

Profile of An Adolescent Problem Drinker

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A study was conducted to determine what sociocultural and demographic variables can be used to identify potential problem drinkers among adolescents in middle school and high school. Three thousand seventeen students were administered an in-depth questionnaire regarding their knowledge, attitudes, and behavior toward the use of alcohol. Twenty schools in six school districts in the two-state area of Georgia and South Carolina participated in the study.

A number of analyses indicated that the student heavy drinker was most typically male, white, and between the ages of 14 and 15 years with an above average knowledge about alcohol and liberal attitudes toward alcohol use. The adolescent heavy drinker is more likely to have parents and best friends who are heavy drinkers, to have had his first encounter with alcohol at an early age, to drink with friends his own age, and to feel that almost all of his friends drink. Results of this study can be used by family physicians in the management of potential alcohol abusers. Early recognition and intervention by the family physician may help to reduce the alarming number of adolescents who are struggling with problems related to alcohol.

In the general populace of the United States, approximately 100 million people, aged 15 years and up, drink alcoholic beverages. With the current rate of alcohol abuse and alcoholism estimated to involve 10 percent of the adult population, it is also estimated that the family physician sees one or two patients daily who have problems with alcohol.¹ With an apparent increase in the number of adolescents falling into this category, the family physician needs to identify potential alcohol abusers at an early age.

Alcohol is the most widely used drug by young people between the ages of 12 and 17 years. It is used far more than are marijuana, cocaine, stimulants, tranquilizers, and opiates combined.² The average age of a teenager's first experience with alcohol is 11 years, younger than the age of 14 years two decades ago.^{2,3}

Nearly 45 percent of traffic accidents in the group aged 16 to 24 years are alcohol related. One out of five people driving at night is legally drunk; the drunk driver is most likely to be single, male, and under the age of 25 years.⁴ Suicide among young people aged 15 to 24 years has in-

creased significantly, and alcohol has been implicated in four out of five suicide attempts.⁵ Alcohol is also associated with criminal behavior among young persons, including homicide.⁶

A number of studies have indicated that young men drink more than young women,^{7,8} whites more than minorities,^{9,10} and older adolescents more than young students.¹¹ Parental^{12,13} and peer^{14,15} influences have also contributed to problem drinking among adolescents.

The purpose of this study was to develop a profile of adolescents who have classified themselves as heavy (problem) drinkers. This profile included social, cultural, and demographic risk factors that may be associated with alcohol use and abuse.

METHODS

A four-part questionnaire was developed and field tested in two pilot studies.¹⁶ Students completed a knowledge test on the nature and effects of alcohol, responded to questions about their attitudes toward alcohol use, and gave a self-report about their drinking behaviors and the drinking behaviors of their parents and best friends.

In addition, a panel of 25 specialists in the field of alcohol abuse evaluated the four drinking categories and reached consensus as to what constituted light, moderate,

Submitted, revised, January 11, 1988.

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and heavy drinking in students aged under 16 years, students aged over 16 years, and parents (Appendix).

Twenty schools in six school districts in the two-state area of Georgia and South Carolina participated in the study. Eleven schools were located in urban and suburban areas with a population of 50,000 to 1 million. Nine schools were located in small towns or rural areas with a population of 10,000 or less. A total of 3,017 students participated.

Classroom teachers administered the questionnaire to students enrolled in the 6th-, 8th-, 10th-, and 12th-grade classes. The principal of each school was asked to select heterogeneous classes that were representative of the school population. Twenty-four questionnaires were eliminated prior to analysis because of insufficient data.

The sample was sufficiently large in number and, according to demographic information on students in the Southeast region of the United States, was representative of the total school population: 47.6 percent were boys; 56.6 percent were white, 39.5 percent black; 21.3 percent were sixth graders, 22.8 percent eighth graders, 29.8 percent tenth graders, and 26.1 percent 12th graders; 83.1 percent were Protestant, 10.2 percent Catholic; 61.3 percent lived in urban areas; and 49.3 percent lived with both natural parents.

RESULTS

Eighty percent of the sample had tried alcohol at some time in their life; more than one third (39.2 percent) had first tried alcohol when they were younger than 11 years old. Over one half (51.2 percent) took their first drink in their own home under parental supervision. The number of abstainers decreased as the students got older. The number of heavy drinkers increased dramatically at 12 years of age (from 2.3 percent for those 11 years of age to 14.4 percent for those 12 to 13 years of age). The majority of drinking students under 12 years of age usually drank with parents or other adults (71.4 percent), but after the age of 13 years, this trend changed, with an ever-increasing percentage indicating that they drank with friends their own age (50.5 percent among those aged 14 to 15 years, 69.2 percent among those aged 16 to 17 years, and 72.8 percent of those over age 17 years). Most did not perceive peer pressure to drink (69.1 percent). An overwhelming number, 90.7 percent, indicated that they did not exert pressure on others to drink.

