Prevalence of Alcohol Problems Among Pediatric Residents

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Objective: To measure the prevalence of alcohol-related problems among pediatric trainees.

Methods: An alcoholism screening test was administered anonymously to participants at a mandatory substance abuse education and prevention program.

Setting: A large urban pediatric residency training program.

Subjects: One hundred fifteen pediatric residents attended the program during 3 consecutive years (1996-1998). Eighty-five (74%) screening tests were returned and 81 (70%) were analyzed.

Main Outcome Measure: The 25-item Michigan Alcoholism Screening Test (MAST). Differential MAST cutpoints have been established to “suggest” or “indicate” a lifetime diagnosis of alcoholism.

Results: Twelve residents (15%) had scores suggestive and 6 (7%) indicative of alcoholism. Twenty-eight (35%) admitted to having alcohol-associated amnesia (blackouts), 13 (16%) to “feeling bad” about their drinking, 9 (11%) to drinking before noon, 6 (7%) to getting into fights when drunk, and 2 (2%) to alcohol-related marital problems. However, only 1 (1%) had gone to anyone for help and none admitted to alcohol-related problems at work.

Conclusions: These screening data suggest that alcohol abuse and related problems exist among pediatric trainees at troubling rates. While more than one third of the trainees had experienced a serious consequence from heavy drinking, only 1 had gone for help and problems were not apparent at work. Greater emphasis should be placed on alcohol prevention and early intervention programs as a routine part of pediatric training.


A BUSE OF alcohol and other drugs by physicians is nothing new. There have been reports of this problem for more than 100 years, with widely varying and often exaggerated estimates of its prevalence.1 More recent studies have indicated that pathological use of alcohol occurs in approximately 10% to 20% of residents worldwide2,3 and that residents’ mean alcohol consumption is not significantly different from the general population.4 One of the largest US studies, however, found that male and female residents had higher rates of past-year and past-month alcohol use than nonphysician peers, but that only 5% of residents used alcohol on a daily basis.5 In a reassuring follow-up study, Hughes et al6 reported that pediatric residents (and pathology residents) were the least likely of 11 specialties to be substance users.

However, it is important to note that the Hughes studies measured use of alcohol and prescription drugs, and not the prevalence of alcohol- or other drug-related pathology. In fact, it is unknown to what extent pediatric residents are affected by alcohol-related problems and there is little discussion of this topic in academic circles. Pediatric faculty should be aware of the magnitude of the problem so that appropriate prevention and early intervention programs can be instituted. The objective of this study was to assess the prevalence of alcohol-related problems among pediatric trainees and to determine how many residents screen positive for alcohol-related disorders.

RESULTS

During 3 consecutive years (1996-1998), 115 trainees (68% female) attended the educational program. Eighty-five tests were returned (74%) and 81 (70%) were ana-

Editor's Note: This article is a wake-up call for those who are unaware of (or close their eyes to) the serious problem of alcohol abuse in residents (even pediatricians!).

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PARTICIPANTS AND METHODS

The Michigan Alcoholism Screening Test (MAST) was given to first-year pediatric residents at a large urban teaching hospital when they arrived for a required substance abuse education and prevention program. Residents were asked to complete the MAST as an educational exercise and return it anonymously at the end of the session. No identifying information of any kind was placed on the form. The MAST is a 25-item screening test that is a valid and reliable predictor of alcoholism among adults. Differential cut points have been established to “suggest” (score ≥ 4) or “indicate” (score ≥ 5) a lifetime diagnosis of alcoholism. All data were entered into and analyzed in Statistical Program for the Social Sciences (Chicago, Ill.) software. Frequencies of total MAST scores and responses to individual items were computed.

çilered. Two subjects answered less than 70% of the items and were excluded. Two others were excluded because they screened positive based on a yes answer to a single question (weighted as 5 points), “Have you ever attended a meeting of Alcoholics Anonymous (AA)?” Subsequently, this question was qualified with the phrase “except as part of medical education or training.”

