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use in Spain: consumption habits, attitudes and opinions.
Royo-Bordonada MA, Cid-Ruzafa J, Martin-Moreno JM, Guallar E.
Public Health. 1997 Sep;111(5):277-84.

which has been published in final form at:

<https://doi.org/10.1038/sj.ph.1900384>

SUBMITTED TO *Public Health* (25 Oct 96)

REVISED (14 Feb 97)

Drug and alcohol use in Spain: consumption habits, attitudes and opinions

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Abstract

To estimate the lifetime prevalence of drug and alcohol use and its sociodemographic determinants and to investigate opinions towards drug use in Spain, we examined a representative nation-wide sample of 2,495 adult Spaniards, males and females, aged 18 years or older, selected by a multistaged random strategy during 1989. Information was obtained at in-home interviews using a structured closed questionnaire. Participants were asked for their lifetime prevalence of use of cannabis, sedatives and sleeping pills, alcohol, amphetamines, inhalants, cocaine and heroin, as well as for their sociodemographic characteristics and their opinions towards drug use. Alcohol had the highest lifetime prevalence of consumption (55.7%), followed by cannabis (12.3%), sedatives and sleeping pills (12.0%), amphetamines (4.3%), cocaine (3.0%), inhalants (0.8%) and heroin (0.6%). Being male, young, separated or divorced, and unemployed were the main determinants of alcohol and drug use. A higher use of illicit drugs was also observed in the higher socio-economic groups. Regular use of any drug was considered a risky health habit by more than 80% of the sample. We conclude that the consumption of drugs and alcohol is a rather extended habit in Spain. Drug users tend to share some common sociodemographic characteristics (being male, young, separated or divorced, and unemployed) which may help target intervention programs.

KEYWORDS: drug abuse; patterns of drug use; surveys.

Introduction

Drug abuse is one of the main public health problems in Western countries ¹. Drug addicts have increased mortality rates and suffer from a variety of acute and chronic medical conditions, including dependence symptoms, infections, and drug-related accidents and disabilities ². Loss of employment, disruption of family structure and criminal activities are also associated with drug addiction. Excessive alcohol intake, although legal, is a major cause of serious medical and socio-economic problems, and its secondary costs are higher than those derived from illegal drug use ^{3,4}.

Spain has particularly high rates of drug and alcohol abuse ^{1,5}. Reported current use of *Cannabis* ranges from 3.2% to 12.2%, depending on the population surveyed and the methodology used ⁶. Prevalence of heroin use is around 1% ⁶. Intravenous drug use is also the main risk factor for HIV infection in this country, which has the highest cumulative incidence rates of drug-related AIDS in the European Union ⁷. Alcohol use is socially accepted and quite common in Spain. Its widespread consumption may have important medical and

socio-economic consequences⁸, with an estimated number of more than 13,500 deaths attributable to alcohol in 1989⁵.

Information on drug use in populations can be collected through different systems, including surveys, notification systems, registers, and ethnographic studies^{9,10}. Population based surveys may systematically underrepresent specific population groups with high prevalence of drug use, such as convicts, homeless, and institutionalised people, and may underestimate the frequency of use of illegal substances⁹⁻¹². Nevertheless, surveys provide useful information on the attitudes and opinions about drug abuse and permit the identification of factors associated with its consumption¹¹. Standardised surveys can also be used to compare patterns of use in different regions, to study trends in the prevalence of use, and to investigate changes in attitudes and opinions towards drug use over time¹².

In 1989, the Spanish Centre for Sociologic Research conducted a survey on a nation-wide representative sample of the general population to investigate attitudes and opinions towards drug abuse. In this paper we analyse the responses to this survey to estimate the lifetime prevalence of drug use in Spain and its sociodemographic determinants. In addition, we also study the attitudes and opinions towards drug use in Spain.

