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Alcohol Knowledge and Drinking Patterns of Nursing Students 1983 - 1985:

Implications for Nursing Education

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BACKGROUND

Problem drinking and alcohol abuse constitute most western cultures' number one drug problem. In the United States a significant proportion of Americans are either directly or indirectly affected by alcohol related problems (National Institute on Alcohol Abuse and Alcoholism, 1987). Yet ironically, alcohol problems often remain unrecognized and the victims remain undiagnosed and untreated. While the diagnostic clues are often vague and subtle, part of the difficulty may lie in the lack of adequate alcohol education in nursing and medical schools (Hasselblad, 1984) both for self-awareness and information which could be used professionally.

As primary care providers, nurses are in an excellent position to recognize drinking problems and alcoholism. Therefore, it is imperative that they become free of alcohol myths and misinformation early in their educational careers.

Unfortunately, an even more serious difficulty in detection and action is that many nurses themselves appear to suffer from alcohol abuse and problem drinking (Bissell & Haberman, 1984; Hendrix & LaGodna, 1986; Lee & Ventres, 1981; Lachman, 1986; Penny, 1986). Jefferson and Esnor (1982) indicated that 67% of the disciplinary proceedings brought against nurses in 35 states were related to some form of chemical abuse. The American Nurses Association estimated that the number of chemically dependent may be as high as 200,000 (Morseal., 1984) and Buxton etal · (1984) estimate that eight to ten percent (135,000 - 170,000) of the total number of 1.7 million nurses (RNs and LPNs) in the United States suffer alcohol and other drug dependence.

Given the estimated high alcohol abuse rates among nurses, surprisingly little is known about the alcohol knowledge and drinking patterns in of student nurses in the united states or other countries Eng(1980) found that the most commonly used drug among nursing students in Queensland Australia was alcohol. Sixty-five percent of the nursing students consumed alcohol at least once per month. Haack and Harford (1984), in a study of senior students at an undergraduate program of a college of nursing in the northern part of the United States, found a somewhat higher

percentage to be frequent drinkers and heavy drinkers than found among other female collegians.

Additionally, about 10% reported that alcohol interfered with their school work and 4% with their job. The combined proportion with either problem was 13%. Engs and Rendell (1987) found that over 90% of Scottish nursing students drank, with 44.5% drinking at least once per month.

Haack and Harford (1984) observed that most undergraduate nursing programs offer only two to four clock hours of instruction on addictions which included alcohol and other drugs while some schools provide none.

Given the estimated high incident of alcohol abuse among nurses and the fact that little information concerning alcohol or problem drinking appears to be available for student nurses, it is important to determine their knowledge level and drinking patterns for curriculum development. A two year time period was selected for data gathering to establish stability or instability of this information. In the United States after 1987 in order for a state to receive federal highway funding, the legal alcohol purchase age needed to be 21 years.

To rule out possible change in drinking patterns and knowledge due to this law, the two time periods in which data from the same colleges had been collected before 1987 are reported in this article.

METHODS

Instrument

An identical anonymous pre-coded questionnaire was used in both 1982-83 and 1984-85. It included demographic items, questions regarding the consumption of alcohol, 36 items tapping knowledge of alcohol, and 17 items concerning possible consequences of drinking. The 36 "true-false" alcohol knowledge items included questions concerned with factual information about alcohol such as: "alcohol is classified as a stimulant;" common myths concerning drinking such as, "drinking hot coffee or taking a cold shower can be an effective way of sobering up;" or information about problem drinking such as, "A person cannot become an alcoholic by just

drinking beer."(Note: the correct response to these three items would be "false").

The 17 items regarding problems asked if respondents had, within the last year, had a hangover, driven a car after having had several drinks, had trouble with the law because of drinking, gotten into a fight after drinking, etc. All questionnaire items had been pre-tested prior to earlier research (Engs, 1977; Hanson, 1972) and instructions explained the voluntary nature of participation.

Samples

The 1982-83 sample consisted of nursing students (N= 291) from a sample of 4,885 students at 72 four-year colleges and universities located throughout the United States of America. The 1984-85 sample consisted of nursing students (N= 170) from a sample of 4,266 students at the same institutions two years later.

In both the 1982-83 and 1984-85 studies, the data were gathered from in class administration of the questionnaire in survey-type sociology or health or physical education classes that had a high probability of containing students from every academic major and class year, including student nurses. The response rate exceeded 98%. Among nursing students 84% were female and 16% male.