Student drinking behavior was correlated significantly with knowledge about alcohol. The more liberal a student's drinking habits, the more knowledge that student had about the nature and effects of alcohol. The student heavy drinker had more liberal attitudes than the moderate, light, or nondrinker regarding unacceptable uses of

alcohol, such as getting drunk, drinking to solve problems, or drinking to overcome shyness. The heavy drinker also had more liberal attitudes toward acceptable uses of alcohol than either the light drinker or the abstainer, such as drinking with the family at mealtime, drinking for religious purposes, or drinking on special occasions such as birthdays or weddings. These findings were not found to differ by age, race, or sex.

The percentages for each drinking category by sex, race, age, and mother's, father's, and best friend's drinking behaviors are shown in Table 1. Significant relationships were found between sex and student drinking behavior, race, age, mother's drinking behavior, father's drinking behavior, and best friend's drinking habits. The student most likely to be self-classified as a heavy drinker was male, white, aged between 14 and 15 years, and had parents and best friends who were heavy drinkers.

While the findings between mothers' drinking behavior and that of the subjects were consistent for both sexes and races, female students, minority students, and respondents younger than 12 years or between the ages of 12 and 13 years seemed to be more profoundly affected by (had drinking patterns similar to) the mother's heavy drinking than were male students, white students, and students in the three older age groups. In a more positive sense, student abstainers were more likely to have nondrinking mothers. This finding was consistent across categories of sex, race, and age.

As with the mother who is a heavy drinker, female and minority students seem to be affected more adversely by the heavy drinking behavior of the father than were the male and white students; however, students tended to identify their drinking behaviors more with both parents at a younger age.

A strong association was found between student drinking behavior and that of his or her best friend. Students typically perceive their best friend to have the same drinking behavior as their own. This effect was evident across categories of race, sex, and age.

The percentages for each drinking category by a number of sociocultural variables are provided in Table 2. Significant relationships were found between the student's drinking behavior and religion, mother's work status, age of first drink, where student had first drink, with whom student drinks, number of friends who drink, where student obtains alcohol, type of alcohol consumed, how much a student's friends drink, amount of pressure to drink, how much pressure they exert on others to drink, and peer pressure vs parental disapproval to drink.

Students who classified themselves as heavy drinkers were more likely to be non-Protestant, have had their first drink by 11 years of age, have had their first drink in an automobile, drink with friends their own age, have indicated that all of their friends not only drink, but drink as

TABLE 1. STUDENT DRINKING BEHAVIOR BY SEX, RACE, AGE, AND PARENTAL AND FRIENDS' DRINKING PATTERNS

Variables	Percent of Total Sample	Drinking Behavior			
		Abstain (%)	Light (%)	Moderate (%)	Heavy (%)
Sex ($\chi^2 = 57.98, P < .0001$)					
Male	45.9	41.2	42.6	47.8	62.6
Female	54.1	58.8	57.4	52.2	37.4
Race ($\chi^2 = 154.11, P < .0001$)					
White	58.6	46.8	58.4	68.7	80.2
Minority	41.4	53.2	41.6	31.3	19.7
Age in years ($\chi^2 = 248.35, P < .0001$)					
Under 12	7.7	12.1	7.4	1.7	2.3
12-13	20.8	28.2	19.2	10.7	14.4
14-15	26.1	25.9	24.1	18.2	38.4
16-17	29.7	24.5	31.9	41.5	27.3
Over 17	15.8	9.3	17.4	27.9	17.7
Mother's drinking behavior ($\chi^2 = 248.09, P < .0001$)					
Abstain	46.2	63.7	35.5	33.3	32.6
Light	37.7	26.3	48.4	42.5	43.2
Moderate	12.7	9.2	12.3	19.4	15.9
Heavy	3.4	.8	3.9	4.7	8.2
Father's drinking behavior ($\chi^2 = 161.35, P < .0001$)					
Abstain	31.5	46.1	21.4	21.8	21.8
Light	31.4	25.9	40.1	32.1	29.1
Moderate	21.8	18.0	22.1	26.1	26.4
Heavy	15.4	10.0	16.4	20.0	22.7
Friend's drinking behavior ($\chi^2 = 1798.95, P < .0001$)					
Abstain	38.1	74.7	20.1	6.6	7.1
Light	19.3	10.0	45.6	10.6	4.5
Moderate	17.6	6.6	16.9	52.8	12.9
Heavy	24.9	8.7	17.4	30.0	75.5

much as they do, obtain alcohol from a store, and prefer liquor over beer and wine as their alcohol of choice.