Methods

The study was based on a survey conducted in 1989 by the Centre for Sociologic Research of Spain, a public institute linked to the Department of the Presidency of the Government. The main characteristics of the survey have been described elsewhere¹³. Briefly, between April 29 and May 2, 1989, a representative sample of the Spanish adult population (except for Ceuta and Melilla) was obtained following a multistaged sampling strategy. The sample was stratified within clusters, with random proportional selection of the primary sampling units (counties), simple random selection of the secondary units (districts), and random routes and sex and age shares for the study units (individuals). The stratifying categories were obtained by crossing the 17 autonomous regions in Spain with the size of the population in each county, grouped in 7 categories (<2,000, 2,001 to 10,000, 10,001 to 50,000, 50,001 to 100,000, 100,001 to 400,000, 400,001 to 1,000,000, and >1,000,000 inhabitants). The survey was designed to obtain a 95.5% confidence interval of width ± 0.0195 for an estimated proportion of 0.5 based on the overall sample. The final sample consisted of 2,495 men and women, aged 18 years or older, from 166 counties in 45 provinces of Spain.

Participants were interviewed in their homes by trained interviewers using a structured closed questionnaire. Those who refused to participate and those who were not in their homes at the moment of the interview were replaced by another individual of the same age and sex, selected at random. Each individual was asked questions regarding his sociodemographic characteristics, his lifetime use of different drugs, and his opinions about different aspects of drug use. For each drug, lifetime consumers were defined as those who had consumed the drug at least once in their lives. The questionnaire included specific items exploring consumption habits for amphetamines, sedatives and sleeping pills, alcoholic

beverages, cannabis, inhalants, cocaine, and heroin. Additional items included questions on the participant's opinion on the importance of the drug problem, the adequacy of alternative policies to solve it, the availability of health and social assistance services for drug addicts, and their perception of the health risks of using drugs.

Statistical methods

Lifetime prevalence of use was estimated from the sample proportions of reported use of specific drugs. Simple and trend χ^2 tests were used initially to evaluate the association between lifetime prevalence of use and sociodemographic characteristics¹⁴. Due to the different pattern of alcohol consumption for men and women in Spain, results of the association of alcohol use and its determinants are presented separately for each gender. To estimate the combined effect of different sociodemographic characteristics, we developed logistic regression models for those drugs with a sufficient number of users to apply this technique (cannabis, sedatives and sleeping pills, and alcohol). All regression models included gender, age, marital status, education, employment status, income, and city of residence size, categorised as indicator variables. The association of drug related variables and sociodemographic characteristics are presented as adjusted odds ratios and 95% confidence intervals. For age, education, income and city of residence size, adjusted tests of trend were derived from the Wald's test P-value from logistic regression models in which each of these variables were introduced as a single discrete variable. For gender, marital status and employment status, P-values were derived from likelihood ratio tests¹⁵. All P-values and statistical tests reported are two-sided. Data were analysed using the SAS package¹⁶.

Results

The sociodemographic characteristics of the participants in the survey are presented in Table 1. The proportion of males was 47.7%, and the average age was 43.7 years for males and 45.4 for females. Over 60% of participants were married, and 27.7% had less than primary education. The median income level was between 1 and 2 times the minimum monthly wage (mmw), with 25.8% of the respondents declaring incomes lower than the mmw.

Table 1

Lifetime prevalence of drug use and its determinants

Lifetime prevalence of drug use by sociodemographic characteristics is shown in Table 2. Alcohol had the highest overall lifetime prevalence of use (55.7%) as well as the lowest mean age at first time of use (16.7 years). Among illicit drugs, cannabis was the most widely used (12.3%). On average, the use of all drugs began during adolescence or young adulthood except for sedatives and sleeping pills, for which the average age at time of first use was 30.8 years. Lifetime prevalence of heroin use (0.6%) and of use of inhalants (0.8%) were too low to allow reliable stratification by sociodemographic characteristics.

Table 2

Use of alcohol, amphetamines and illicit drugs was higher for males than for females. The only drugs used more frequently by women were sedatives and sleeping pills, although the gender difference was not statistically significant (Table 2). Except for sedatives and sleeping pills, all drugs were more frequently used in the 18 to 30 years of age interval, showing statistically significant inverse trends of use with increasing age. Sedatives and sleeping pills were more frequently used in the 31 to 45 years of age interval, lacking a clear linear trend with age.

