

HIGH RISK CHARACTERISTICS OF OREGON NURSES
IDENTIFIED AS HAVING PROBLEMS WITH
ALCOHOL AND DRUG USE

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CHAPTER I

INTRODUCTION

Of adult Americans, 70% drink, and of these an estimated 6% - 10% develop alcoholism (Cahalan & Cisin, 1968). Roughly 5% of alcoholics are women. If we ignore the small number of men in nursing and assume that, with respect to alcoholism, nurses are the same as other women, then 5% (or 40,000) of our nearly 1.5 million nurses are alcoholic (Isler, 1978). There are no available statistics regarding women who abuse other substances, so similar predictions can not be made.

The nursing profession has recently begun assessing the alcohol and drug problem among nurses. The National Council of State Board of Nursing, Inc., started collecting information on disciplinary actions from its member state boards. Although not all state boards have reported, the data available on disciplinary proceedings involving nurses in Oregon during the period September 1980 through August 1981 show that 67% were related to some form of chemical abuse (Oregon State Board of Nursing, 1982).

Nurses, as other health care professionals, are exposed to a number of situations and possess a number of

characteristics that place them at high risk for alcoholism. The work itself is stressful and demanding. Salaries are adequate to make alcohol or drugs readily affordable. High levels of education, movement away from strict, abstinence-oriented religions, and exposure to urban environments are all known to be associated with increased drinking. Changing shifts and unpredictable sleep patterns also make the use of alcohol as well as sedatives and stimulants very tempting.

In 1981, the American Nurses' Association created a Task Force on Addiction and Psychological Disturbance to formulate guidelines that state nurses' associations might use for developing programs to help nurses whose practice is impaired by alcoholism and/or drug abuse. The Oregon Nurses' Association formed a task force in August 1982 to begin assessing alcohol and drug use among nurses in Oregon. This task force will establish guidelines and policies for nurses with alcohol and drug problems.

The Oregon State Board of Nursing reported 100 nurses who had come to the attention of its disciplinary board for "chemical abuse" (alcohol and drug abuse) in 1981 and 1982. These nurses had been identified as unsafe practitioners through their decreased ability to perform the duties of their jobs. Their nursing licenses are in jeopardy, and

their licenses may be revoked or suspended for a period of time.

The main reason for concern about "impaired nurses" (as they are called) is the impact of the problem on the entire health care delivery system. On the personal level, the tragedy is that nurses suffer from illnesses that go undetected and untreated for years while they work among providers of health care services. On a professional level, the danger is that patient care will be jeopardized by nurses whose judgment and skills are impaired.

Statement of the Problem

The purpose of this study is to identify characteristics of nurses who develop chemical abuse problems. These characteristics may provide a "high risk profile" that can be used to identify groups to be targeted for education focused on prevention and self-evaluation. Members of these high risk groups may also be targeted for treatment intervention at an earlier stage of the addiction process, thereby helping them to avoid the deterioration in their job performance and loss of their licenses.

CHAPTER II

REVIEW OF THE LITERATURE

There are few surveys in the literature on alcohol and drug addiction among nurses. Therefore, research on alcohol and drug addicted physicians will be included in this review, along with the more well-known surveys of the general population of the United States. The literature will be reviewed with respect to the following categories: (a) demographic characteristics, (b) job characteristics, (c) health issues, (d), accidents related to alcohol and drug use, and (e) arrests related to alcohol or drugs.

Demographic Characteristics

Age

Bissell and Jones (1981) studied 100 nurses recovering from alcoholism. Face-to-face interviews were done by research staff who were themselves recovered alcoholics. Subjects were accepted for the study if they met the following criteria: (a) they were members of Alcoholics Anonymous, (b) they considered themselves to be alcoholic, and (c) they had been completely abstinent for one calendar year or more. No attempt was made to define "alcoholism"

or "AA membership." In some cases, collateral contacts were available to verify abstinence and in other cases they were not. The sample was not random and there was no control group. The sample is overrepresentative of subjects in urban areas because of the ease of travelling to major urban areas for interviews versus travel to rural areas.

The age range for nurses in this study was from 29 to 69 years, with a mean age of 44.6 years. The sample included 100 registered nurses who had been abstinent from alcohol for 1 to 20 years.

In Jaffe's (1982) sample the age range was narrower, from 30 to 45 years, with a mean age of 37.5 years. The sample included the alcoholic nurses who were referred to the St. Vincent's Hospital Alcoholism Consultation Team in New York City.

Poplar's (1969) study of drug addicted nurses revealed little difference in age from alcohol addicted nurses, with the mean age being 41.7 years. The sample included 90 nurses seeking treatment for drug addiction at the National Institute of Mental Health Clinical Research Center in Lexington, Kentucky, during a five-year period ending May 1967.

National surveys of the general population confirm the findings of Bissell and Jones (1981) and of Poplar (1969) that the age period of risk for women is from 40 to 50 years

(Bailey, Haberman, & Alksne, 1965; Cahalan, 1976). There is no particular age associated with addiction for men.

In two studies on physicians (Herrington, Benzer, Jacobson, & Hawkins, 1982; Johnson & Connolly, 1981), the risk period for addiction was middle age, perhaps a little later in life than for nurses.

Marital Status

The 90 nurses treated for drug addiction at the National Institute of Mental Health Clinical Research Center (Poplar, 1969) included 41% who were married, whereas 28% were divorced, 18% single, 10% widowed, and 3% separated. There was no research found on the marital status of alcohol addicted nurses.

Education: Surveys of Alcohol and Drug-Addicted Nurses and Physicians

The literature suggests that the nurse who is a high achiever and holds an advanced degree may be particularly vulnerable to alcohol and drug problems.

A majority of alcoholic nurses (Bissell & Jones, 1981) reported they were academic high achievers, with 66.7% ranking in the upper third of their class. Many of these nurses held advanced degrees. Of the 98 recovered alcoholic physicians, 53% reported that they were in the upper third of their medical school class (Bissell & Jones,

1976). In Jaffe's (1982) study of 16 recovering alcoholic nurses, 60% held Master's degrees in nursing. It may be that nurses who are high academic achievers and have advanced degrees hold jobs with a great amount of authority and responsibility, and that the pressure of these jobs may contribute to a person's susceptibility to addiction.

An earlier survey (Poplar, 1969) on 90 drug-addicted nurses in treatment, showed that only 9% had a bachelor's degree. Eight percent had two years of college, 19% had one year of college, and 65% had graduated from a three-year hospital program.

The difference in the educational background of nurses in the more recent surveys (Bissell & Jones, 1981; Jaffe, 1982) versus the earlier surveys (Poplar, 1969) may reflect a recent trend for nurses in general to hold advanced degrees compared to 13 years ago.

In the general population surveys, there was an interesting tendency for persons who started but did not complete a level of education to report a higher rate of alcohol consumption than those who completed a lower level (Bailey et al., 1965). Women who went to college but didn't finish had a higher proportion of heavy drinkers than those who graduated (NIAAA, 1971).

Other Characteristics of Drug-Addicted Nurses

There are other characteristics of drug-addicted nurses that are worth noting. Poplar (1969) has identified some of these in a survey of 90 nurses treated for drug addiction at the National Institute of Mental Health Clinical Research Center in Lexington, Kentucky. The Psychometric Index of Character Structure was administered to all admissions from 1960 to 1962 who remained in treatment and did not leave against medical advice immediately after drug withdrawal. The responses on the 400-item test of the 68 nurses composing the sample were compared with responses of a control group of 200 other women patients who remained in treatment. The nurses responded differently on 184 items, which called attention to the fact that they are not typical of addicts in general.

When asked how they got started using drugs, the nurses gave as their most frequent reason physical illness. The next most frequent reasons for using drugs were emotional disturbance and work pressure (Poplar, 1969). This suggests that most of the nurses may have begun using drugs obtained by legitimate means, namely prescriptions for their medical or emotional problems; only later did they become addicted and "misuse" the drugs. These nurses obtained their drugs from doctors (40%), hospitals (38%),

illegal prescriptions (6%), drug stores (10%), other family members' drugs (2%), and pushers (4%).

Nurses claimed more than other addicts the ability to work while using drugs. When their habits became too expensive for them to support, they did not resort to prostitution, shoplifting, or use of illegal black market drugs. Rather, they usually procured their drugs through theft in their working situation, through physicians, or through forged prescriptions (Poplar, 1969).

They tended to be conventional, even ultraconventional, and seemed not to have developed normal flexibility in interpersonal relationships. They believed their bosses "had it in" for them. Even so, as a group, they would have been regarded as very desirable employees because of their apparent tendency to try to "bear up" (Poplar, 1969).

The nurses had a great tendency to deny. They denied tenseness, depression, boredom, lack of interests, restlessness, and unhappiness. As a matter of fact, of the 400 test items administered, the nurses responded to 255 with denying responses (Poplar, 1969).

Drugs Used by Those in Treatment

For nurses and physicians, the drug of choice appears to be demerol, followed by morphine, paregoric, codeine, darvon, and the barbiturates (Bissell & Jones, 1976;

Bissell & Jones, 1981). The abuse of sedative/hypnotics, narcotics, and stimulants seems to remain fairly constant (Bissell & Jones, 1981) for nurses and physicians. Some of the studies on drug addiction among nurses and physicians were conducted before chondiazopoxide was marketed in 1962 and diazepam in 1964. Bissell and Jones's clinical impressions are that they are currently seeing quite similar rates of addiction in their patients who are medical professionals; that is, they are seeing the same numbers in trouble with the same categories of drugs. Brand names change with the times, and individuals who might have used meprobamate or glutethimide five years ago now use diazepam or methaqualone.

It is not uncommon to find persons addicted to more than one substance. However, Bissell and Jones (1981) obtained interesting results when they compared drug and alcohol addiction rates for nurses and physicians. A greater percentage (65%) of nurses were exclusively addicted to alcohol as compared to physicians (58%). They found 24% of the physicians were addicted to both alcohol and non-narcotic drugs, while 21% of the nurses had dual addictions. "Addiction" was self-defined by the individual subject. Subjects were asked if they used a given drug outside a hospital setting. If they had, they were asked if they felt they had been addicted to it. Those who

replied in the affirmative were counted; those who seemed unsure were not included (Bissell & Jones, 1981).

Job Factors

Trice (1980) stated that alcohol use, and especially long-term abuse, impaired those cognitive functions required for efficient job performance. Threatt (1976) studied the influence of alcohol on work performance and the effects of alcohol use on various aspects of human behavior. He concluded that long-term alcohol abuse created problems beyond impairment of sensory-motor skills and intellectual performance. Long-term alcohol abuse affects a person's job in many ways.

The physical deterioration from alcohol addiction is well documented. Physical illness due to alcohol can result in absenteeism and ineffectiveness on the job, while psychological impairment can result in poor decision making and reduced output. Impaired judgment is associated with higher accident rates, mistakes, and increased workload for other workers. Drug use can cause similar impairments for employees with the same detrimental effect on job performance.

Many alcoholic nurses have held demanding, responsible positions in which they functioned with great competence (Bissell & Jones, 1981). Often they continued

to work for years after they began to drink heavily and before they finally succumbed to the effects of alcoholism.

In Bissell and Jones's (1981) survey, 90% of the physicians had been working full time as physicians while they were active alcoholics, compared to 67% alcoholic nurses. They found that pressure from fellow professionals was brought to bear less frequently on the alcoholic nurses than on the male physicians. In view of the fact that many nurses work within hierarchies under direct supervision, Bissell and Jones thought it more likely that they would be confronted or disciplined than would the more autonomous physician. This did not prove to be the case.

