses and doctors as inherent in their way of life cannot be endured by a small percentage of them. This inability to endure continued pressure may account for their false hope of refuge in the misuse of drugs. The ready availability of the drugs is an “easy way out.” It is not entirely the fault of the drug or its ready availability that produces the addict. It is a combination of weakness, either congenital or acquired, through fatigue or frustrations, that serves as a background for the misuse of drugs.

Nurses as well as others in the hospital field should be most cautious in accepting premature claims of possibly nonaddicting qualities of newly-introduced drugs.¹

In the busy lives we lead, should we be alert to the needs of those who cannot stand up to pressures and help them through their difficulties? Should we be so well informed that we can help them through their difficulties in order that they will not be tempted to start the habit? Should we take the time to learn the proper procedure, and the persons to whom the report of suspected addiction is to be made? Should we know something of the law in relation to reporting missing drugs? Should we educate and cooperate in a project by which iatrogenic addictions can be reduced?

The physician who prescribes addicting drugs for chronic pain should assume responsibility for the potential hazards of this practice, and nurses should cooperate in the elimination of this practice.

It is to be hoped that by education and dedication we may acquire the same discipline as pertains in one country where the production of opium for export is its main industry, but custom prevents citizens of that country from using the drug.

SUMMARY

A diligent search for information concerning the misuse of drugs by nurse anesthetists, and other members of the medical and paramedical team, has been made. Some suggestions and impressions have been incorporated in this presentation in the hope that others will share with the authors the shattering realization of the need for more knowledge to help those who may not be able to help themselves.

Members of the 1961 A.A.N.A. Program Committee who suggested the subject of this paper were: E. Ruth Stephens, C.R.N.A., Memphis, Tennessee, Chairman; Anne E. Starcovic, C.R.N.A., Charleston, West Virginia and Thomas Richards, Jr., C.R.N.A., Winter Haven, Florida.
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No special search was made for material, which is voluminous, in the newspapers and magazines. A list of the articles that came to our attention during the course of this study follows.

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Where specific quotations from the literature are used in the paper, the reference has been listed numerically in the bibliography. Other books and articles that have been read are listed separately under the following heading.

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Limitations of space on the first page of the article precluded the use of the full biographic information for the senior author. It is included here for completeness.

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Another facet of the problem that occurred to us was the problem of the professional addict in relation to insurance programs. We asked the insurance consultant of AANA, Mr. John Maginnis, for information. He very kindly prepared a paper which follows this presentation.