For all drugs, lifetime prevalence of use was positively associated with educational status and with monthly income. Being divorced, separated or single was also associated with higher drug and alcohol use. With regard to employment status, the unemployed had the highest lifetime prevalence of use for all drugs except for amphetamines, which was highest among students. Alcohol, amphetamines and illicit drug use were positively related to city of residence size. The pattern of lifetime prevalence of alcohol use with age was different for males and females, with a marked increase in prevalence of use in younger women (P-value for the age by gender interaction <0.01).

The association of sociodemographic determinants with cannabis use remained essentially unchanged when all variables were taken into account in multiple logistic regression analysis (Table 3). Cannabis use was strongly related to gender (odds ratio for men compared to women 3.26), to marital status (odds ratio for being separated or divorced compared to being single 3.92), and to age. The adjusted odds ratios for ages 31-45, 45-65 and >65 years compared to 18-30 years of age were 0.58, 0.12 and 0.09, respectively (p value for trend <0.0001). Education, income and city of residence size were also positively related to cannabis use, but significant trends were only evident for education level (p value <0.001).

Table 3

After adjustment for other sociodemographic variables, use of sedatives and sleeping pills was significantly associated with age, education and employment status (Table 3). The prevalence of use of sedatives and sleeping pills with respect to age did not follow a linear pattern, but had a maximum in the 31-45 age group (p value for heterogeneity of odds ratios with respect to age 0.05). The observed univariate association of sedative use with income was no longer evident after adjustment for other variables.

Table 4

Multiple logistic regression analysis of sociodemographic determinants of alcohol use in men showed increased use in younger age groups, and among those divorced or separated. However, none of these associations were statistically significant (Table 4). In women, alcohol use remained strongly related to age (p value for trend 0.0001) and employment status (P-value 0.01). Alcohol use was particularly high among unemployed women (odds ratio compared to working women 2.50, P-value 0.014) and among those with secondary education (odds ratio compared to less than primary education 2.20, P-value 0.036).

Table 5

Among illicit drug users, lifetime use of multiple drugs was extremely high (Table 5). Lifetime prevalence of use of three or more drugs was 88.2% for amphetamine users, 85.0% for inhalant users, 92.9% for cocaine users, and 100% for heroin users. Heroin users had the highest prevalence of secondary use of any other drug (Table 6). Alcohol was the drug more

frequently consumed as a secondary drug. Prevalence of alcohol use also increased with use of other licit drugs by 27%, and with use of illicit drugs by 43% (data not shown).

Opinions towards drug-related questions

Drug use was considered a “very important” problem by 59.0% of the sample population, and a “very important or fairly important” problem by more than 95%. This opinion was more common among licit drug users than among no users and illicit drug users, and less common among young people, divorced or separated people, students, and those with lower incomes. 68.2% of respondents were in favour of punishment for any drug use, 12.6% were in favour of allowing “soft” drugs, 8.4% were in favour of controlled supply of drugs for addicts, 2.7% were in favour of free drug dealing, and 8.1% did not manifest any opinion. The probability of being in favour of punishing drug use was also higher among no users than among licit drug users and illicit drug users. These opinions didn’t vary substantially according to the sociodemographic characteristics of the respondents.

Over 80% of the study participants considered regular use of drugs a very or fairly risky health habit. Use of heroin, cocaine, or amphetamines in a single occasion was also considered very or fairly risky by the majority of the participants (Table 7). Although daily abuse of alcohol was considered very or fairly risky by 91.5% of the sample, moderate alcohol use was considered scarcely or no risky at all by 63.7% of the participants. When asked specifically about the risk of use of cannabis by teenagers, 58.9% of respondents thought that teenagers who consume cannabis now will become users of more dangerous drugs in the future, while 41.1% of respondents thought that cannabis use is a part of teenage culture.

Table 7

When questioned on their opinion about the availability of care services for drug addicts, 81.1% of the participants considered them insufficient. This percentage was higher among drug users (85.7 % for heroin users and 85.1 % for cannabis users) than among users of alcohol but not of other drugs (72.0%), or among those who did not use any drug at all (68.3%).

Discussion

Among the drugs studied, alcohol had the highest lifetime prevalence of use and cannabis was the illicit drug most widely used. Drug use began, on average, in adolescence or young adulthood, and being male, young, unemployed, separated or divorced were risk factors for increased use of drugs. We also observed a tendency to abuse of multiple drugs among illicit drug users. The majority of the participants in this survey considered that drug use was a very important problem and a serious individual health risk, and that the resources used to solve the drug problem were insufficient.