Quite a number of nurses reported that their employers had been aware of their alcoholism (Jaffe, 1982) or were suspicious of it (Bissell & Jones, 1981), but professional pressure to seek treatment had not been imposed on them. Some of these alcoholic nurses left their jobs voluntarily before they were confronted about their alcohol use.

It was common for the alcoholic nurses to experience "job shrinkage," where instead of welcoming extra assignments, as in the past, the nurse did only what was absolutely necessary (Isler, 1978). Many alcoholic nurses also reported changing their work hours from day to night shifts where supervision was minimal, or moving into a job

setting where nursing staff were in short supply and standards of performance less demanding (Bissell & Jones, 1981). If employers were suspicious of a nurse's drinking problem, the nurse changed places of employment, often giving family responsibilities and health problems as explanations.

One reason why alcoholic physicians may feel the consequences of professional pressures more often than alcoholic nurses is the high job mobility that nurses have compared to physicians. The physicians' lower job mobility may also be a reason why job jeopardy was the most common motivating factor for 50 physicians to enter treatment for alcohol and drug addiction (Johnson & Connolly, 1981).

It has been this author's experience, after working in the alcohol and drug treatment field for nine years, that chemically addicted people are willing to risk loss of spouses, families, and material possessions; but few are willing to risk losing their jobs. When it becomes apparent that a person's job is in jeopardy, this often acts as a motivating factor for him/her to enter treatment.

Treatment outcome has been extremely good for alcoholics and drug abusers whose illness is identified early and who are sent to treatment as a condition for retaining their jobs or their licenses to practice (Bissell & Jones, 1981).

Health Factors

Employed alcoholics studied by Pell and D'Alonzo (1970) had more sickness, absenteeism, and disability than their peers. The illness was attributed to almost all major diagnostic categories, but particularly to cirrhosis, peptic ulcer, pneumonia, bronchitis, hypertension, neuropathy, diabetes mellitus, musculoskeletal disorders, and accidents.

It is clear that the alcoholic employee costs his/her employer much in the way of medical insurance claims, lost productivity, absenteeism, and job shrinkage. Often the physical disorder is treated and the underlying cause, which is substance abuse, goes untreated.

It is well documented that female alcoholics develop physical disorders more quickly and are more illness prone than male alcoholics (Morgan & Sherlock, 1977; Ashley et al., 1981; Jones-Saumity, Fabian, & Parsons, 1981).

Jones-Saumity et al. (1981) matched 100 alcoholic women with 100 nonalcoholic control women. The alcoholic women were volunteers from four residential treatment programs located within 100 miles of Oklahoma City. Alcoholism was defined by alcoholic-related problems in their lives and by residency in an alcohol-treatment program. The alcoholic women also scored above the 50th percentile on the General Alcoholism Scale of the Alcohol

Use Inventory, which is an index of alcoholism severity. The alcoholic women fell into the heavy drinker category according to Cahalan and Cisin's (1968) criteria, whereas control women were abstainers, infrequent, light, or moderate social drinkers. The sample was matched for age and education. There were several physical health disorders which the alcoholics reported significantly more often than did the controls.

As expected, the alcohol-related disorders were more prevalent in the alcoholic women. The prevalence of all liver diseases was higher in the alcoholic group and alcoholics also reported significantly more nonalcoholic-related physical health disorders than the controls. The alcoholics had had a higher prevalence of communicable diseases (mostly childhood) than the controls, which may suggest a susceptibility to infection predating alcohol abuse. Traumatic injuries occurred significantly more often among alcoholics than controls (Jones-Saumity et al., 1981).

Drug use is related to alcohol problems, particularly for women, and is currently the focus of much concern. Women were not eligible to participate in this study (Jones-Saumity et al., 1981) if they were currently abusing drugs other than alcohol. Despite this screening process, over three-fourths of the alcoholic women reported some form of drug abuse, and 11% had been addicted to at least

one drug other than alcohol. Also surprising was the high frequency of drug use in the nonalcoholic women: 59% reported using prescription or nonprescription drugs without supervision to an extent of possible abuse.

In a survey (Ashley et al., 1981) with a sample of 1,000 alcoholic men and women, significantly more alcoholics than controls reported the following: smoking, liver disorders, nervous problems (past history of nervous breakdown or treatment/medication for nerves), and drug use (use of prescription and nonprescription drugs without supervision to an extent of possible abuse). Seizures or convulsions occurring in conjunction with alcohol use, alcoholic hepatitis, and drug addiction (prealcohol abuse) were reported only by alcoholics.

Ashley et al. (1981) recorded lifetime illnesses of 1,000 alcoholic men and women who voluntarily entered the medical unit of the Addiction Research Foundation in Toronto. The staff internists recorded complete histories and performed thorough physical exams on every patient. These were supplemented by routine blood tests, X-rays, electrocardiograms, laboratory and clinical diagnostic procedures, and assessments as required. In addition to this, previous hospital records were requested and in most cases obtained. All data were then reviewed and collated,

and a long-term medical profile of each patient was constructed.

Bissell and Jones (1976, 1981) compared the medical complications of alcoholic nurses with the medical complications of alcoholic physicians. As a group, the nurses were slightly younger than the physicians and had started drinking when they were somewhat older; they had, therefore, fewer years of exposure to the toxic effects of alcohol on the body. In spite of this, the nurses reported more physical problems than the physicians.

In summary, the literature shows an increase in alcohol-related diseases among alcoholics. It was also found that nonalcoholic-related health disorders were significantly greater among alcoholic women than the controls (Jones-Saumity et al., 1981).

The Relationships among Alcohol Consumption, Automobile Accidents, and Accidental Falls

There is little research available on the relationship between alcohol consumption and job-related accidents, although the relationship of alcohol consumption to fatal automobile accidents and to accidental falls is well documented (Roizen, 1981; NIAAA, 1981). These relationships provide support to the general belief of people working in job-related safety departments, that employees

who have drinking problems are at high risk of involvement in industrial accidents.

Automobile accidents. Alcohol has been found to be a contributing factor in a large number of highway accidents. Problem drinkers comprised 48% of the drivers responsible for their own fatal injuries, 41% of the drivers who survived but were responsible for fatal injuries to others, and 31% of the drivers who fatally injured a pedestrian (Boston University School of Law, 1976). A recent literature review found that between 35% and 64% of all fatal crashes involved alcohol (Roizen, 1981). It is clear that alcohol interferes with a person's ability to function adequately while driving a car.

Accidental falls. With the exception of motor vehicle accidents, falls account for more accidental deaths than any other cause. A 1978 study (Haberman & Baden, 1978) found that almost 50% of those dying from falls had been drinking. It has been documented that alcoholics are at greater risk for falls and resulting death than the general population (NIAAA, 1981).

Alcohol-related accidents. A significant portion of the working population experiences job-related accidents. It has been found that alcohol inhibits coordination and judgment, lengthens reaction time, and decreases motor

performance and sensory skills in simulated industrial work. Experiments on the effect of alcohol intoxication on normal persons demonstrated changes in performance up to 18 hours after the ingestion of alcohol (Walkenberg, Gold, & Tichauer, 1975). This indicates that heavy drinking, even off the job, is detrimental to job performance and can play a role in job-related accidents.

In the study by Ashley et al. (1981), 23% of the alcoholic group had suffered some type of trauma, with one-half of them being fractures. The females in the group suffered a greater number of fractures, concussions, and burns than the males. It is highly probable that the traumas were accident related.

Alcohol and drug-related arrests. Many of the 97 physicians surveyed by Bissell and Jones (1976) experienced difficulty with the law; 50% had been arrested while under the influence of liquor and 38% were jailed. Many others stated that while they had never been arrested, they believed that they should have been, but the police were often lenient when they were identified as a doctor.

Herrington et al. (1982) surveyed 40 physicians who were being rehabilitated for alcohol and drug addiction. They found that 30% of the physicians had been subject to legal action, primarily for writing illegal prescriptions

or for driving under the influence of an intoxicating substance.

Of the 100 alcoholic nurses in Bissell and Jones's (1981) sample, 14% reported having been arrested while under the influence. The same nurses reported that, frequently, action was taken only when some outside agency forced the issue, often by discovering a drug-related infraction of the law. Up to this point, the people around them--friends, family, and colleagues alike--had joined them in denying or concealing the problem rather than attempting to deal with it forthrightly. The physicians had more arrests and jailings related to alcohol than the alcoholic nurses. However, this tends to be true in all comparisons of male and female arrest rates.

Summary

The National Council of State Board of Nursing found that 67% of the disciplinary proceedings for a one-year period were related to some form of chemical abuse (Ensor, 1982). The problem does exist, but there is little known about the nurse who has problems with alcohol and drug use.

Women deteriorate physically faster from alcohol's effect on the body than men. Possibly, nurses at high risk for developing alcohol and drug addiction could be identified by a health profile. Patterns and reasons for

job absenteeism may be a way of targeting nurses who are beginning to have a chemical abuse problem.

The literature shows that alcohol plays a big part in accidents. Nurses involved in accidents on and off the job may be looked at more closely for signs of alcohol or drug addiction. By the time a person has incurred a chemical abuse-related arrest, the chances of having a problem with chemical abuse are high.

The literature reviewed covered studies on alcohol and drug abuse by nurses, physicians, and the general population. There was some information on demographic characteristics, education, drug of choice, and health problems. There was little information on job characteristics, and no information on job related accidents, job attitudes, absenteeism, and alcohol- and drug-related arrests. If more information were available, a high risk profile could be formulated and used to identify groups of nurses at high risk.

CHAPTER III

METHODS

Description of the Study

This study compares the characteristics of a group of nurses identified as having substance abuse problems with a group of nurses in the general nursing population. The survey used a mail questionnaire, and the following characteristics were compared: (a) demographic characteristics; (b) job characteristics; (c) stressful life events; (d) health characteristics; (e) accidents; (f) legal information; and (g) drug and alcohol use.

Definitions

Alcohol and drug abuse. This term will be used in this study to identify people who abuse any mood altering substances. These persons may be physically or psychologically addicted to the substance. Their use of alcohol or drugs would cause impairment in physical, mental, or social functioning.

Impaired nurse. The term 'impaired nurse' refers to a nurse whose functioning in performing the job is impaired because of substance or chemical use. An impaired nurse may be using substances to an extent or manner that is dangerous to herself/himself or others.

Sample and Setting

The sample for this study included 100 impaired and 100 non-impaired nurses. The non-impaired nurses were randomly selected from the total population of 23,470 nurses licensed to practice in Oregon in March 1983. The group of impaired nurses included all nurses licensed in Oregon, who had their licenses revoked, suspended, or put on probation between January 1, 1981, and December 31, 1982, for violation of Oregon State Statute 678.111. The statute reads:

Causes for denial, revocation, suspension of license or probation, reprimand or censure of license for: (e) Use of any controlled substance or intoxicating liquor to an extent or in a manner dangerous or injurious to the licensee or others or to an extent that such use impairs the ability to conduct safely the practice for which the licensee is licensed. (Oregon Statutes, Chapter 678)

The impaired nurses of this sample cannot represent the total population of nurses who abuse substances, but only those who have been formally identified and disciplined. Still, this sample is considerably more

representative of the universe of substance abusers than samples in previous studies, which were limited to nurses actively undergoing treatment.