RESULTS

Alcohol Knowledge

There were significant differences ($p < .05$) over time in responses to only three of the 36 alcohol knowledge items. One involved an increase in correct responses to, "It takes about as many hours as the number of beers drunk to completely burn up the alcohol ingested" (53.6% to 80.8%). However, there were decreases in correct answers to "Drinking milk before drinking an alcoholic beverage will slow down the absorption of alcohol into the body" to 43.6%) and to "Proof on a bottle of liquor represents half the percent of alcohol contained in the bottle" (52.0 to 38.7%). See Table 1

Other than these three items, there appears to be stability of the other questions over the two year time period. A number of students, however, had misconceptions concerning alcohol or problem drinking. Almost one in ten did not know that people often drink to escape from problems and loneliness and did not know that alcohol had been used historically as a medicine in childbirth, sedation and surgery. About a third thought alcohol was classified as a stimulant, that a .02 BAC would cause a person to go into a stupor, and that drinking coffee or taking a cold shower was an effective way of sobering up. About one in twenty did not know that alcohol was a drug and thought that a person could not become an alcoholic if they just drank beer. Nurses need to have accurate information to these and other items concerning the physiology of alcohol and problem drinking so they may recognize it in themselves and their patients.

Drinking Behaviors and Problems

The drinking levels and problems related to drinking exhibited by nursing students over time are found in Table 2. As can be seen there were no significant changes over these two time periods in patterns or problems related to drinking. Thus it appears that among this sample of student nurses, that drinking patterns and problems appear to be stable over this two year time period.

Of these students about one in four were moderate heavy to heavy drinkers (a range of drinking 3 or 4 drinks at least once a week to more than 6 drinks at any one sitting more than once a week). Over a third drove a car while drinking, and had driven a car when they knew they had too much to drink. These are behaviors which could result in serious problems for these individuals.

Over one in ten had missed class because of hangover, about one in ten had been criticized by a close friend about their drinking or gotten into a fight after drinking. About one in 20 had come to class after having several drinks or had gone to class after drinking. All of these behaviors could be indicative of problem drinking or result in poor classroom learning.

RECOMMENDATIONS

The findings of this study appear to indicate a stability of knowledge of alcohol and problem drinking, and drinking patterns and problems of the nursing students in this sample over the two time periods. This appears to suggest that this type of instrument could be used for baseline data when evaluating alcohol education curriculum.

These results appear to have implications for alcohol education among student nurses both in terms of information for self-use and use with patients. The authors would like to recommend some basic information which could be included in units on alcohol and problem drinking. This information could be integrated in anatomy and physiology, psychiatry, medical-surgical, maternal nursing, pharmacology, family and community health, nursing and other courses.

Sample outline for nursing education about alcohol, drinking and problem drinking

I. Acute physical effects of alcohol

- A. The nature of ethanol as a depressant drug
- B. Blood Alcohol Concentration in relationship to the effects of alcohol upon the central nervous system
- C. The interaction of alcohol with other drugs
- D. The fetal alcohol syndrome
- E. Acute alcohol intoxication and withdrawal
- F. Nursing implications and management of acute alcohol intoxication, fetal alcohol syndrome and pre-natal counseling

II. Physiological effects of chronic alcohol abuse

- A. Effect of chronic alcohol abuse on the central nervous system
- B. Effect of chronic alcohol abuse on the cardio-vascular, genital-urinary, gastric-intestinal, liver and other systems
Physical dependency and the withdrawal syndrome
- C. Nursing implications and management of alcohol dependency, the withdrawal syndrome and chronic central nervous and other system damage.

- III. Psycho-social aspects of acute alcohol consumption
 - A. Historical and cultural uses of alcohol
 - B. Responsible choices concerning drinking and methods for responsible alcohol consumption for those who chose to drink.
 - C. Cultural reasons for acute alcohol abuse and irresponsible drinking
 - D. Legal, social, family problems from acute alcohol intoxication
 - E. Nursing implications and management of social and family problems resulting from acute alcohol abuse

- IV. Psycho social aspects of alcoholism and chronic problem drinking
 - A. Biological and psycho-social theories of alcoholism and problem drinking
 - B. Types of alcoholics and problem drinkers
 - C. Signs and symptoms of alcoholism and problem drinking
 - D. Family problems and co-dependency in families with alcoholism and problem drinking
 - E. Medical, social and self-help treatment modalities in alcoholism and problem drinking
 - F. Nursing implications and management in treatment of alcoholics, problem drinkers and their families

This is a brief curriculum outline which could encompass a whole course or be integrated as separate units into a variety of courses. The number of hours devoted to each items would depend upon local needs and time constraints. This outline provides information both for student nurses to use in their own lives and for use in patient care.