The interpretation of these results, however, need to take into account certain methodological issues on the validity of surveys on drug abuse. Population based surveys tend to underestimate the prevalence of consumption of socially stigmatised drugs^{9,10}, as

well as to underrepresent groups with higher prevalence of use, such as institutionalised people and homeless¹⁷. Besides, drug users probably spend more time out of their homes compared to no users, making it more difficult to reach them with in-home surveys¹⁸. Other common methodological limitations of surveys are the possibility of bias when the proportion of no response is high, and the lack of statistical power to obtain reliable and stable estimates of the prevalence and determinants of abuse of drugs with low prevalence of use, such as heroin^{19,20}. Thus, population based surveys tend to underestimate the frequency of drug use and the results of surveys have to be used in combination with other methods of assessment, such as nomination techniques, capture-recapture methods, and estimation of drug use from mortality registers^{6,21-23}.

The sampling method used in this survey introduced two additional sources of uncertainty. First of all, the final stage of the sampling process was based on quotas. While it is difficult to estimate the potential impact of quota sampling, similar results have been observed in Spanish surveys with and without random sampling^{6,18}. Second, no information was available on the proportion of no response. Nevertheless, lack of response in this survey would probably tend to underestimate the prevalence of drug use.

The estimation of alcohol use in our study showed a relatively low prevalence (55.7%) when compared with USA and other European surveys, with figures ranging between 70% and 90%^{18,24-26}. This survey was not specifically designed to study alcohol use. Unlike other surveys, a detailed history of use was not available, which may help explain these conflicting results^{19,24}. The higher prevalence of alcohol use in men and young people was consistent with other surveys^{6,18,24-28}. The increase in lifetime prevalence of alcohol use in young adults was more pronounced in women than in men, reflecting the recently increased social acceptance of alcohol use by women in Spain⁸. The pattern of higher alcohol use among illicit drug users confirms results already observed in previous studies^{8,29}.

Regular use of sedatives and sleeping pills is usually higher among women^{6,18,24,27}. In our survey, gender differences were smaller than previously reported and not statistically significant, probably due to the fact that lifetime use of these drugs reflects occasional rather than regular use. The sociodemographic pattern of use of sedatives and sleeping pills is different to that of other drugs, particularly with respect to gender, age, and age at first time of use^{6,18,25,28}. These differences should be incorporated in the design of specific campaigns of detection and prevention of abuse.

As in other Western countries, cannabis was the illegal drug most frequently used in Spain^{1,6,17,18,25,28,30}. Although the consumption of cannabis was not punished in Spain at the time of the survey, the levels of cannabis use reported are similar to those in countries in which it is punished, as well as in those in which there is easy access to drugs, such as Holland, indicating that cannabis use may depend on socio-economic and cultural factors rather than on restrictive public policies¹. In spite of the high prevalence of cannabis use, the derived rate of health problems and use of services are low compared to other drugs, probably due to the availability, price, and mode of administration of cannabis²⁷.

Cocaine and amphetamines are stimulants which share some common patterns of use^{27,31}. The overall prevalence of use of cocaine and amphetamines in our study (3.0% and 4.3%, respectively) were in the range of use reported in other studies^{18,24}. In agreement with other European and USA studies, cocaine and amphetamine use were more frequent in men and in those younger than 40 years^{6,25,27,31,32}. Use of both stimulants was higher in those with high school or college education and in people with high incomes, reflecting the existence of users who probably have not yet developed problematic behaviours of use. Although this survey could hardly detect problematic users, these results complement other methods of drug use ascertainment which tend to underrepresent well adapted users²³. These two different types of drug users (high education and income socio-economic group vs. marginal users)^{27,32}, demand alternative methods to identify and prevent illicit drug use.

Recently, the use of a new kind of illegal substances, the design drugs, has increased markedly, specially among young people. The only study of the prevalence and patterns of use of these drugs in Spain reflects a similar pattern to those of cocaine and amphetamine, with a lifetime prevalence of use of 2,2% among people over fifteen³³. The introduction of these new drugs, however, seems not have changed the public health importance of the drugs included in our study.