Instrument

The review of the literature revealed no available standardized instrument for surveying characteristics of people who develop substance abuse problems. Therefore the investigator developed a questionnaire to survey these characteristics. This questionnaire is reproduced in Appendices A and B. Following is a rationale for each section of the questionnaire.

Demographic Information

The review of the literature revealed some limited findings on demographic characteristics of impaired nurses, specifically: age, marital status, and education. Information covering these same areas were included in the questionnaire and to permit comparisons with previous studies.

There was nothing found in the literature on the following areas: (a) percent of female versus male nurses who abuse alcohol or drugs, (b) single parenthood at the time of substance abuse, and (c) whether impaired nurses were working towards, but had not completed, an educational

degree. Questions pertaining to each of these areas were included in the questionnaire.

Job Characteristics

The literature review did not identify particular specialty areas within nursing which yielded higher percents of impaired nurses. It was found that alcoholic nurses reported that they moved into job settings where nursing staff was in short supply and the standards of performance were less demanding (Bissell & Jones, 1981). It may be that nurses who develop substance abuse problems work in certain areas or settings. Questions 7 and 8 ask the setting and area where the nurse most often works.

Many alcoholic nurses reported that they changed from day shift to night shift, where supervision was minimal (Bissell & Jones, 1981). Or, if their employer was suspicious of their drinking problem, they would change places of employment. Questions 9 through 12 address the job characteristics of full-time or part-time employment, shift most often worked, and average length of employment.

It was common for the alcoholic nurses to experience "job shrinkage," where instead of welcoming extra assignments, as in the past, the nurse did only what was necessary (Isler, 1978). One of the impaired nurses who took part in the pilot study for this research reported

feeling overly responsible on the job with difficulty delegating responsibility. Along with this was the feeling of a lack of recognition and positive feedback from the workplace. Questions 13 through 17 are job attitude statements. The respondents rate themselves on a scale from always to never, as the statement applied to them when they were using alcohol or drugs for the impaired nurses, or how the statement applies to them currently, for the non-impaired nurses. The scale assigned 1 point for "never," 2 points for "occasionally," 3 points for "frequently," and 4 points for "always. A mean score was then calculated for each question and for each group.

Stressful Life Events

One theory of substance abuse is that alcohol or drugs are used as a way to cope with stress in a person's life (Miller, Hersen, Eisler, & Hilsman, 1974). There were no studies found in the literature where stressful life events were measured for people who had been identified as having substance abuse problems. It may be that people who are experiencing high stress in their lives are also involved in substance abuse; hence, in this study the relationship between stress and abuse is examined.

The questionnaire included Holmes and Rahe's (1967) Social Readjustment Rating Scale (SRRS). This scale lists

43 episodes that a person may have experienced. Each item is weighted, with the highest being 100 for death of a spouse down to 11 for minor violations of the law. The items are totalled for an index of life change. Question 19 includes the 43 items of the SRRS.

Health Characteristics

The literature revealed specific health problems associated with alcohol abuse. These illnesses include, but are not restricted to, pneumonia, liver disorders, hypertension, ulcers, diabetes, traumatic or accidental injury, nervous breakdown or disorders, and musculoskeletal problems. Question 20 lists health problems and the respondent is asked to answer "yes" or "no" as to whether she had experienced any of these in the past two years. The purpose of the time limit was to place the occurrence of health problems in or near the time period when the respondent was using alcohol or drugs.

Absenteeism from the Job

The literature states that employees with alcohol abuse problems have absenteeism rates three to four times higher than other employees. There are no studies specific to nurses in this area. One study on nurses with drug abuse problems described them favorably as employees. The nurses were found to have the following characteristics:

(a) They possessed more ability to work than other addicts;
(b) They were overly responsible on their jobs; and
(c) They were regarded as very desirable employees even while using drugs. Impaired nurses may not show the same absenteeism rate as other impaired employees. Or, nurses who abuse drugs may differ in absenteeism rates from nurses who abuse alcohol because of the need to obtain drugs on the work site. Questions 21a and 21b address the respondents' absenteeism from the job.

Accident Information

The literature supports an increased incidence of accidents among people who have alcohol or drug abuse problems. Questions 22a, 23a, and 24a ask whether the respondent has experienced an accident which caused injury to self, others, or property. Questions 22b, 23b, and 24b ask whether the accident happened at work, someplace other than work, or both. The investigator is interested in finding out the level of work-related accidents and whether patients are injured.

Legal Information

The literature found that physicians who abused alcohol or drugs experienced more difficulty with the law (Bissell & Jones, 1976) and a higher percent was arrested

than nurses with substance abuse problems. Questions 25, 26, and 27 focus on legal issues and drug or alcohol use.

Alcohol and Drug Use

Question 28 lists 17 drugs that have mood altering qualities. Also included is a space to check over-the-counter drugs and other drugs. The respondent has six choices of frequency of use for each drug listed. They are: (a) daily, (b) several times per week, (c) once a week, (d) once a month, (e) rarely, and (f) never.

The impaired nurses are asked to check the frequency of use for each drug taken during the time they were using drugs and/or alcohol. The results from this group are to be compared to the results obtained from the nurses from the general nursing population.

Procedures

Pilot Study

A pilot study of the questionnaire was conducted in September 1982 on five nurses who had their licenses to practice nursing revoked or suspended because of substance abuse. Two of the five nurses responded and gave feedback on specific questions. As a result, the questionnaire was improved.

Confidentiality

The Committee on Human Subjects at Oregon Health Sciences University suggested changes for the cover letter and questionnaire pertaining to the issue of confidentiality.

The following measures were taken to protect respondents' anonymity: (a) there are no identifying codes or names on the questionnaires or envelopes; (b) the demographic questions are nonspecific, i.e., exact age is not asked for, to protect respondents' identities; (c) after the survey is completed, the computer cards and the questionnaires will be destroyed; (d) I will be the only person with access to the questionnaires; and (e) the results will be reported on groups of nurses, not individuals. These measures were listed in the cover letters and are in Appendices A and B.

After the changes were made, the committee granted approval and gave permission for the study to be implemented.

Data Collecting Procedure

The questionnaires for this survey were sent by first class mail to the home addresses of the sample with a cover letter stating the purpose of the study (see Appendix B). A stamped and addressed envelope was enclosed for the respondent to return the questionnaire. All questionnaires

were returned to a post office box at Oregon Health Sciences University. If a respondent completed the questionnaire and returned it, this was considered an affirmation of consent.

A postcard was sent one week after the questionnaire to remind the nurses to complete the questionnaires and return them. If they had already sent the questionnaires back, they were thanked for participating in the study.

CHAPTER IV

RESULTS

Description of Sample

Questionnaires were mailed to 200 nurses, 100 impaired and 100 non-impaired. Eight questionnaires were returned from the impaired nurse group as not deliverable. The remaining 92 questionnaires were delivered, and 53 persons responded, making a return rate of 58%. Of the 100 questionnaires sent to the comparison group, 14 were returned as not deliverable. Of the 86 delivered questionnaires, 62 were completed and returned for a response rate of 72%. Although more questionnaires were delivered to the impaired nurses, fewer in that group chose to respond and participate in the study than nurses in the comparison group.

One problem with self-administered mail questionnaires is the tendency to obtain a low response rate. This raises the question as to how representative the respondents are of the total sample. In the present instance, no data were available for the nonrespondents by which they might be compared to respondents. It is

assumed that the respondents were indeed typical of the sample as a whole, in that a response rate of 50% may be considered sufficient to rule out extreme bias (Polit & Hungler, 1976).

Demographic Characteristics

Table 1 presents information regarding the demographic characteristics of the two groups of nurses. The two groups did not differ in age, sex, or marital status. However, a greater proportion of the impaired nurses were single parents. In addition, the two groups did differ significantly in level of education. In the sample of impaired nurses, 55% had two years of nursing education, with an Associate of Arts degree, in comparison with 19% of the non-impaired nurses. Only 45% had three or more years of educational preparation for nursing, with a diploma, baccalaureate or advanced degree, in comparison to 81% of the non-impaired nurses.

Job Characteristics

Some significant differences were found between the two groups when job characteristics were compared. (See Table 2.) A greater percentage (87%) of the impaired nurses reported they worked full time than the comparison group. It should be noted that the impaired nurses

TABLE 1
Demographic Characteristics of Impaired Nurses
and a Comparison Group

Characteristics	Impaired Nurses (N=53)		Non-Impaired Nurses (N=62)		Significance of Difference
	Number	(%)	Number	(%)	
AGE					
18-25 Years	2	(4)	3	(5)	
26-41 Years	42	(78)	35	(57)	
41-65 Years	9	(17)	23 ^a	(37)	N.S.
SEX					
Female	43	(81)	58	(94)	
Male	10	(19)	4	(6)	N.S.
MARITAL STATUS					
Married	27	(51)	40	(64)	
Divorced	13	(24)	7	(11)	
All Other	13	(24)	15	(25)	N.S.
SINGLE PARENT					
Yes	17	(32)	8	(13)	
No	36	(68)	54	(87)	6.22*
LEVEL OF EDUCATION					
2-Year Associate	29	(55)	12	(19)	
3-Year Diploma	13	(24)	26	(42)	
4-Year Bachelor or Higher	11	(21)	24	(39)	15.6**

* $p < .05$ by Chi-Square Analysis

N.S. = Not Significant

^aThe total does not add up to 62 as data were missing.

TABLE 2
 Job Characteristics of Impaired Nurses
 and a Comparison Group of Nurses

Characteristics	Impaired Nurses (N=53)		Non-Impaired Nurses (N=62)		Significance of Difference
	Number	(%)	Number	(%)	
WORK SETTING					
Hospital	47	(89)	49	(79)	
Other	6	(11)	13	(21)	N.S.
SPECIALTY AREA					
Med/Surg.	26 ^a	(49)	33	(53)	
Pediatrics	2	(4)	10	(16)	
Other	24	(45)	19	(31)	N.S.
WORKS FULL TIME					
Yes	46	(87)	30	(48)	
No	7	(13)	32	(52)	18.96*
SHIFTS					
Days (Some Eve.)	32	(60)	46 ^a	(74)	
Nights & Some Other	21	(40)	14	(23)	N.S.
YEARS WORKED FOR ONE EMPLOYER					
4 Years or Less	38	(72)	33	(53)	
More Than 4 Years	15	(28)	29	(47)	4.15*

* $p \leq .05$ by Chi-Square Analysis

N.S. = Not Significant

^aThe total does not add up to 53 for the impaired nursing group and 62 for the comparison group because data were missing.

responded to this question from the time frame of when they were using alcohol or drugs, whereas the comparison group answered the same questions as of the present.

Another significant finding concerned the number of years nurses of the two groups had worked for one employer. Of the impaired nurses, only 28% had worked more than four years for one employer, whereas the corresponding figure for the non-impaired nurses was 47%.

On the basis of a review of the literature (Bissell & Jones, 1981), it was anticipated that impaired nurses would work night shifts to a significantly greater extent than non-impaired nurses. Of the impaired nurses, 40% worked the night shift compared to 23% of the comparison group, but this difference did not attain statistical significance. Finally, the two groups of nurses did not differ in work setting, nor in the specialty area of nursing. In both groups, most worked in hospitals, and most were medical or surgical nurses.

Job Attitudes

From Table 3, it may be concluded that the impaired nurses differed significantly from the non-impaired on only one of the five attitudinal questions examined. The impaired nurses more often than the non-impaired felt they were not able to say "no" to extra work requested of them.