It is recommended that in evaluation of this instruction, that baseline information, such as reported in this report, be gathered prior to and after all phases of instruction are complete. A longitudinal study of nurses as they go through their course of study and alcohol education units and its effect on knowledge and behavior would also be of interest to the field.

SUMMARY

The findings of this study indicate remarkable stability in the drinking patterns and problems of nursing students as well as their alcohol knowledge over a two year time period. Some students appeared to have patterns which may indicate problem drinking and there were misconceptions concerning the effects of alcohol and the nature of problem drinking. It is recommended that alcohol education, such as outlined in this article be instituted at the collegiate level in the preparation of nurses.

REFERENCES

- Bissell, L. & Haberman, P. (1984). Alcoholism in the Professions (New York: Oxford).
- Buxton, M., Jessup, M. & Landry, M. (1984). Treatment of the chemically dependent health professional. In H.B. Milkman and H.J. Shaffer (Eds.) The Addictions (Lexington, MA: Heath).
- Engs, R.C. (1977). Drinking patterns and problems of college students. Journal of Studies Alcohol, 38, 2144-2156.
- Engs, R.C. (1980). The drug use patterns of helping profession students in Brisbane, Australia. Drug and Alcohol Dependence, 6, 231-246.
- Engs, R.C. & Rendell, K.H. (1987). Drug use patterns of nursing students in the Tayside region of Scotland. Health Education Research. 2(4)329-336.
- Haack, M.R. & Harford, T.C. (1984). Drinking patterns among student nurses. International Journal of the Addictions, 19(5)577-583.
- Hanson, D.J. (1972). Norm Qualities and Deviant Drinking Behavior (Unpublished Ph.D. dissertation, Syracuse University).
- Hasselblad, J. (1984). Alcohol Abuse Curriculum Guide for Nurse Practitioner Faculty (Rockville, MD:U.S. Department of Health and Human Services).
- Hendrix, M.J. & LaGodna, G.E. (1986). Bridge to recovering. American Association of Occupational Health Nurses Journal, 34(1)6-9.

Jefferson, L.V. & Esnor, B.E. (1982). Help for the helper: confronting a chemically impaired colleague. American Journal of Nursing, 82(4), 574- 577.

Lachman, V .D. (1986). Why we must take care of our own. Nursing, April, 41.

Lee, D.K. & Ventres, S. (1981). The nurse: the enabler. American Journal of Nursing, March, 506-508.

Morse, R.M., Martin, M.A., Swenson, S.M. & Niven, R.G. (1984). Prognoses of physicians treated for alcoholism and drug dependence. Journal of the American Medical Association, 251(6)743-746.

National Institute on Alcohol Abuse and Alcoholism (1987). Sixth Special Report to the U.S. Congress on Alcohol and Health, U.S. Dpt. HHS: Rockville, MD.

Penny, J.T. (1986). Spotlight on support for impaired nurses. American Journal of Nursing, June, 689-691.

Table 1

Alcohol Knowledge Among Nursing Students, Over Time, In Per Cent (*)(p < .05)

| <u>Knowledge</u> | 1982-83 <u>(N=291)</u> | 1984-85 <u>(N=170)</u> |
|---|---------------------------|---------------------------|
| Drinking Milk before drinking an alcoholic beverage will slow down the absorption of alcohol into the body | 55.7 | 43.6* |
| Wines are made by fermenting grains. | 64.5 | 70.8 |
| Alcoholic beverages do not provide weight increasing calories. | 96.4 | 93.9 |
| In America drinking is usually considered an important socializing custom in business, improving interpersonal relationships | 94.6 | 91.3 |
| Gulping alcoholic beverages is a commonly accepted drinking pattern in this country. | 55.3 | 55.4 |
| Alcohol is usually classified as stimulant. | 67.4 | 68.8 |
| Alcohol is not a drug. | 91.5 | 94.2 |
| A Blood alcohol concentration of 0.1% is the legal definition of alcohol intoxication in most states in regards to driving. | 72.0 | 81.8 |
| Approximately 10% of fatal highway accidents are alcohol related. | 51.4 | 53.1 |
| Alcohol was used for centuries as a medicine in childbirth, sedation, and surgery. | 91.6 | 92.7 |
| Table wines contain from 2-12% alcohol by volume. | 91.3 | 87.5 |
| It is estimated that approximately 85% of the Adult Americans who drink misuse or abuse alcoholic beverages. | 32.7 | 27.3 |
| Many people drink to escape from problems, loneliness and depression. | 97.9 | 91.4 |
| Liquor mixed with soda pop will affect you faster than liquor drunk straight. | 86.0 | 87.5 |
| The most commonly drunk alcoholic beverage in the United States are distilled liquors (whiskey, gin, Vodka) | 57.0 | 60.2 |
| A 150 pound person, to keep his blood alcohol concentration below the legally intoxicated level, means that would have to drink less than 3 beers in an hour. | 27.6 | 20.2 |
| A person cannot become an alcoholic by just drinking beer. | 97.0 | 95.6 |