The Eurobarometer survey showed that Europeans considered drug use one of the main public health problems and a dangerous health habit³⁴. Similarly, the majority of Spaniards considered drug use and its consequences as a fairly or very important problem, and use of any drug as a very or fairly important health risk. However, moderate alcohol use was considered scarcely or no risky by most of the population surveyed. A recent study of British households also showed that health was not an important determinant of being a lifetime teetotaller³⁵. The different public perception of the risk of alcohol use compared to other drugs is very relevant to the design intervention programs to control drug and alcohol abuse.

Opposite to most other European countries, personal consumption of drugs is not punished in Spain³⁶. Nevertheless, the majority of the Spanish population believed that punishment would be the most efficient measure to solve drug-related problems. Spaniards, as well as other Europeans³⁷, had the opinion that public measures were insufficient to solve the drug problem.

This paper shows some common sociodemographic characteristics among users of different drugs in Spain. Young people, as well as separated, divorced or unemployed people are groups at higher risk of use, and should receive special attention in prevention programs. In spite of Spaniards concern with drugs, moderate alcohol use was not considered as a risky health habit. The latter, in addition to the social acceptance and the high prevalence of alcohol use in this country, make prevention and control of alcohol use a priority of public health in Spain.

Acknowledgements

Drs. Luis De la Fuente, Gregorio Barro, Javier Damián and Ana Ruigómez provided helpful comments to the manuscript.

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TABLE 1.- Sociodemographic characteristics of 2,495 participants in a representative nationwide survey of illegal drugs, sedatives and sleeping pills, and alcohol use in Spain, 1989.

	Frequency	Percentage
SEX:		
Men	1,190	47.7
Women	1,304	52.3
AGE (years):		
18-30	699	28.2
31-45	665	26.8
46-65	736	29.7
> 65	381	15.4
MARITAL STATUS:		
Single	653	26.4
Married	1,580	63.8
Divorced/Separated	36	1.5
Widow/er	208	8.4
EDUCATION:		
Less than primary	687	27.7
Primary school	1,285	51.8
Secondary school	245	9.9
College	266	10.7
EMPLOYMENT STATUS:		
Working	1,107	45.1
Unemployed	165	6.7
Retired	330	13.4
Student	146	5.9
Housework	706	28.8
INCOME (mmw ^a)		
≤ 1 mmw	489	25.8
≥1 to ≤2 mmw	954	50.4
≥3 to ≤4 mmw	406	21.5

> 4 mmw	43	2.3
CITY OF RESIDENCE SIZE (inhabitants):		
< 2,000	196	9.5
2,001-10,000	434	21.0
10,001-50,000	414	20.0
50,001-100,000	124	6.0
100,001-400,000	439	21.2
400,001-1,000,000	167	8.1
> 1,000,000	296	14.3

^a mmw = minimum monthly wage

TABLE 2.- Lifetime prevalence of drug consumption by sociodemographic characteristics among participants in a representative nationwide survey of illegal drugs, sedatives and sleeping pills, and alcohol use in Spain, 1989.