TABLE 3
 Job Attitudes of Impaired Nurses
 and Comparison Group

Job Attitudes	Impaired Nurses (N=53)		Non-Impaired Nurses (N=62)		Significance of Difference
	Mean	S.D.	Mean	S.D.	
Feels indispensable on the job	2.26	.94	2.05	.76	N.S.
Finds it difficult to delegate responsibility	2.28	.80	2.05	.60	N.S.
Does not receive recognition for job done	2.60	.72	2.44	.70	N.S.
Inability to say "no" to extra work	3.10	.69	2.50	.79	1.89*
Does not receive positive feedback at work for job done	2.43	.69	2.34	.66	N.S.
Mean average score	2.49	.54	2.29	.35	2.43*

* By t-test.

N.S. = Not Significant

The two groups did not differ on the other four job attitudes. However, when the five responses were totaled and averaged, the mean score of the impaired nurses was significantly higher than that of the non-impaired (2.49 points versus 2.29), implying that the overall attitude of impaired nurses toward their jobs was somewhat less favorable than those of the non-impaired nurses.

Stressful Life Events

The stress theory of alcohol abuse (Miller et al., 1974) hypothesizes that persons will use alcohol as a way to cope with high levels of stress in their lives. On the basis of that view, an attempt was made in this study to measure the stressfulness of the nurses' lives, through administration of the Social Readjustment Rating Scale (SRRS) of Holmes and Rahe (1967). As mentioned earlier, respondents answered by circling items they had experienced in the past two years. Holmes and Rahe (1967) placed a different weight on each item. The weights of the items checked by the respondents were added, for a total SRRS score for each respondent. If someone experienced all stressful life events their total SRRS score would be 1466.

The mean SRRS score for the impaired nurses was 350.5, significantly higher than the mean score of 206 for

the comparison group. The difference between the two groups reached the .05 level of significance ($t = 4.70$).

When the individual items on the SRRS were examined, there were some interesting differences emerged. (See Table 4.) The percentages of impaired nurses who divorced (21%) and married (28%) were higher than the percentages of the comparison group (8% and 5%). Holmes and Rahe weighted these events heavily, considering them to be highly stressful.

Other individual items on the Social Readjustment Rating Scale that differentiated the two groups of nurses appeared to be related to changes in employment. The following items are listed in order of stress weight from heaviest to least: (a) fired at work; (b) change in financial state; (c) foreclosure of mortgage or loan; (d) change to different line of work; (e) change in living conditions; and (f) change in residence. It may be these stresses were frequently experienced by the impaired nurses as a direct result of their being identified as abusing alcohol or drugs, and consequently losing their jobs.

There were significant differences between the two groups for two items, namely revision of personal habits and change in recreation. Perhaps these differences were attributable to job loss or to change in marital status, which may have resulted in drastic financial changes. The

TABLE 4

Numbers and Percentages of Impaired and Non-Impaired Nurses Experiencing Events on the Holmes and Rahe Social Adjustment Rating Scale

	Impaired Nurses (N=53)		Non-impaired (N=62)		Significance of Difference
	Number	(%)	Number	(%)	
1. Death of spouse	1	(21)	1	(2)	N.S.
2. Divorce	11	(21)	5	(8)	.051*
3. Marital separation	10	(19)	5	(8)	N.S.
4. Jail term	2	(4)	0	(--)	N.S.
5. Death of close family member	16	(30)	10	(16)	N.S.
6. Personal injury or illness	24	(45)	10	(16)	.001*
7. Marriage	15	(28)	3	(5)	.001*
8. Fired at work	28	(53)	1	(2)	.001*
9. Marital reconciliation	4	(7)	1	(2)	N.S.
10. Retirement	1	(2)	6	(10)	N.S.
11. Change in health of family member	17	(32)	16	(26)	N.S.
12. Pregnancy	10	(19)	9	(15)	N.S.
13. Sex difficulties	12	(23)	11	(18)	N.S.
14. Gain of new family member	10	(19)	9	(15)	N.S.
15. Business readjustment	10	(19)	10	(16)	N.S.
16. Change in financial state	41	(77)	24	(39)	.001*
17. Death of close friend	10	(19)	5	(8)	N.S.
18. Change to different line of work	18	(34)	10	(16)	.026*
19. Change in number of arguments with spouse	13	(24)	10	(16)	N.S.
20. Mortgage over \$10,000	12	(23)	22	(35)	N.S.
21. Foreclosure of mortgage of loan	6	(11)	1	(2)	.03*
22. Change in responsibilities at work	19	(36)	16	(26)	N.S.
23. Son or daughter leaving home	7	(13)	10	(16)	N.S.
24. Trouble with in-laws	9	(17)	4	(6)	N.S.
25. Outstanding personal achievement	10	(19)	6	(10)	N.S.
26. Wife begin or stop work	4	(7)	10	(16)	N.S.
27. Begin or end school	11	(21)	14	(23)	N.S.

28. Change in living conditions	29	(55)	15	(24)	.001*
29. Revision of personal habits	24	(45)	10	(16)	.001*
30. Trouble with boss	7	(13)	4	(6)	N.S.
31. Change in work hours or conditions	21	(40)	25	(40)	N.S.
32. Change in residence	29	(55)	13	(21)	.001*
33. Change in schools	0	--	3	(5)	N.S.
34. Change in recreation	15	(28)	4	(6)	.001*
35. Change in church activities	10	(19)	8	(13)	N.S.
36. Change in social activities	20	(38)	12	(19)	.028*
37. Mortgage or loan less than \$10,000	13	(25)	4	(6)	.006*
38. Change in sleeping habits	24	(45)	18	(29)	N.S.
39. Change in number of family get-togethers	14	(26)	9	(15)	N.S.
40. Change in eating habits	21	(40)	15	(24)	N.S.
41. Vacation	15	(28)	41	(66)	.001*
42. Christmas	22	(42)	45	(73)	.001*
43. Minor violations of the law	11	(21)	3	(5)	.009*

p ≤ .05 by Chi-Square Analysis

N.S. = Not Significant

non-impaired nurses experienced the following stresses significantly more often than the impaired nurses: (a) mortgage on a loan less than \$10,000; (b) vacations; and (c) Christmas. Most impaired nurses did not experience these events, which may indicate job loss or change in marital status and, consequently, a change in their financial status. It is clear that the impaired nurses experienced more stressful life events than the general population of nurses.

Health Characteristics

The literature review supports the view that alcohol consumption over time causes an increase in illnesses and physical problems (Ashley et al., 1981). Female alcoholics develop physical disorders more quickly and are more illness prone than male alcoholics (Morgan & Sherlock, 1977; Jones-Saumity et al., 1981; Ashley et al., 1981; Bissell & Jones, 1981). In the Health Characteristics section of the questionnaire, health problems were listed and the respondents were asked if they had experienced any of these in the past two years. The two groups were found to differ on two items. (See Table 5.) A significantly greater percentage of the impaired nurses than of the impaired group had experienced accidental injury (47% versus 21%). The validity of this finding was further supported by responses to an individual stress item on the SRRS, which asked if the nurses had

Health Problems Experienced by Impaired
Nurses and Comparison Group

Health Problem	Impaired Nurses (N=53)		Non-impaired Nurses (N=62)		Significance of Difference
	Number	(%)	Number	(%)	
Flu	27	(51)	40	(65)	N.S.
Hepatitis	2	(4)	0	(0)	N.S.
High Blood Pressure	10	(19)	7	(11)	N.S.
Headaches	24	(45)	21	(34)	N.S.
Indigestion, Stomach Problems, Ulcers, Colitis	20	(38)	17	(27)	N.S.
Muscle Aches and Pains	25	(47)	32	(52)	N.S.
Broken Bones or Sprains	9	(17)	6	(10)	N.S.
Low Back Pain	25	(47)	28	(45)	N.S.
Allergies	18	(34)	21	(34)	N.S.
Menstrual Problems	11	(21)	13	(21)	N.S.
Heart or Chest Pain	1	(1)	5	(8)	N.S.
Joint Problems Gout or Arthritis	9	(17)	15	(24)	N.S.
Diabetes	1	(1)	2	(3)	N.S.
Accidental Injury	25	(47)	13	(21)	.003*
Pancreatitis	1	(1)	0	(0)	N.S.
Mental Health Problems	36	(68)	11	(18)	.0001*

* $p \leq .05$ by Chi-Square Analysis

N.S. = Not Significant

experienced personal injury or illness in the past two years. To that question 45% of the impaired nurses answered "yes," but only 16% of the unimpaired nurses. Apparently impaired nurses experience accidental injury to a greater extent than do nurses in the general population.

The second health characteristic in which the two groups significantly differed was mental health. Of the two samples, 68% of the impaired nurses and 18% of the comparison group had experienced mental health problems. This finding is consistent with those previously reported in the literature (Ashley et al., 1981).

Pearson correlation coefficients were calculated between stress scores and presence of health problems. Nurses' SRRS scores were found to be positively associated with the following health problems: (a) flu ($r = .27$); (b) headaches ($r = .34$); (c) indigestion ($r = .29$); (d) muscle aches and pains ($r = .24$); (e) broken bones or sprains ($r = .20$); (f) accidental injury ($r = .27$); and (f) mental health problems ($r = .46$). All were significant at the .001 to .005 levels.

Job Absenteeism

The impaired nurses were asked their opinion as to whether they had missed more work than usual during the time they were using alcohol and drugs. Of those who

responded, 26% believed they did miss more work than usual. The non-impaired nurses were not asked how much time they missed from work; therefore, it is impossible to state whether impaired nurses missed more work than the non-impaired.

Accident Information

Both groups of nurses were asked if they had experienced an accident that caused injury to themselves or others, or that resulted in property damage. The impaired nurses were asked the question with reference to the period when they were using alcohol and drugs, while the comparison group was asked this question with reference to the past year. No significant difference was found in responses by the two groups. (See Table 6.) This finding runs counter to that reported by Walkenberg, Gold, and Tichauer (1975), DHEW (1981), and Roizen (1982).

Legal Information

The participants in the study were asked if they had been arrested for: (a) driving under the influence of intoxicants; (b) illegal possession of drugs; or (c) any other alcohol or drug-related charge.

None of the nurses in the comparison group had experienced an arrest for any of these reasons. Of the

TABLE 6

Accident Information for Impaired Nurses and
Comparison group

Accident	Impaired Nurses (N=53)		Comparison Group (N=63)		Significance of Difference Level
	Number	(%)	Number	(%)	
Accidental Injury to Self	12	(23)	11	(18)	N.S.
Accident occurred					
At Work	2	(4)	4	(7)	N.S.
Other than Work	9	(17)	6	(10)	N.S.
Both	1	(2)	1	(2)	N.S.
Accidental Injury to Others	3	(6)	0	--	N.S.
At Work	0	--	0	--	N.S.
Other than Work	3	(6)	0	--	N.S.
Both	0	--	0	--	N.S.
Accident Resulting in Property Damage	7	(13)	4	(7)	N.S.
At Work	0	--	0	--	N.S.
Other than Work	0	--	0	--	N.S.
Both	1	(2)	0	--	N.S.

$p \leq .05$ by Chi-Square Analysis

N.S. = Not Significant

impaired nurses, 13% had been arrested for driving under the influence of intoxicants, 9% for possession of drugs, and 8% for other alcohol or drug related charges. None of the differences reached the significance level.