The relationship between student drinking behavior and whether students feel peer pressure to drink was significant only for male students, white students, and students in the two younger and the older age categories. Heavy drinkers did not differ appreciably from the total sample in the amount of perceived peer pressure to drink; however, heavy drinkers did indicate that they typically exert pressure on others to drink.

Students were asked what they would do if they received a high amount of pressure from peers to drink knowing that their parents were totally against such behavior. Students classified as heavy drinkers responded that they would drink and not tell their parents. Abstainers stated that they would get out of the crowd. These findings were significant across categories of sex, race, and age.

DISCUSSION

The results of this study provide an in-depth profile of an adolescent who is self-classified as a heavy (problem) drinker. The category of heavy drinker reflects a student who is drinking frequently and in amounts considered excessive for his or her age bracket. The adolescent heavy drinker is portrayed statistically as male, white, non-Protestant, aged 14 to 15 years, with either one or both parents who drink heavily, and whose best friend is also a heavy drinker. The relationship between the drinking habits of the student and his friends' drinking behavior is strong; an adolescent heavy drinker is more likely to drink with friends his own age who have similar patterns of behavior. The adolescent problem drinker began drinking early (before the age of 12 years), first consumed alcohol outside of the home, prefers liquor over beer and wine, and obtains

TABLE 2. STUDENT DRINKING BEHAVIOR AND SOCIOCULTURAL VARIABLES

Variables	Percent of Total Sample	Drinking Behavior			
		Abstain (%)	Light (%)	Moderate (%)	Heavy (%)
Religion ($\chi^2 = 13.29, P < .005$)					
Protestant	83.5	85.9	84.3	80.3	79.0
Non-Protestant	16.5	14.1	15.7	19.7	21.0
Mother's work status ($\chi^2 = 16.36, P < .05$)					
Full time	56.6	54.0	54.8	64.6	58.9
Part time	16.4	16.6	17.3	13.9	16.7
Housewife	27.0	29.4	27.9	21.5	24.4
Age (years) of first drink ($\chi^2 = 40.99, P < .0001$)					
Under 11	39.2	38.4	38.0	33.8	48.1
11-12	19.5	18.7	20.8	18.8	18.8
13-14	22.4	21.5	20.2	26.8	23.1
15-16	14.0	14.8	15.3	16.3	8.2
Over 16	4.9	6.6	5.6	4.3	1.8
Where first drink was taken ($\chi^2 = 63.49, P < .0001$)					
Own home	51.2	55.9	55.9	43.8	44.0
Friend's home	20.8	16.5	19.9	24.3	24.7
Restaurant	6.2	6.3	6.3	7.8	4.1
Automobile	5.1	2.7	3.4	6.5	10.3
Other	16.6	18.6	14.5	17.8	17.0
With whom student usually drinks ($\chi^2 = 182.29, P < .0001$)					
Parents	26.4	—	41.6	14.3	10.8
Friends, same age	56.3	—	45.3	68.4	64.1
Friends, older	11.5	—	9.1	12.8	14.6
Alone	3.0	—	2.4	2.8	4.4
Other	2.8	—	1.7	1.8	6.2
Number of friends who drink ($\chi^2 = 1060.39, P < .0001$)					
None	19.8	40.6	9.6	1.5	1.5
Few	41.3	46.7	53.0	29.0	17.5
More than one half	18.6	8.8	21.2	33.8	24.8
Almost all	20.3	3.9	16.3	35.8	56.2
Where alcohol obtained ($\chi^2 = 176.91, P < .0001$)					
Parents	32.8	—	49.3	20.0	16.3
Friends	39.6	—	34.2	44.1	44.8
Store	27.5	—	16.5	35.9	38.9
Type of alcohol consumed ($\chi^2 = 173.96, P < .0001$)					
Beer, ale	50.9	—	43.5	57.9	57.1
Wine	27.3	—	42.5	17.6	9.7
Liquor	21.8	—	13.9	24.5	33.2
How much friends drink ($\chi^2 = 244.46, P < .0001$)					
More than I do	55.1	71.7	54.5	43.1	28.2
About the same	38.0	23.7	37.9	50.0	60.8
Less than I do	6.9	4.6	7.6	6.9	11.0
Pressure from peers ($\chi^2 = 10.73, P < .05$)					
Yes	30.9	27.9	34.0	34.7	29.3
No	69.1	72.1	66.0	65.3	70.7
Exert pressure on others ($\chi^2 = 159.28, P < .0001$)					
Yes	9.3	2.6	7.8	18.0	21.2
No	90.7	97.4	92.2	82.0	78.8
Peer pressure vs parents ($\chi^2 = 726.39, P < .0001$)					
Drink and tell	7.7	2.2	7.5	15.2	15.5
Drink, not tell	16.7	1.6	15.0	30.7	45.9
Refuse to drink	37.0	37.6	42.1	38.1	24.7
Get out of crowd	38.6	58.5	35.4	16.0	13.9