	N	Cannabis	Amphetamines	Sedatives ^a	Cocaine	Alcohol		
						Overall	Men	Women
Overall prevalence		12.3	4.3	12.0	3.0	55.7	70.1	42.6
Average age at first use (years)		18.7	19.3	30.8	21.2	16.7	16.1	17.8
SEX								
Men	1,190	18.7	5.9	11.6	4.7	70.1	70.1	-
Women	1,304	6.5	2.8	12.3	1.5	42.6	-	42.6
P for heterogeneity ^b		<0.001	<0.001	0.603	<0.001	<0.001	-	-
AGE (years):								
18-30	699	30.2	9.4	11.5	7.2	66.2	74.9	57.5
31-45	665	11.2	4.8	15.0	2.9	60.7	72.9	49.4
46-65	736	1.9	0.9	11.3	0.1	48.5	64.8	33.7
> 65	381	0.6	0.0	8.6	0.0	41.3	66.2	23.2
P for trend ^c		<0.001	<0.001	0.12	<0.001	<0.001	0.003	<0.001
MARITAL STATUS:								
Single	653	29.2	10.1	11.1	8.0	65.1	74.4	54.1
Married	1,580	6.3	2.1	12.2	1.2	54.6	68.5	41.9
Divorced/Separated	36	34.4	15.6	25.0	6.5	63.9	88.9	38.9
Widow/er	208	1.5	1.0	11.2	0.0	33.3	59.2	25.2
P for heterogeneity ^b		<0.001	<0.001	0.19	<0.001	<0.001	0.02	<0.001
EDUCATION:								
Less than primary	687	2.6	0.9	10.0	0.6	45.4	67.0	30.8
Primary school	1,285	11.1	3.5	11.9	2.2	56.3	69.2	44.1
Secondary school	245	29.6	11.5	10.1	9.7	70.5	76.7	63.4
College	266	27.6	10.6	18.7	6.7	66.5	74.3	55.9
p for trend ^c		<0.001	<0.001	0.002	<0.001	<0.001	0.04	<0.001
EMPLOYMENT STATUS:								
Working	1,107	17.2	5.8	12.7	4.3	63.1	69.5	50.3
Unemployed	165	31.0	10.3	20.5	7.7	75.2	78.7	70.4
Retired	330	0.7	0.3	8.6	0.0	56.4	67.9	25.0
Student	146	30.9	11.0	6.6	7.4	64.6	72.7	55.2
Housework	706	1.9	1.2	11.4	0.5	36.1	33.3	36.1
P for heterogeneity ^b		<0.001	<0.001	0.001	<0.001	<0.001	0.10	<0.001
INCOME (mmw^d)								
≤ 1	489	6.1	2.4	10.8	1.7	44.9	69.0	27.9

≥1 to ≤2	954	13.2	4.5	12.7	2.8	58.1	69.9	46.9
≤2 to ≤4	406	19.6	6.0	13.7	4.7	66.0	75.4	55.3
> 4	43	31.7	14.6	22.0	12.2	66.7	80.0	47.1
P for trend ^c		<0.001	<0.001	0.06	<0.001	<0.001	0.08	<0.001
CITY OF RESIDENCE SIZE (inhabitants):								
< 2,000	196	11.4	2.2	10.8	2.2	55.9	71.6	41.0
2,001-10,000	434	10.2	3.2	11.4	2.0	53.6	70.9	37.8
10,001-50,000	414	7.1	2.7	9.3	1.7	46.8	60.9	34.0
50,001-100,000	124	18.4	7.0	9.7	4.4	61.2	71.2	51.6
100,001-400,000	439	11.8	5.2	11.2	3.3	51.5	65.7	39.3
400,001-1,000,000	167	15.9	6.1	15.2	4.9	59.0	77.2	42.5
> 1,000,000	296	16.1	4.1	10.5	4.1	63.1	76.8	50.7
P for trend ^c		0.003	0.03	0.58	0.01	0.01	0.15	0.02
N	2,495	291	101	284	70	1,372	824	548

^a Sedatives and sleeping pills.

^b P value corresponds to a χ^2 test of heterogeneity of estimated proportions across categories of sociodemographic variables (see Methods for details).

^c P value corresponds to a χ^2 test of trend of estimated proportions across categories of sociodemographic variables (see Methods for details).

^d mmw = minimum monthly wage.

TABLE 3.- Logistic regression models for the association of sociodemographic characteristics and lifetime drug consumption of cannabis and sedatives and sleeping pills in Spain, 1989.