Alcohol and Drug Use

Respondents were asked to check the frequency with which they used each of 19 mood altering substances (alcoholic or drug): (a) daily, (b) several times a week, (c) once a week, (d) once a month, (e) rarely, and (f) never. A respondent was considered to be a user of a particular substance if she answered "daily," "several times a week," or "once a week." She was considered a non-user if she answered "once a month," "rarely," or "never." Use and non-use was then determined for each substance and for both groups of nurses. (See Table 7.)

The opiates were the most frequently used drugs by the impaired nurses group (74%). None of the non-impaired nurses admitted to using opiates. The category of opiates included the following drugs: demerol, darvon, percodan, codeine, talwin, and dilaudid.

A greater percent of the impaired nurses consumed beer (42%) and liquor (38%) than of the comparison group (18% and 18%). The two groups did not differ significantly in their use of wine. The nurses who used wine did not use

TABLE 7

Alcohol and Drug Use of Impaired Nurses and Comparison Group

Substance	Impaired Nurses (N=53)		Comparison Group (N=62)		Significance of Difference
	Number	(%)	Number	(%)	
Caffeine, Coffee/Cola	46	(87)	43	(69)	N.S.
Opiates	39	(74)	0	--	.001*
Tobacco	30	(57)	9	(15)	.001*
Beer	22	(42)	11	(18)	.001*
Liquor	20	(38)	11	(18)	.004*
Wine	17	(32)	19	(31)	N.S.
Over the Counter Drugs	16	(30)	17	(27)	N.S.
Marijuana/Hashish	14	(26)	0	--	.001*
Tranquilizers (valium, librium, others)	12	(23)	0	--	.001*
Heroin or Morphine	11	(21)	0	--	.001*
Anti-Depressants	8	(15)	0	--	.001*
Barbiturates/Downers	7	(13)	0	--	.001*
Amphetamines/Speed	6	(11)	0	--	.001*
Cocaine	4	(8)	0	--	.001*

Other Sedatives (Quaaludes, etc.)	1	(2)	0	--	.001*
Methadone	1	(2)	0	--	N.S.
Other	0	(0)	6	(10)	.005*

$p \leq .05$ by Chi-Square Analysis

N.S. = Not Significant

^a The total does not add up to 53 or 62 as data were missing.

as many other drugs as the nurses who used liquor and beer. Wine use was correlated significantly with the use of five other substances (caffeine, liquor, cocaine, and over-the-counter drugs). Beer use correlated significantly with the use of 13 other substances (tobacco, caffeine, wine, liquor, marijuana, hallucinogens, amphetamines, cocaine, barbiturates, tranquilizers, heroin, opiates, and other). Liquor was correlated with the use of nine other substances.

There were only 4 substances on the list of 19 that did not distinguish the two groups of nurses. These were: caffeine, wine, over-the-counter drugs, and methadone. The comparison group did not report use of any of the drugs except "other" and "over-the-counter," although they did report use of caffeine, tobacco, beer, liquor, and wine.

The impaired nurses group reported use of 18 out of the 19 substances and used 14 of these substances significantly more than the non-impaired group.

It appears that the nurses representing the general nursing population were not drug users or at least did not admit to using drugs. They did imbibe the same amount of wine and caffeine drinks as the impaired nurses. They also used more "other" drugs than the impaired nurses. Perhaps these were prescription drugs for various medical conditions.

CHAPTER V

DISCUSSION

Demographic Characteristics

The impaired and non-impaired nurses of this study differed on two demographic characteristics. The impaired nurses were more likely to be single parents and to have completed somewhat less formal education.

With respect to the association between single parenthood and impairment, two interpretations are possible. First, it might be argued that single parenthood is a stress-producing situation, and that women who are single parents face considerable role conflict, role strain, and role overload. They are nurturers of children in the parent role, breadwinners for the family as heads of household, and they are enacting the work role on the job. In addition, they must attempt to meet their own personal, psychological, and social needs. It seems highly likely that the single parent who attempts to perform these various roles feels much conflict and guilt.

Proceeding from the premise that single parenthood entails role conflict and stress, it might be further

argued that this stress may lead some women to use alcohol and drugs as a coping strategy. And indeed, some early experimental work has indicated a link between conflict and alcohol use. Thus, Miller and Dollard (1950) produced evidence to show that alcohol ingestion provides temporary reduction in fear and conflict.

This sequence of events from single parenthood to conflict to substance abuse is illustrated by the following comment of an impaired nurse:

I had just had a baby and I resented having to work altogether. I wanted to stay home with my children who I felt needed me after my divorce.

This nurse may have found the conflict of trying to fulfill several roles was intolerable and resorted to alcohol or drugs to reduce her stress.

However, an alternative explanation of the link between single parenthood and impairment may be advanced. Perhaps a nurse's indulgence in alcohol and/or drugs has led to marital problems, thence to divorce, and to the state of single parenthood. The data available from the present investigation cannot indicate which sequence of events was more frequent, and therefore cannot aid in selecting between the two interpretations. Clearly, further research is needed to determine the issue of directionality of the relationship between single parenthood and substance use.

With respect to the observed difference in amount of education of the impaired and non-impaired nurses, it should be noted that this finding runs counter to those reported recently to Bissell and Jones (1981) and by Jaffe (1982). Those authors remarked that the majority of alcoholic nurses they studied were high academic achievers, with many holding masters degrees. It is true that the majority of drug addicted nurses studied by Poplar (1969) were less well educated, having completed a three-year hospital diploma program or less. However, at the time of Poplar's study, 14 years ago, this may have constituted the usual preparation of nurses, so that Poplar's subjects may not have differed substantially from the general population of nurses of that day.

Sample selection may well explain the contradictory findings of the present study and the studies by Bissell and Jones, and by Jaffe. In the present sample, the impaired nurses were all licensed nurses who had been called before the Oregon State Board of Nursing for disciplinary action because of substance use in the last two years. Whereas all had been identified as possessing a substance use problem, they were not necessarily all in treatment for that problem. The samples selected by Bissell and Jones (1981) and by Jaffe (1982) also comprised nurses identified as substance users, but they were all

actively involved in treatment, or had successfully completed treatment. Nurses who enter and complete treatment programs may be a highly select group. They may possess high levels of motivation and this motivation may have been previously manifested by academic achievement. It is also possible that the better educated among the impaired nurses are steered into treatment more frequently than the less well educated, because of the preferences of counselors. At any rate, it seems probable that samples of impaired nurses undergoing treatment are not truly representative of impaired nurses as a whole. On the assumption that the present sample is more representative than that of these other authors, it may be argued that the present finding is valid, and that impaired nurses tend to be less well educated than non-impaired nurses.

Job Characteristics

One of the differences between the two groups of nurses concerned employment conditions. A greater percent of impaired nurses worked full time and, in addition, a greater percent were single parents. These nurses were probably the breadwinners for their families, necessitating their working full time.

One nurse commented:

I concealed my problem, I was afraid to ask for help where I worked because I couldn't risk losing my job. I needed it too much to support myself and my two children.

Another nurse who worked full time stated:

I gave so much to my patients and I didn't have time to fill my own needs, so I took drugs for the euphoric feeling and what seemed like a quick easy way to make myself feel good.

In many cases the work setting provided the impaired nurses with the supply of substances they were using. As one nurse states:

I rarely missed work--that's where I got the drugs that I needed, so I always went to work.

For many of the impaired nurses their jobs were very important to them. For some it provided the money to support themselves and their families along with providing them with a supply of drugs.

A greater percent of the comparison group of nurses from the general nursing population had worked four years or longer for one employer. This finding was expected, based on the literature review. For instance, Jaffe (1982) asserted that alcoholic nurses left their jobs voluntarily if they believed their employers were suspicious of their drinking problem.

Although a greater proportion of the impaired nurses worked the night shift than non-impaired nurses, the

difference was not statistically significant. This investigator had expected impaired nurses to prefer the night shift because of less visibility and supervision. This expectation was not met. Thus one nurse stated:

I was so bored when I was on night shift--I started using codeine to make the shift go faster. There was also a lack of recognition on the night shift--I wasn't considered part of the team.

Another nurse who worked night shift commented:

I was fresh out of school, away from home and I took a night shift job that I hated and I hadn't made any friends since I moved here.

Both the above comments suggest that the conditions of night shift work induced substance abuse by the nurses rather than a prior addiction having led them to seek the night shift as a means to use and obtain substances more easily. Conceivably, the low visibility provided by night shift work facilitated the process of addiction.

Stressful Life Events

The impaired nurses group obtained a higher mean score on the Social Readjustment Rating Scale than the non-impaired nurses. Comments written on the questionnaires by impaired nurses reflect many personal and job related stresses in their lives before they were identified as abusing substances. One nurse states:

I had just graduated, moved away from home for the first time, newly married, having financial problems and problems with my in-laws plus I was working a job I hated.

Another impaired nurse writes:

I was working full time plus trying to maintain a home and raise small children--I could keep this pace up for 6 months and then I would suffer from total exhaustion both mentally and physically.

These nurses had significantly more social readjustments in their life in a two-year period than the non-impaired nurses group. Some of these changes were related to employment and may have occurred after they were identified as having a substance abuse problem and were terminated from their jobs.

Low frustration or stress tolerance has been an issue raised when discussing male alcoholics but has been raised very little in connection with women problem drinkers. In 1952, the World Health Organization's Committee on Alcoholism stated, without specifying sex, that alcoholics

present a large variety of personality types which have a few traits in common, in particular a low capacity for coping with tensions.

When looking at the individual items on the Social Readjustment Scale, the item with the heaviest weight was divorce, which is known to be a disruptive and stressful experience. The second most heavily weighted item was personal injury or illness on which there is substantial research supporting that increased life changes occur

before the onset of illness or accidental injury. Marriage was the third most heavily weighted item because, even though it is looked upon as a positive experience, it requires a great deal of social readjustment.

In studies of alcoholic women, it has been repeatedly found that if one asks about the circumstances leading to problem drinking, women significantly more often than men cite a traumatic event (NIAAA, 1978). Many alcoholic women pinpoint a stressor such as divorce, rejection by a spouse or lover, abandonment, the death of someone close, or a hysterectomy, miscarriage, or related gynecological problem (Mulford, 1977).

The results from the present survey support the preceding findings. The impaired nurses group had a higher average score on the Social Readjustment Scale. Possibly the high level of stress in their lives may have led them to adopt alcohol or drug use as a way to cope. Women in our society are socialized to seek solutions in medication more than men. Starting at age 15, the female rates of using nonprescribed medicines, particularly over-the-counter pain relievers, are higher than male rates (Bush & Rabin, 1976). The impaired nurses in the present study may have responded to high levels of stress in their lives by self-medicating with alcohol and drugs.

The impaired nurses experienced significantly more individual social readjustment events that were related to employment than did the non-impaired nurses. It is possible that the employment-related adjustments were a direct result of losing their licenses to practice nursing and losing their jobs, as a consequence of alcohol and drug use. One impaired nurse commented on what happened after her job termination and loss of license:

My trailer home was repossessed, my friends withdrew because I wasn't able to talk about my problem, my parents gave me the cold shoulder, I lost my job and my income to support myself and my four-year-old child.

It is difficult to determine whether the high stressors preceded the impaired nurses' alcohol and drug use or whether the stressors were a result of their loss of job and nursing license.