alcohol from a store. This individual has a higher-than-average knowledge level regarding the nature and effects of alcohol and has liberal attitudes regarding what uses

of alcohol are socially acceptable or unacceptable. These findings are supported by previous studies examining the sociocultural correlates of alcohol use.⁷⁻¹⁶

Conversely, students categorized as light drinkers are more likely to drink under parental supervision in the home, have conservative attitudes about alcohol use, have parents who drink lightly or moderately, and choose friends who reflect their own patterns of behavior. These students are less likely to succumb to peer pressure to drink and will choose to leave a crowd rather than change their behavior. Those whose initial encounter with alcohol was at a later age (over 13 years of age) were less likely to become problem drinkers.

Family physicians should be cognizant of the risk factors associated with alcohol use among adolescents. If heavy drinking patterns are indicated among parents or friends, further information should be sought to determine whether the adolescent has a problem or a potential problem with alcohol abuse. No other medical specialty has a better opportunity to combat alcohol abuse in families. Early recognition and intervention by the family physician may help to reduce the alarming number of adolescents who are struggling with alcohol-related problems.

Acknowledgment

This study was funded by the National Institute on Alcohol Abuse and Alcoholism, grant No. 1R23-AA06863-12.

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APPENDIX

Drinking Categories

Frequency	Amount	Under 15 Years			Over 15 Years			Parent		
		Light Drinker	Medium Drinker	Heavy Drinker	Light Drinker	Medium Drinker	Heavy Drinker	Light Drinker	Medium Drinker	Heavy Drinker
Yearly										
Once or twice	1-2 beers or 1 glass of wine or 1 shot of whiskey	×	—	—	×	—	—	×	—	—
Once or twice	2-4 beers or 2-3 glasses of wine or 2-3 shots of whiskey	×	—	—	×	—	—	×	—	—
Once or twice	5-6 beers or 1 bottle of wine or 1 pint of whiskey	—	×	—	×	—	—	×	—	—
Monthly										
Once or twice	1-2 beers or 1 glass of wine or 1 shot of whiskey	—	×	—	×	—	—	×	—	—
Once or twice	2-4 beers or 2-3 glasses of wine or 2-3 shots of whiskey	—	—	×	—	×	—	×	—	—
Once or twice	5-6 beers or 1 bottle of wine or 1 pint of whiskey	—	—	×	—	×	—	—	×	—
Three or four times	1-2 beers or 1 glass of wine or 1 shot of whiskey	—	—	×	—	×	—	—	×	—
Three or four times	2-4 beers or 2-3 glasses of wine or 2-3 shots of whiskey	—	—	×	—	×	—	—	×	—
Three or four times	5-6 beers or 1 bottle of wine or 1 shot of whiskey	—	—	×	—	—	×	—	×	—
Weekly										
Once or twice	1-2 beers or 1 glass of wine or 1 shot of whiskey	—	—	×	—	×	—	—	×	—
Once or twice	2-4 beers or 2-3 glasses of wine or 2-3 shots of whiskey	—	—	×	—	×	—	—	×	—
Once or twice	5-6 beers or 1 bottle of wine or 1 pint of whiskey	—	—	×	—	—	×	—	—	×
Daily										
Every day	1-2 beers or 1 glass of wine or 1 shot of whiskey	—	—	×	—	—	×	—	×	—
Every day	2-4 beers or 2-3 glasses of wine or 2-3 shots of whiskey	—	—	×	—	—	×	—	—	×
Every day	5-6 beers or 1 bottle of wine or 1 pint of whiskey	—	—	×	—	—	×	—	—	×