	Cannabis		Sedatives ^a		
	OR ^b	(95% CI) ^b	OR ^b	(95% CI) ^b	
SEX					
Women	1		1		
Men	3.26	(2.13-5.00)	0.78	(0.52-1.17)	
P for heterogeneity ^c			<0.0001		0.23
AGE (years):					
18-30	1		1		
31-45	0.58	(0.37-0.92)	1.64	(1.00-2.67)	
46-65	0.12	(0.05-0.26)	1.11	(0.60-1.96)	
>65	0.90	(0.01-0.65)	0.70	(0.29-1.66)	
P for trend ^d			<0.0001		0.71
MARITAL STATUS:					
Single	1		1		
Married	0.43	(0.27-0.67)	1.06	(0.66-1.70)	
Divorced/Separated	3.92	(1.29-11.97)	1.90	(0.61-5.87)	
Widow/er	1.50	(0.34-6.56)	1.42	(0.63-3.20)	
P for heterogeneity ^c			<0.0001		0.63
EDUCATION:					
Less than primary	1		1		
Primary school	1.60	(0.78-3.28)	1.19	(0.75-1.90)	
Secondary school	3.20	(1.39-7.36)	1.39	(0.66-2.90)	
College	3.02	(1.31-6.98)	2.25	(1.16-4.37)	
P for trend ^d			<0.001		0.01
EMPLOYMENT STATUS:					
Working	1		1		
Unemployed	1.09	(0.62-1.91)	2.27	(1.31-3.93)	
Retired	0.23	(0.04-1.39)	1.22	(0.60-2.48)	
Student	0.58	(0.30-1.14)	0.84	(0.32-2.19)	
Housework	0.45	(0.19-1.05)	0.83	(0.50-1.39)	
P for heterogeneity ^c			0.06		0.03
INCOME (mmw^e):					

≤ 1	1		1	
≥1 to ≤2	1.22	(0.69-2.16)	0.99	(0.63-1.55)
≥2 to ≤4	1.10	(0.57-2.14)	0.69	(0.38-1.27)
> 4	1.52	(0.51-4.55)	0.96	(0.32-2.91)
P for trend ^d			0.78	0.38
CITY OF RESIDENCE SIZE (inhabitants):				
< 2,000	1		1	
2,001-10,000	1.10	(0.54-2.24)	0.90	(0.48-1.71)
10,001-50,000	0.60	(0.28-1.27)	0.86	(0.45-1.64)
50,001-100,000	1.83	(0.77-4.34)	0.64	(0.25-1.59)
100,001-400,000	0.90	(0.44-1.83)	0.92	(0.48-1.75)
400,001-1,000,000	0.85	(0.36-1.97)	1.00	(0.47-2.16)
> 1,000,000	1.65	(0.79-3.46)	0.71	(0.34-1.48)
P for trend ^d			0.17	0.47

^a Sedatives and sleeping pills.

^b OR = odds ratio adjusted for all variables in the table; (95% CI) = 95 percent confidence interval.

^c P value corresponds to a likelihood ratio test for tthe corresponding set of indicator variables.

^d P value for trend (see Methods for details).

^e mmw = minimum monthly wage.

TABLE 4.- Logistic regression models for the association of sociodemographic characteristics and lifetime alcohol consumption in Spain, 1989, by gender.

	Men		Women		
	OR ^a	(95% IC) ^a	OR ^a	(95% IC) ^a	
AGE (years)					
18-30	1		1		
31-45	1.09	(0.64-1.86)	0.81	(0.52-1.27)	
46-65	0.77	(0.43-1.36)	0.53	(0.32-0.87)	
>65	0.57	(0.23-1.39)	0.37	(0.18-0.78)	
P for trend ^b			0.23		<0.001
MARITAL STATUS:					
Single	1		1		
Married	0.87	(0.52-1.50)	0.93	(0.58-1.49)	
Divorced/Separated	2.03	(0.41-10.03)	0.55	(0.14-2.25)	
Widow/er	0.54	(0.21-1.38)	0.66	(0.32-1.33)	
P for heterogeneity ^c			0.39		0.55
EDUCATION:					
Less than primary	1		1		
Primary school	0.84	(0.54-1.31)	1.00	(0.66-1.51)	
Secondary school	1.11	(0.53-2.33)	2.20	(1.05-4.61)	
College	0.94	(0.47-1.88)	0.83	(0.43-1.63)	
P for trend ^b			0.75		0.96
EMPLOYMENT STATUS:					
Working	1		1		
Unemployed	1.11	(0.58-2.10)	2.50	(1.20-5.20)	
Retired	1.53	(0.80-2.94)	1.06	(0.46-2.43)	
Student	0.92	(0.37-2.25)	0.62	(0.27-1.41)	
Housework	0.14	(0.01-1.35)	0.75	(0.51-1.12)	
P for heterogeneity ^c			0.21		0.01
INCOME (mmw^d)					
≤ 1	1		1		