Distribution of subjects’ MAST scores is shown in the Figure. According to MAST criteria, 12 residents (15%) had scores suggestive and 6 (7%) indicative of alcoholism. Twenty-eight (35%) admitted to having alcohol-associated amnesia (blackouts), 13 (16%) to “feeling bad” about their drinking, 9 (11%) to drinking before noon, 6 (7%) to getting into fights when drunk, and 2 (2%) to alcohol-related marital problems. However, only 1 (1%) had gone to anyone for help and none admitted to alcohol-related problems at work.

COMMENT

This study shows that alcohol problems are present among pediatric trainees at disturbing rates. Prior studies have found that slightly more than 6% of medical students screened positive on a modified version of the MAST, while more than 12% of residents and more than 21% of nursing students were MAST-positive. In this study, more than 14% of trainees were identified by the MAST as having a possible diagnosis, and more than 7% as having a likely diagnosis of alcoholism. Even if the cut point were raised to 6 or greater, as suggested in some studies, 6% of the residents would still screen positive for alcoholism.

This study has limitations. It was conducted at a single pediatric training program during a 3-year period. The extent to which these findings are representative of all pediatric training programs over time is unknown. In addition, the measurement used in this study was a screening test and not a diagnostic assessment. Further studies on the prevalence of alcohol disorders among residents are therefore needed. These studies should include diagnostic interviews or other substance abuse measures in addition to a screening test.

However, the exact prevalence of alcohol-related disorders (ie, alcohol abuse or dependency) may be less important than the prevalence of alcohol-related problems (eg, blackouts, fights, and so on) among residents, which were found to be relatively common in this study. More than one third of the trainees had experienced alcohol-associated amnesia, a serious consequence of heavy drinking. While this single symptom is not diagnostic, it is certainly of concern. Only 1 of the study subjects reported going to someone for help about drinking and none reported having alcohol-related problems at work. Faculty cannot therefore assume that problems are absent among their residents based on lack of visibility. In fact, problems at work may be a relatively late manifestation of alcoholism. Significant problems in personal and family life may exist for some time before coworkers or supervising physicians become aware that an individual is in trouble. More emphasis should be placed on early recognition and intervention for alcohol problems during residency training, especially since physicians have a pattern of increasing alcohol problems with age, yet respond more favorably to treatment programs than the general population.

Substance abuse education and prevention programs should be a routine part of residency training in pediatrics. Such training (ie, “the impaired physician”) is in fact required by the Residency Review Committee in Pediatrics as part of the medical ethics curriculum. Very few physicians, however, report that substance abuse counseling and information programs were an important part of their residency training. At our own hospital, a mandatory education program was instituted 5 years ago following the tragic death of a trainee associated with the misuse of a synthetic opioid analgesic. The course includes a discussion of alcohol and other drug use among physicians, state and hospital regulations on prescribing, physician health and assistance programs, and the personal story of a “recovering physician.”

Faculty must also model responsible use of alcohol (in social settings) and complete abstinence while professionally involved in the hospital. It was not so long ago that “liver rounds” were a regular and popular feature of medical education and training. While social drink-
ing need not be discouraged, events should never be centered around heavy drinking and no individuals should return to professional duty after drinking.

Every hospital should have a committee charged with providing confidential support and assistance for physicians with alcohol, drug, or other mental health problems. While these individuals may be reluctant to self-refer, the existence of such a program makes it easier for others to intervene when they suspect that a colleague is in trouble. Residents should know that they can receive confidential advice about a friend or coworker, and that intervention through such a program does not necessarily mean that a career will be interrupted. Training directors and chief residents must also be aware that this problem can affect anyone. Alcohol and other drug problems should be considered when a resident’s performance is unsatisfactory or undergoes a sudden decline. When giving constructive feedback in these cases, alcohol and other drug use should be mentioned as a known cause of performance problems among physicians and information should be provided on how to access a confidential assistance program. When overt evidence of an alcohol or drug problem exists, referral to a treatment and monitoring program should be required. Further information on these programs can be obtained through a state’s medical society or board of registration.

**CONCLUSION**

Alcohol-related problems exist among pediatric trainees at disturbing rates. Symptoms may not be visible at work, even when serious consequences (eg, blackouts) have occurred. Greater emphasis should be placed on alcohol prevention and early intervention programs as a routine part of pediatric training.

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