Health Characteristics

Of the health problems listed on the questionnaire, two served to differentiate the two groups of nurses. A significantly greater percentage of the impaired nurses experienced accidental injury and mental health problems than the non-impaired nurses. Similarly, Jones-Saumity et al. (1981) and Ashley et al. (1981) listed a number of health problems experienced to a significantly greater extent by a sample of alcoholic men and women than by a

control group. Among these health problems were traumatic injuries and nervous problems, in accord with the findings of the present survey.

In interpreting the fact that a greater percent of the impaired nurses experienced mental health problems, the question arises as to which came first, the substance abuse or the mental health problem. When person are addicted to alcohol or drugs, it often affects their emotional behavior. They may feel irritable, emotionally labile, or suspicious and not realize this is the effect of the chemical. As one nurse states:

I didn't know I was alcoholic and for five years I went to every doctor for every part of my body to figure out what was wrong with me. I even had a CAT scan because I was sure I had a brain tumor!

Another perspective is presented by an impaired nurse:

I was recently diagnosed as manic-depressive and often these people self-medicate in an effort to control something that is happening to them.

She goes on to add:

But mostly I began using to ease the emotional pain I was feeling from an inability to cope with real life events.

It is difficult to determine the directionality of the relationship. It poses a major research question: Do emotional problems create a vulnerability in the person to develop substance abuse problems, or does the substance abuse lead to the deterioration of one's emotional life?

Low self-esteem was mentioned by several of the impaired nurses. One nurse described herself as an introvert with low self-esteem. Another states:

I didn't take hard drugs to feel better, relax, etc., but rather to instill in my consciousness how rotten I was--a sort of self-punishment in a self-defeating way; with lack of self-esteem being the bottom line.

Another nurse comments on self-esteem:

Due to lack of self-esteem I constantly felt I was a failure. No matter how much or how well I did, I never felt it was good enough.

There were also references to feelings of guilt.

I really feel I was seeking punishment to relieve my guilt about my children.

And feelings of being a perfectionist:

I was not able to pace myself realistically and when I felt I was not meeting the standards I set for myself, I escaped through the use of alcohol.

These comments raise questions about personality traits that exist before alcohol or drug use problems arise and the possibility of research in this area.

In summary, in this study a positive correlation was found between amount of stress as measured by scores on the Social Readjustment Scale and a number of health problems experienced. This finding adds to the already substantial support recorded in the literature for the theory that periods of high stress in a person's life are often followed by illness (Minter & Kimball, 1978; Rahe & Arthur, 1978).

Job Absenteeism

Health problems due to alcohol or drug use can result in absenteeism from the job. Of the impaired nurses, 26% believed they missed more work than usual during the time they were using alcohol and drugs. This question was asked only of the impaired nurses, so no comparison data exist for the non-impaired nurses. Two impaired nurses stated they went to work to get the drugs that they wanted. This assertion suggests that the nurses who got their drugs from work perceived their absence rates as normal. The nurses who used alcohol and were intoxicated or hung over from drinking were probably the ones who called in sick. Absenteeism may depend on the particular substance that is being used.

Accident Information

Apparently the question on accidents was not well worded. Evidence of confusion is provided by the qualifying comment of one respondent who stated she had not had an automobile accident. She had, however, taken an overdose of pills, according to her response to a separate item. The ambiguity of the item may explain the discrepancies between the responses to the accident questions in this section and the responses to the accident

questions in the health problems section and on the Social Readjustment Scale.

Legal Information

David Ohlms (1981) has stated that driving under the influence charge is a strong indication of early stage alcoholism. Arrests may be one differentiating characteristic for nurses who are at high risk to develop alcohol or drug use problems.

Three legal questions were asked on the questionnaire and 13% of the impaired nurses answered "yes" to being arrested for driving under the influence of intoxicants, 9% for possession of drugs, and 8% for other alcohol or drug related charges. None of the non-impaired nurses had been so arrested, although the difference was not statistically significant.

Alcohol and Drug Use

Opiates were the most frequently used class of drug by the impaired nurses. This finding agrees with that of Bissell & Jones (1981), who identified demerol as the drug of choice for impaired nurses and physicians. The non-impaired nurses did not admit to using opiates or any of the other drugs listed. They may have used some of the

drugs listed but not often enough to be considered as "user," as defined by this study.

After opiates, the next most frequently used drugs were marijuana, tranquilizers, and heroin/morphine. Evidently, the impaired nurses preferred the effects of opiates over the effects of the other drugs. The feeling of euphoria and sense of well-being are known to be greater from opiates than from the other drugs listed.

The drugs least frequently used by the impaired nurses were antidepressants, barbiturates, amphetamines, and cocaine. Except for antidepressants these drugs are readily available on the street. Consequently, the nurses may not risk taking them from the workplace, but may buy them from street sources and use them during off work hours. Not all nurses who use drugs are identified as impaired nurses. The identified impaired nurses in this study most frequently used opiates and they may have been detected because of drugs missing from the workplace.

A significantly greater percent of the impaired nurses than of the comparison group used liquor and beer. It is interesting to note that the two groups did not differ in their use of wine. The nurses from the general population consumed wine as frequently as the impaired nurses. Wine use correlated with the use of five other substances (caffeine, liquor, cocaine, and over-the-counter

drugs). Generally, a nurse from either group who consumed wine was not a user of other drugs, except of cocaine. In comparison, the use of beer correlated with the use of 13 other substances and the use of liquor correlated with 9 other substances.

Tobacco was listed in the substance abuse question. It was used significantly more often by the impaired nurses than by the non-impaired. Perhaps tobacco use could be employed as one way to screen nurses at high risk for alcohol or drug abuse.

A number of impaired nurses used both alcohol and drugs. One nurse made this comment:

I used and abused drugs sporadically over many years, alcohol was my drug of choice and now I know I used drugs where I couldn't use alcohol (alcohol not acceptable on the breath).

Another nurse stated:

Had I not been a nurse I might have been able to drink alcohol and use drugs longer, but being a nurse gave me access to drugs I might not have used and I believe this accelerated my disease.

A wide variety of drugs are accessible to nurses in their work settings and this is an occupational hazard within the profession.

Comments from the Open-Ended Question

On the last page of the questionnaire, respondents were asked to comment on the issue of alcohol and drug use

among nurses. Numerous comments from the impaired nurses regarding how their substance use problems were handled are worth noting. Many stated that they knew they needed help, but there was no place for them to go. As one impaired nurse comments:

At this time, any nurse with a substance abuse problem is more likely to conceal her problem rather than risk losing her job/license if she seeks help.

Another nurse has this to say:

Our professional organization does an adequate job of imposing punitive measures, but nothing in the way of assistance or rehabilitative measures.

And a statement from another nurse:

I am not blaming anyone for my problem, but the way it was handled devastated me. It was handled clean and quiet and no one wanted to see me or talk to me again--I was treated rude when I called the State Board of Nursing before my time was up. A letter was sent instead of the promised return phone call.

There were comments from nurses who felt positive about the outcome of their identification as impaired nurses and how it was handled. These nurses made the following comments:

I can tell you I plan to thank them (Oregon State Board of Nursing) for removing me from the nursing role and making therapy a part of my suspension. There are many shortcomings of the system, but I am one of the lucky ones for getting caught.

Another comment:

I am so grateful to a fair OSBN, who allows me to continue to work under supervision while faithfully being in treatment.

Another nurse expresses her positive feelings about having a chance to prove herself by stating:

I have not used any drugs since I got caught and I now work part-time for a supervisor who is aware of the incident and I was given a chance to prove myself--which I have done.

This study focuses on high risk characteristics that will help identify vulnerable nurses, so education and early intervention can take place. It is apparent from the above comments that the impaired nurses responded positively to being permitted to continue work under probationary conditions, while undergoing treatment for their alcohol or drug problems.

CHAPTER VI

SUMMARY, CONCLUSION, AND RECOMMENDATIONS

Nursing, through its professional organization, has recently begun assessing the extent of alcohol and drug problems among nurses. The Oregon State Board of Nursing (OSBN) data available on disciplinary proceedings involving nurses during the period September 1980 through August 1981 showed that 67% were related to some form of chemical abuse (OSBN, 1982). The OSBN reported 100 nurses who had come to the attention of its disciplinary board for chemical abuse in 1981 and 1982.

The purpose of this study was to identify characteristics of nurses who develop alcohol or drug use problems. These characteristics could provide a "high risk profile" that could be used to identify target groups for educational sessions and for treatment intervention at an earlier stage of the addiction process.

A self-administered questionnaire was sent to the 100 nurses who had come to the attention of the OSBN for alcohol or drug use problems in 1981 and 1982. The questionnaires were also sent to a control group consisting of 100 nurses in the general nursing population who were

licensed to practice in Oregon in 1981 and 1982. The impaired nursing group had a response rate of 58% and the comparison group 72%. The results of the data were used to construct the following "high risk profile" of a nurse with alcohol or drug use problems.

A nurse who is at high risk to have alcohol or drug problems is a single parent who has achieved an educational level of an Associate of Arts degree. This nurse has a high level of stress in her life as shown by a high score on the Social Readjustment Scale. It is likely that she has experienced and has had to readjust to the following personal events: divorce, death of a close family member, personal injury or illness, marriage, or minor violations of the law.

The health of the high risk nurse differs from the non-high risk nurse in two respects. She is more likely to have suffered an accidental injury, and to have experienced some kind of mental health problem.

The high risk nurse drinks alcohol in the form of beer or hard liquor, rather than wine alone. She is a cigarette smoker and uses drugs, especially opiates. Other drugs used by nurses at high risk include marijuana, tranquilizers, morphine, antidepressants, amphetamines, and cocaine, in that order.

A limitation of this study is the inability to state cause and effect relationships. For example, this survey found that impaired nurses had high stress scores. It does not answer the question as to whether high stress causes nurses to abuse alcohol or drugs, or if abusing alcohol and drugs creates the high stress in their lives. A survey of this nature does raise questions for further, more in depth, research.

Why do some nurses cross the line from giving drugs to patients to taking drugs themselves? Do some nurses have less adaptable ways to deal with stress in their lives, and are they consequently more likely to sanction drug use for relief? Some nurses may give themselves permission to use drugs for what they believe will be a temporary period of time, never intending to continue, but not being able to quit.

One nurse made this comment on the questionnaire:

It is fine to look at the stress factors as increasing the possibility of a nurse becoming an abuser of alcohol or drugs, but I feel one must look at the individual characteristics that may lead to substance abuse. Could there be some correlation between the type of individual who becomes a nurse and drug abuser?

This comment focuses on a long standing question in the drug abuse field. Is there a predisposing personality for people who have alcohol or drug use problems?

There are many questions that are unanswered, but applying the high risk profile formulated from this survey to nurses in Oregon, there are many who are at high risk to have problems with alcohol and drugs.

Nurses with high risk characteristics need to be targeted for education and early intervention for treatment. Educational sessions for all nurses could take place at the work site, in this case hospitals. All nurses need to be educated to behavioral and work performance signs and symptoms of alcohol and drug abuse. Because of the high denial present with people involved in alcohol and drug abuse, supervisors and colleagues are in key positions to help implement early treatment intervention. A resource person could be available to answer questions, do evaluations, and make referrals to treatment facilities. These nurses could maintain their licenses and their jobs on the condition that they be involved and make progress in treatment.

In doing this the danger to patients who are being cared for by impaired nurses decreases. The personal anguish of nurses with addiction problems is alleviated and they can reconstruct their lives learning to participate in life productively without depending on alcohol or drugs.