≥1 to ≤2	0.83	(0.52-1.33)	1.64	(1.08-2.47)
≥2 to ≤4	0.96	(0.52-1.77)	1.71	(1.00-2.92)
> 4	0.89	(0.27-2.95)	0.92	(0.26-3.31)
P for trend ^b			0.86	0.12

CITY OF RESIDENCE SIZE (inhabitants):

< 2,000	1		1	
2,001-10,000.	1.13	(0.58-2.18)	0.53	(0.29-0.97)
10,001-50,000.	0.64	(0.34-1.23)	0.68	(0.37-1.25)
50,001-100,000.	0.71	(0.31-1.62)	1.02	(0.47-2.24)
100,001-400,000.	0.72	(0.37-1.39)	0.55	(0.30-1.00)
400,001-1,000,000.	1.37	(0.58-3.23)	0.55	(0.26-1.17)
> 1,000,000	1.58	(0.74-3.38)	0.97	(0.50-1.89)
P for trend ^b			0.29	0.58

^a OR = odds ratio adjusted for all variables in the model; (95% CI) = 95 percent confidence interval.

^b P value for trend (see Methods for details).

^c P value corresponds to a likelihood ratio test for the corresponding set of indicator variables.

^d mmw = minimum monthly wage.

TABLE 5.- Lifetime prevalence of multiple drug consumption among users of specific drugs, sedatives and sleeping pills, and alcohol use in Spain, 1989^a.

Consumer of:	Number of drugs consumed			
	One	Two	Three	Four or more
Cannabis	7.2	50.5	18.9	23.4
Amphetamines	5.9	5.9	22.8	65.4
Sedatives and sleeping pills	18.7	52.1	13.0	16.2
Alcohol	68.6	21.5	4.8	5.1
Inhalants	10.0	5.0	0.0	85.0
Cocaine	2.9	4.3	22.9	70
Heroin	0.0	0.0	7.7	92.3

^a For each row, the table shows the percentage distribution of number of drugs consumed among those who consumed the index drug.

TABLE 6.- Type of second drug consumed among drug users participating in a representative nationwide survey of illegal drugs, sedatives and sleeping pills, and alcohol use in Spain, 1989, by type of drug^a.

	n	Secondary drug						
		Cannabis	Amphetamines	Sedatives ^b	Inhalants	Cocaine	Heroin	Alcohol
<u>Reference drug</u>								
Cannabis	291	-	27.5 ^a	26.0	6.1	22.1	4.3	92.7
Amphetamines	101	76.2	-	53.5	16.0	47.5	12.4	91.1
Sedatives ^b	284	27.1	20.4	-	4.9	9.7	3.8	80.9
Inhalants	20	85.0	84.2	65.0	-	60.0	30.0	85.0
Cocaine	70	89.9	68.1	37.1	17.1	-	17.4	95.7
Heroin	13	92.3	92.3	76.9	46.2	92.3	-	100.0
Alcohol	1372	21.0	7.3	17.8	1.3	5.3	1	-

^a For each row, the table shows the percentage distribution of secondary drugs consumed by consumers of the index drug.

E.g.: among 291 people who had consumed cannabis, 27.5% had consumed also amphetamines.

^b Sedatives and sleeping pills.

TABLE 7 .- Opinions about the health risk of using a certain drug in a single occasion and of using a certain drug regularly in Spain, 1989^a.

	Very risky	Fairly risky	Scarcely risky	Not risky	Do not know
In a single occasion:					
Cannabis	15.5	28.1	26.1	15.0	15.3
Heroin	41.6	35.6	8.5	3.2	11.2
Amphetamines ^b	33.0	31.5	14.4	4.1	17.0
Cocaine	41.2	31.8	11.5	4.5	11.0
Regularly					
Cannabis	45.4	37.2	5.4	1.7	10.2
Heroin	69.0	22.3	0.5	0.2	8.1
Amphetamines	56.4	28.8	0.9	0.3	13.6
Cocaine	66.7	23.4	0.9	0.3	8.6

^a For each row, the table shows the percentage distribution of the opinions on health risk for using a drug on a single occasion and using a drug regularly.

^bOne or two occasions.