The prevalence of alcohol, cigarette and illicit drug use and problems among dentists

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Substance (alcohol, cigarette and illicit drug) use and abuse have been recognized as areas of concern among dental professionals.[1,2] As determined from qualitative data,[3,4] a number of dentists—like their patients and other health care professionals[5-9]—use alcohol, tobacco and other potentially addicting drugs, thus potentially jeopardizing themselves, their practices and, most importantly, the public. While these data are highly informative for delineating important correlates of use, prevalence data for alcohol, cigarette and drug use by dentists are virtually unknown, and, as noted by Hankes and Bissell,[10] what data exist are questionable in their generalizability.[10]

There is little evidence that dentists are at a greater risk of developing alcohol- or other drug-use problems than is the general public.

Much of the available information pertaining to dentists has been based largely on a review article,[11] a retrospective analysis of treatment-seeking or professionally censured dentists,[12] a study with uncorrected multiple analyses,[13] or qualitative studies.[3-5,14] In particular, qualitative studies based on clinical samples of dentists may lead to overestimating dentists' substance dependence and raising unfounded concerns about their substance use. While these studies have provided valuable insights into the clinical processes of substance use and abuse by dentists, they nonetheless are limited with respect to methodological rigor and generalizability to dentists at large.

ABSTRACT

Background. Primarily on the basis of qualitative data, use of alcohol and illicit drugs has been speculated to be higher among dentists. The authors conducted a study to assess self-reported substance use by dentists and compare these data with those regarding physicians and the general population (GP).

Methods. A total of 113 dentists (65.3 percent) and 104 physicians (63.4 percent) from a northeastern state responded to a seven-page self-report survey during the summer of 2002. The survey assessed health care professionals' alcohol, cigarette and drug use; consequences of use; disciplinary occurrences and treatment; and professional and social influences.

Results. Although about twice as many physicians as dentists reported heavy alcohol use, a greater number of dentists reported heavy episodic alcohol use over the past year and past month, as well as having more alcohol-use problems than physicians. Roughly twice as many physicians and three times the GP reported using anxiolytics than did dentists. More dentists than physicians reported past-year, but not past-month, minor opiate use. While more dentists reported being in social situations in which they were offered alcohol, more physicians reported being offered alcohol by pharmaceutical companies at various functions.

Conclusions. Contrary to previous speculation, there is little evidence from the prevalence data the authors analyzed for this report to suggest that dentists are at a greater risk of developing alcohol- or other drug-use problems than is the GP.

Practice Implications. While the findings of this study do not suggest that substance use is more prevalent among dentists, educational institutions and state organizations still must be vigilant in educating, monitoring and encouraging dentists to voluntarily receive treatment.

Key Words. Alcohol; drugs; cigarettes; substance use; substance abuse.

Substance abuse rates among dentists have been characterized to be higher than those reported in the general population (GP).[11,12] Clarke and colleagues,[12] citing previous findings,[14] deduced that chemical dependency may be more prevalent among dentists; they estimated the percentage of alcohol and drug dependence in dentists to be 15 to 18 percent. Chiodo and Tolle[11] similarly suggested that dentists were at a higher risk of reporting greater substance abuse than the GP. They concluded that the literature consistently reported higher rates of chemical dependency in health care providers. Actually, the 15 to 18 percent estimate initially cited by Hedge[14] was consistent with combined substance abuse-dependence data for the GP at the time[15] and, therefore, does not support this characterization. As also reported for physicians,[16] this incongruity illustrates the lack of dependable data that question whether dentists are indeed at increased risk of developing alcohol or drug dependence.

The primary aim of our study was to obtain methodologically sound and current prevalence data so as to better inform the dental profession about data that may direct future initiatives related to substance use by dentists. A secondary aim of our study was to compare substance use among dentists with a sample of physicians and the public at large using data collected from a statewide survey, as well as general population data available from the National Survey on Drug Use and Health (NSDUH).[17] To provide a more complete substance abuse outcomes-related topography, we also included prevalence data focusing on the consequences of substance abuse and putative social and professional influences that may facilitate or contribute to substance use by dentists.

In this article, we use a number of specialized terms that often have other "everyday" meanings. To minimize confusion, we define "drug use" as the intake of a licit substance (used without a prescription or for reasons other than intended) or illicit substance, and we define "drug abuse" as "the intake of a chemical substance under circumstances or at dosage levels that significantly increase risks of harm, whether or not the substance is licit or illicit."[18] In addition, we define "alcohol use" as alcohol being consumed during the specified period assessed in the survey and "alcohol abuse" as a pattern of problem drinking that may result in health consequences, social problems or both.

SAMPLE AND METHODS

Measures. *Substance use.* We used items based on the National Household Survey on Drug Abuse[19] and other surveys of health care professionals[20-23] to assess health care professionals' self-reported substance use. Consistent with these surveys, we defined "heavy episodic use" of alcohol as consuming five or more drinks containing alcohol during one episode at least once during the specified timeframe (year or month) and "heavy alcohol use" as heavy episodic use five or more times during the past month.

We compared past-year and past-month use of drugs with similar items assessed in the GP in 2002.[17] In our study, we specified that the phrase "use of prescription drugs" meant the drug use was "on your own, without authorization, or for use other than intended or prescribed." The prescription drug classes (with trade name examples) we assessed included stimulants, major opiates, minor opiates, anxiolytics (for example, alprazolam), sedative-hypnotics, inhalants (for example, nitrous oxide), tranquilizers, barbiturates and miscellaneous drugs such as butorphanol or tramadol. The "street drugs" we assessed included marijuana, cocaine, hallucinogens and "designer drugs" such as 3,4-methylenedioxymethamphetamine (known commonly as "Ecstasy"). In view of low base rates assessed in a much larger sample,[22] we did not assess heroin and steroid use.

Alcohol and drug dysfunction. A set of items assessed lifetime minor and major consequences of use called "dysfunctions," first as a result of alcohol use and then of drug use.[21] An example of a main question stem assessing minor alcohol-related dysfunction was "Has your alcohol or drug use ever caused you to …". One of the multiple answer choices was "get behind in your work?". An example of a question assessing major dysfunction was "have an auto accident or other kind of accident?"; the response options ranged from "never" to "often."

Disciplinary occurrences and treatment. We assessed self-reported consequences resulting from alcohol and drug use, along with disciplinary outcomes and treatment sources.[23]

Professional and social influences. Consistent with previous research,[24,25] we used a set of questions to assess the impact of social influences such as friends, acquaintances and pharmaceutical companies on alcohol and drug use during