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APPENDICES

APPENDIX A
QUESTIONNAIRE AND COVER LETTER FOR
IMPAIRED NURSE GROUP

April 7, 1983

I am a graduate nursing student who has worked in the field of alcohol and drug treatment for eight years. Health professionals as a group have been considered at high risk to become involved in substance abuse. Nurses with alcohol and/or drug use problems often jeopardize their jobs before treatment is considered.

It has been my experience that people do not have to "bottom out" before they enter treatment and turn things around for themselves. The goal of this study is to identify groups of nurses who are at high risk to develop problems with alcohol and drug use. I plan to target high risk groups for substance abuse education where self-evaluation and early intervention can take place much earlier than is presently being done.

Why have I chosen you? First, your name was selected from a list of nurses who have had personal, past experience with substance abuse. Secondly, your past experience in this area makes you an expert. Your participation in this study may help other members of our profession seek help and enter treatment before their job is in jeopardy. It will also help sensitize nurses to the nature of the problem.

I realize the nature of this study is a sensitive one and, because of this, I have taken the following measures to protect your anonymity: 1) there are no identifying codes or names on the questionnaire or envelopes, 2) the demographic questions are non-specific to protect respondent's identity, 3) after the survey is completed, the computer cards and the questionnaires will be destroyed, 4) I will be the only person with access to the questionnaires and I do not want to know people's identities, and 5) the results will be reported on groups of nurses, not individuals.

I can't guarantee absolute anonymity, however with all of the precautions I am taking, identifying anyone in this study is extremely unlikely.

The study is titled, High Risk Characteristics of Oregon Nurses Identified as Having Problems with Alcohol and Drug Use. I am conducting this survey under the supervision of Florence Hardesty, R.N., Ph.D., Oregon Health Sciences University, School of Nursing.

If you wish to see a copy of the final report, it will be available through the School of Nursing at the above address. If you have any questions, please call me at 244-1685.

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The questionnaire takes approximately 15 minutes to complete. If you choose to participate, the time you spend replying is very much appreciated.

Thank you for your cooperation.

Sincerely,

Jane Griffin, R.N.

Demographic information may show there are certain factors in a person's life which may create a higher risk to use drugs or alcohol.

Please circle the appropriate answer.

1. In which category does your present age fall?

- | | | |
|----------|----------|----------|
| 1. 18-25 | 3. 34-41 | 5. 50-57 |
| 2. 26-33 | 4. 42-49 | 6. 58-65 |

2. What is your sex?

- | | |
|-----------|---------|
| 1. Female | 2. Male |
|-----------|---------|

3. Please choose the one category that best represents your current marital status.

- | | |
|--------------------------------|--------------------------|
| 1. Never Married | 5. Living with a Partner |
| 2. Married, for the first time | 6. Remarried |
| 3. Separated | 7. Divorced |
| 4. Widowed | |

4. Are you now or have you been a single parent?

- | | |
|--------|-------|
| 1. Yes | 2. No |
|--------|-------|

Were you a single parent during the time you were using alcohol or drugs?

- | | |
|--------|--------|
| 1. Yes | 2. No. |
|--------|--------|

5. Have you completed course work towards a degree, but have not yet acquired it?

- | | |
|--------|-------|
| 1. Yes | 2. No |
|--------|-------|

6. What is the highest level of education you have completed?

1. 2-year Associate Degree
2. 3-year Diploma Program
3. 4-year Bachelor Degree
4. Master's Degree or beyond

Job Characteristics

There may be certain job characteristics that cause employees to be at higher risk to develop problems with drug or alcohol use.

Please answer the following questions, thinking about the time you were using drugs or alcohol.

7. Which best describes the setting in which you worked most often as a nurse?

- | | |
|-----------------------------------|--|
| 1. Hospital | 6. Office Nurse |
| 2. Nursing Home or Long Term Care | 7. Community Health |
| 3. Educational setting | 8. Self Employed, but not private duty |
| 4. Private Duty or Home Care | 9. Other _____ |
| 5. Occupational Health | |

8. Which best describes the area in which you worked most often, as a nurse?
- | | |
|-------------------------------|----------------------------------|
| 1. Industrial or Occupational | 7. Administration and Management |
| 2. Pediatrics | 8. Health Community |
| 3. Obstetrics/Gynecology | 9. Family Centered |
| 4. Medical/Surgical | 10. Gerontology |
| 5. Mental Health | 11. Other _____ |
| 6. Education | |
9. Did you work full-time in nursing (at least 35 hours a week)?
1. Yes 2. No
10. Did you work part-time in nursing?
1. Yes 2. No
11. Which of these best describes the schedule that you most often worked?
- | | |
|----------------------------|-------------------|
| 1. Days | 4. Nights |
| 2. Days with some evenings | 5. Rotating Shift |
| 3. Evenings | |
12. What was the average length of time that you worked for an employer?
- | | |
|-------------------|--------------------|
| 1. 1 Year or Less | 4. 4-6 Years |
| 2. 1-2 Years | 5. 6 Years or More |
| 3. 2-4 Years | |

Please read the statements below and rate yourself as they applied to you in your work situation when you were using alcohol and/or drugs.

Please check the most appropriate answer.

13. I felt indispensable on my job.
- / _____ / / _____ / / _____ / / _____ /
 Always Frequently Occasionally Never
14. It was difficult for me to delegate responsibility to others.
- / _____ / / _____ / / _____ / / _____ /
 Always Frequently Occasionally Never
15. I received recognition for the job that I did.
- / _____ / / _____ / / _____ / / _____ /
 Always Frequently Occasionally Never
16. I was able to say "no" to extra work that was asked of me.
- / _____ / / _____ / / _____ / / _____ /
 Always Frequently Occasionally Never
17. I received positive feedback from the people I worked with regarding my work.
- / _____ / / _____ / / _____ / / _____ /
 Always Frequently Occasionally Never

18. Were there any job-related factors or characteristics that you feel were significant in creating or maintaining your alcohol or drug use?
-
-
-

Stressful Life Events

Below is a list of events that create stress in our lives.

19. Please circle the number next to the events that have taken place in your life in the past 2 years.

1. Death of spouse
2. Divorce
3. Marital separation
4. Jail term
5. Death of close family member
6. Personal injury or illness
7. Marriage
8. Fired at work
9. Marital reconciliation
10. Retirement
11. Change in health of family member
12. Pregnancy
13. Sex difficulties
14. Gain of new family member
15. Business readjustment
16. Change in financial state
17. Death of close friend
18. Change to different line of work
19. Change in number of arguments with spouse
20. Mortgage over \$10,000
21. Foreclosure of mortgage or loan
22. Change in responsibilities at work
23. Son or daughter leaving home
24. Trouble with in-laws
25. Outstanding personal achievement
26. Wife begin or stop work
27. Begin or end school
28. Change in living conditions
29. Revision of personal habits
30. Trouble with boss
31. Change in work hours or conditions
32. Change in residence
33. Change in schools
34. Change in recreation
35. Change in church activities
36. Change in social activities
37. Mortgage or loan less than \$10,000
38. Change in sleeping habits
39. Change in number of family get-togethers
40. Change in eating habits
41. Vacation
42. Christmas
43. Minor violations of the law

Health Characteristics

Often when we are under stress, our bodies react by becoming ill. Studies show that alcohol use has a negative effect on the physiological functioning of the body. This physiological deterioration is more rapid for women. There is less information on drug abuse, but the same negative effects may be true.

20. Please circle the appropriate answer for any of the health problems that have bothered you in the past two years.

- A. Flu or infections of the throat or lungs:
 1. Yes 2. No
- B. Infections such as hepatitis:
 1. Yes 2. No
- C. High blood pressure:
 1. Yes 2. No
- D. Frequent headaches or severe headaches:
 1. Yes 2. No
- E. Indigestion, stomach problems, ulcers or colitis:
 1. Yes 2. No
- F. Muscle aches and pains:
 1. Yes 2. No
- G. Broken bones or sprains:
 1. Yes 2. No
- H. Lower back pain:
 1. Yes 2. No
- I. Allergies:
 1. Yes 2. No
- J. Menstrual problems:
 1. Yes 2. No
- K. Heart or chest pain:
 1. Yes 2. No
- L. Joint problems, gout, arthritis:
 1. Yes 2. No
- M. Diabetes
 1. Yes 2. No
- N. Accidental injury (broken bones, muscle sprains, cuts, bruises, etc.):
 1. Yes 2. No
- O. Pancreatitis:
 1. Yes 2. No
- P. Mental health problems (depression-anxiety, nervous breakdown, etc.):
 1. Yes 2. No

21a. During the time you were using alcohol and/or drugs, did you miss more work than usual for you, before problems with alcohol/drugs?

1. Yes 2. No

21b. If your answer was YES, which of the following reasons did you most frequently give your employer? (Choose the most frequent reason given your employer.)

1. Medical reason for yourself.
2. Medical reasons related to other family members.
3. Transportation problems.
4. Other _____.

Accident Information

Studies show that people using alcohol and/or drugs are more prone to accidents.

22a. While you were using alcohol and/or drugs, did you have any sort of accidents which caused an injury to yourself?

1. Yes 2. No

22b. If your answer was YES, did the accident happen

1. While you were at work?
2. Some place other than work?
3. Or both?

23a. While you were using alcohol and/or drugs, did you have any sort of accidents which caused injury to others?

1. Yes 2. No

23b. If your answer was YES, did the accident happen

1. While you were at work?
2. Some place other than work?
3. Or both?

24a. Did you have accidents which resulted in some type of property damage?

1. Yes 2. No

24b. If your answer was YES, did the accident happen

1. While you were at work?
2. Some place other than work?
3. Or both?

Legal Information

One study showed that physicians who had been evaluated as having problems with alcohol and/or drugs had also encountered legal difficulties with substances.

Have you been involved in any of the following:

25. Have you been arrested for drunk driving, or driving under the influence of intoxicants?
 1. Yes 2. No
26. Have you been arrested for illegal possession of drugs?
 1. Yes 2. No
27. Have you been arrested on any other alcohol or drug-related charge?
 1. Yes 2. No
28. On the chart below, please indicate with a check how often you used each item during the time that you were using drugs and/or alcohol.

<u>ITEM</u>	<u>Daily</u>	<u>Several Times Per Week</u>	<u>Once a Week</u>	<u>Once a Month</u>	<u>Rarely</u>	<u>Never</u>
1. Tobacco						
2. Coffee, Cola						
3. Beer						
4. Wine						
5. Liquor						
6. Marijuana/Hashish						
7. Hallucinogens: (LSD, Mushrooms, PCP, MDA, etc.)						
8. Speed/Amphetamines						
9. Cocaine						
10. Downers/Barbiturates						
11. Other Sedatives: (Quaaludes, Sopors, etc.)						
12. Tranquilizers: (Valium, Librium, others)						
13. Anti-Depressants						
14. Inhalants (Glue, Paint)						
15. Heroin or Morphine						
16. Other Opiates: (Darvon, Percodan, Talwin, Demerol, Codeine, Dilaudid, etc.)						
17. Legal/Illegal Methadone						
18. Over-the-Counter						
19. Other						

APPENDIX B
QUESTIONNAIRE AND COVER LETTER FOR
NON-IMPAIRED NURSES GROUP

April 7, 1983

Lately, there is more attention being given to the impaired professional. This is a person whose performance as a professional has become impaired as a result of alcohol or drug use problems. Professional groups such as physicians, attorneys, and dentists have established programs to help their members. Health professionals as a group have been considered at high risk to become involved in substance abuse, and nurses in Oregon are in the process of establishing programs for their colleagues.