| | | |
|---|------|-------|
| To prevent getting a hangover one should sip his drink slowly, drink and eat at the same time, space drinks over a period of time, and don't over drink for your limit. | 80.7 | 88.1 |
| Responsible drinking can result in relaxation, enhanced social interactions, and a feeling of well being. | 73.2 | 61.4 |
| Distilled liquors (gin, whiskey, vodka, etc.) usually contain about 15-20% alcohol by volume. | 58.9 | 52.0 |
| Moderate consumption of alcoholic beverages is generally NOT harmful to the body. | 53.6 | 69.2 |
| It takes about as many hours as the number of beers drunk to completely burn up the alcohol ingested. | 37.6 | 50.8 |
| An ounce of whiskey contains about 60 calories. | 98.2 | 98.8 |
| Many people drink for social acceptance, because of peer group pressures, and to gain adult status. | 69.6 | 57.1 |
| A blood alcohol concentration of .02 causes a person to be in a stupor | 95.9 | 96.0 |
| Liquors such as gin, scotch, and whiskies are usually distilled from mashes made from fermenting grains . | 52.0 | 38.7* |
| Proof on a bottle of liquor represents half the per cent of alcohol contained in the bottle. | 77.0 | 72.3 |
| The United States lacks a national consensus on what constitutes the responsible use of alcoholic beverages. | 60.5 | 57.4 |
| There is usually more alcoholism in a society which accepts drunken behavior than in a society which frowns on drunkenness. | 83.6 | 77.1 |
| Beer usually contains from 2-12% alcohol by volume. | 89.9 | 86.8 |
| Eating while deinking will have no effect on slowing down the absorption of alcohol in the body. | 62.3 | 70.7 |
| Drinking coffee or taking a cold shower can be an effective way of sobering up. | 97.1 | 98.1 |
| Wines throughout history have been commonly drunk at religious ceremonies and family gatherings. | 74.8 | 82.5 |
| Drinking of alcoholic beverages has been common in the U.S.A. since the Puritans first settled here | 96.1 | 97.0 |
| Alcohol has only been used in a very few societies throughout history. | 83.3 | 81.3 |
| Liquor taken straight will affect you faster than liquor mixed with water | 90.4 | 87.5 |

Table 2
 Drinking Problems Experienced During Previous Year By Nursing Students Who Drink, Over Two
 Time Periods, In Percent

| <u>Drinking Problem</u> | <u>1982-83 (N-291)</u> | <u>1984-85 (N-170)</u> |
|---|------------------------|------------------------|
| Have had a hangover | 64.2 | 66.7 |
| Have gotten nauseated and vomited from drinking | 36.2 | 38.2 |
| Driven a car after having several drinks | 48.6 | 48.0 |
| Driven a car when you knew you had too much | 32.3 | 27.6 |
| Driven a car while drinking | 35.9 | 34.1 |
| Come to class after having several drinks | 4.6 | 2.4 |
| "Cut a class" after having several drinks | 2.3 | 4.1 |
| Missed a class because of a hangover | 12.8 | 17.1 |
| Arrested for DWI (Driving While Intoxicated) | 0.5 | 0.0 |
| Been criticized by someone you were dating because of your drinking | 9.2 | 5.7 |
| Trouble with the law because of drinking | 2.3 | 0.8 |
| Lost a job because of drinking | 0.5 | 0.0 |
| Got a lower grade because of drinking too much | 2.3 | 2.4 |
| Gotten into trouble with the school administration because of behavior resulting from drinking too much | 0.9 | 0.0 |
| Gotten into a fight after drinking | 8.3 | 9.8 |
| Thought you might have a problem with your drinking | 2.8 | 3.3 |
| Damaged property, pulled false fire alarm, or other such behavior after drinking | 3.7 | 0.0 |

Table 2 Continued

Drinking Patterns of nursing students in percent in each time period

| | | |
|----------------------|------|------|
| Abstainer | 24.4 | 27.6 |
| Moderate | 22.0 | 29.2 |
| Moderate Heavy/Heavy | 18.8 | 24.8 |