I am a graduate student who has worked in the field of alcohol and drug treatment for eight years. I am conducting this survey to identify characteristics of nurses who are at high risk to develop problems with alcohol or drug use. This questionnaire has been sent to a group of impaired nurses from Oregon who have been identified as having alcohol or drug use problems.

Why have I chosen you? I would like a group of nurses from the general nursing population to complete the questionnaire. This information will be compared and contrasted with information gathered from the group of impaired nurses. Your name was randomly selected from a list of licensed nurses in Oregon.

I realize the nature of this study is a sensitive one and, because of this, I have taken the following measures to protect your anonymity: 1) there are no identifying codes or names on the questionnaires or envelopes, 2) the demographic questions are non-specific to protect respondent's identity, 3) after the survey is completed, the computer cards and the questionnaires will be destroyed, 4) I will be the only person with access to the questionnaires and I do not want to know people's identity, and 5) the results will be reported on groups of nurses, not individuals. Keep in mind that, presently, there are 26,000 nurses registered to practice in Oregon.

I can't guarantee absolute anonymity, however, with all of the precautions I am taking, identifying anyone in this study is extremely unlikely.

The study is titled, High Risk Characteristics of Oregon Nurses Identified as Having Problems with Alcohol and Drug Use. I am conducting this survey under the supervision of Florence Hardesty, R.N., Ph.D., Oregon Health Sciences University, School of Nursing.

April 7, 1983
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If you wish to see a copy of the final report, it will be available through the School of Nursing at the above address. If you have any questions, please call me at 244-1685.

The questionnaire takes approximately 15 minutes to complete. If you choose to participate, the time you spend replying is very much appreciated.

Thank you for your cooperation.

Sincerely,

Jane Griffin, R.N.

Demographic Information

Demographic information may show there are certain factors in a person's life which may create a higher risk to use drugs or alcohol.

Please circle the appropriate answer.

1. In which category does your present age fall?

1. 18-25	3. 34-41	5. 50-57
2. 26-33	4. 42-49	6. 58-65

2. What is your sex?

1. Female	2. Male
-----------	---------

3. Please choose the one category that best represents your current marital status.

1. Never Married	5. Living with a Partner
2. Married, for the first time	6. Remarried
3. Separated	7. Divorced
4. Widowed	

4. Are you a single parent?

1. Yes	2. No
--------	-------

5. Have you completed course work towards a degree, but have not yet acquired it?

1. Yes	2. No
--------	-------

6. What is the highest level of education you have completed?

1. 2-year Associate Degree
2. 3-year Diploma Program
3. 4-year Bachelor Degree
4. Master's Degree or beyond

Job Characteristics

There may be certain job characteristics that cause employees to be at higher risk to develop problems with drug or alcohol use.

Please answer the following questions by circling the most appropriate number.

7. Which best describes the setting in which you worked most often as a nurse?

1. Hospital	6. Office Nurse
2. Nursing Home or Long Term Care	7. Community Health
3. Educational setting	8. Self Employed, but not private duty
4. Private Duty or Home Care	9. Other _____
5. Occupational Health	

8. Which best describes the area in which you worked most often, as a nurse?
- | | |
|-------------------------------|----------------------------------|
| 1. Industrial or Occupational | 7. Administration and Management |
| 2. Pediatrics | 8. Health Community |
| 3. Obstetrics/Gynecology | 9. Family Centered |
| 4. Medical/Surgical | 10. Gerontology |
| 5. Mental Health | 11. Other _____ |
| 6. Education | |
9. Do you work full-time in nursing (at least 35 hours a week)?
1. Yes 2. No
10. Do you work part-time in nursing?
1. Yes 2. No
11. Which of these best describes the schedule that you most often work?
- | | |
|----------------------------|-------------------|
| 1. Days | 4. Nights |
| 2. Days with some evenings | 5. Rotating Shift |
| 3. Evenings | |
12. What is the average length of time that you have worked for an employer?
- | | |
|-------------------|--------------------|
| 1. 1 Year or Less | 4. 4-6 Years |
| 2. 1-2 Years | 5. 6 Years or More |
| 3. 2-4 Years | |

Please read the statements below and rate yourself as they apply to you in your work situation.

Please check the appropriate answer.

13. I feel indispensable on my job.

/ _____ / / _____ / / _____ / / _____ /
 Always Frequently Occasionally Never

14. It is difficult for me to delegate responsibility to others.

/ _____ / / _____ / / _____ / / _____ /
 Always Frequently Occasionally Never

15. I receive recognition for the job that I do.

/ _____ / / _____ / / _____ / / _____ /
 Always Frequently Occasionally Never

16. I am able to say "no" to extra work that is asked of me.

/ _____ / / _____ / / _____ / / _____ /
 Always Frequently Occasionally Never

17. I receive positive feedback from the people I work with regarding my work.

/ _____ / / _____ / / _____ / / _____ /
 Always Frequently Occasionally Never

18. Are there any job-related factors or characteristics that you feel are significant toward creating or maintaining an employee's alcohol or drug use?
-
-
-

Stressful Life Events

Below is a list of events that create stress in our lives.

19. Please circle the numbers next to the events that have taken place in your life in the past 2 years.

1. Death of spouse
2. Divorce
3. Marital separation
4. Jail term
5. Death of close family member
6. Personal injury or illness
7. Marriage
8. Fired at work
9. Marital reconciliation
10. Retirement
11. Change in health of family member
12. Pregnancy
13. Sex difficulties
14. Gain of new family member
15. Business readjustment
16. Change in financial state
17. Death of close friend
18. Change to different line of work
19. Change in number of arguments with spouse
20. Mortgage over \$10,000
21. Foreclosure of mortgage or loan
22. Change in responsibilities at work
23. Son or daughter leaving home
24. Trouble with in-laws
25. Outstanding personal achievement
26. Wife begin or stop work
27. Begin or end school
28. Change in living conditions
29. Revision of personal habits
30. Trouble with boss
31. Change in work hours or conditions
32. Change in residence
33. Change in schools
34. Change in recreation
35. Change in church activities
36. Change in social activities
37. Mortgage or loan less than \$10,000
38. Change in sleeping habits
39. Change in number of family get-togethers
40. Change in eating habits
41. Vacation
42. Christmas
43. Minor violations of the law

Health Characteristics

Often when we are under stress, our bodies react by becoming ill.

20. Please circle the appropriate answer for any of the health problems that have bothered you in the past two years.

- A. Flu or infections of the throat or lungs:
1. Yes 2. No
- B. Infections such as hepatitis:
1. Yes 2. No
- C. High blood pressure:
1. Yes 2. No
- D. Frequent headaches or severe headaches:
1. Yes 2. No
- E. Indigestion, stomach problems, ulcers or colitis:
1. Yes 2. No
- F. Muscle aches and pains:
1. Yes 2. No
- G. Broken bones or sprains:
1. Yes 2. No
- H. Lower back pain:
1. Yes 2. No
- I. Allergies:
1. Yes 2. No
- J. Menstrual problems:
1. Yes 2. No
- K. Heart or chest pain:
1. Yes 2. No
- L. Joint problems, gout, arthritis:
1. Yes 2. No
- M. Diabetes
1. Yes 2. No
- N. Accidental injury (broken bones, muscle sprains, cuts, bruises, etc.):
1. Yes 2. No
- O. Pancreatitis:
1. Yes 2. No
- P. Mental health problems (depression, anxiety, nervous breakdown, etc.):
1. Yes 2. No

21. When you miss work, which reason do you most frequently give your employer?

1. Medical reason for yourself.
2. Medical reasons related to other family members.
3. Transportation problems.
4. Other _____.

Accident Information

22a. In the past year, have you had any sort of accidents which caused an injury to yourself?

1. Yes
2. No

22b. If your answer was YES, did the accidents happen

1. While you were at work?
2. Some place other than work?
3. Or both?

23a. In the past year, have you had any sort of accidents which caused injury to others?

1. Yes
2. No

23b. If your answer was YES, did the accidents happen

1. While you were at work?
2. Some place other than work?
3. Or both?

24a. In the past year, have you had accidents which resulted in some type of property damage?

1. Yes
2. No

24b. If your answer was YES, did the accidents happen

1. While you were at work?
2. Some place other than work?
3. Or both?

Legal Information

One study showed that physicians who had been evaluated as having problems with alcohol and/or drugs had also encountered legal difficulties with substances.

Have you been involved in any of the following:

25. Have you been arrested for drunk driving, or driving under the influence of intoxicants?

1. Yes 2. No

26. Have you been arrested for illegal possession of drugs?

1. Yes 2. No

27. Have you been arrested on any other alcohol or drug-related charge?

1. Yes 2. No

28. On the chart below, please indicate with a check how often you use each item.

<u>ITEM</u>	<u>Daily</u>	<u>Several Times Per Week</u>	<u>Once a Week</u>	<u>Once a Month</u>	<u>Rarely</u>	<u>Never</u>
1. Tobacco						
2. Coffee, Cola						
3. Beer						
4. Wine						
5. Liquor						
6. Marijuana/Hashish						
7. Hallucinogens: (LSD, Mushrooms, PCP, MDA, etc.)						
8. Speed/Amphetamines						
9. Cocaine						
10. Downers/Barbiturates						
11. Other Sedatives: (Quaaludes, Sopors, etc.)						
12. Tranquilizers: (Valium, Librium, others)						
13. Anti-Depressants						
14. Inhalants (Glue, Paint)						
15. Heroin or Morphine						
16. Other Opiates: (Darvon, Percodan, Talwin, Demerol, Codeine, Dilaudid, etc.)						
17. Legal/illegal Methadone						
18. Over-the-Counter						
19. Other						

APPENDIX C

ABSTRACT

AN ABSTRACT OF THE THESIS OF
JAME M. GRIFFIN

For the MASTER OF NURSING

Date Receiving this Degree: June, 1984

Title: High Risk Characteristics of Oregon Nurses Identified As Having Problems with Alcohol and Drug Use

Approved:

Florence Hardesty, Ph.D.

Thesis Advisor

The nursing profession has recently begun assessing the alcohol and drug problem among nurses. The National Council of State Board of Nursing, Inc., started collecting information on disciplinary actions from its member state boards. Although not all state boards have reported, the data available on disciplinary proceedings involving nurses in Oregon during the period September 1980 through August 1981 show that 67% were related to some form of chemical abuse (Oregon State Board of Nursing, 1982).

The purpose of this study was to identify characteristics of nurses who develop chemical abuse problems. These characteristics may provide a "high risk profile" that could be used to identify target groups for

educational sessions and for treatment intervention at an earlier state of the addiction process.

A self-administered questionnaire was sent to the 100 nurses who had come to the attention of the OSBN for alcohol or drug use problems in 1981 and 1982. The questionnaires were also sent to a control group consisting of 100 nurses in the general nursing population who were licensed to practice in Oregon in 1981 and 1982. Descriptive statistics were used to analyze the data.

The significant findings which differentiated the nurses identified as having alcohol and drug use problems from nurses in the general nursing population were:

- (a) single parenthood;
- (b) lower level of education;
- (c) high stress score on the Rahe and Holmes Social Readjustment Rating Scale;
- (d) more accidental injury and mental health problems experienced;
- and (e) higher consumption rate of beer, liquor, and drugs, especially opiates.