

Puerto Rico Substance Abuse Needs Assessment Program

2002 Household Survey

Final Results

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Executive Summary

This report contains the results of the second PR.SANAP household survey conducted during 2001-02. The sample for this second household survey was representative of all persons 15 to 64 years old, not including institutionalized or homeless individuals. A total of 4,322 individuals completed the assessment interview, a response rate of 81.7%. The assessment interview ascertained use of alcohol, controlled and illicit substances, last year disorders of substance abuse and dependence, use of services for alcohol and drug problems, and potential demand of services. To reduce under-reporting of drug use, the 2002 survey introduced the use of a self-administered questionnaire to ascertain drug use and disorders, and collection of hair specimens from all participants as a way of communicating to respondents that their responses, although anonymous, could be verified with biological markers. Other salient features of the household survey were 1) the use of an area probability sample stratified by health region, oversampling of adolescents and women, and application of a standardized diagnostic interview to assess substance abuse and dependence based on the most recent Psychiatric nosology (DSM-IV).

Some of the key findings of this study were:

- Over two thirds (69.3%) of the population 15 to 64 years old have used alcohol at some point in their lives. Close to half (47.2%) of the population 15 to 64 years old used alcohol during the 12-month period previous to the study interview.
- Lifetime use of other drugs, including non-medical use of prescription drugs and use of illicit drugs, was reported by 14.2% of the population. Last year use of other drugs, including non-medical use of prescription drugs and use of illicit drugs, was reported by 7.8% of the population.
- One in 20 respondents (4.9%) met criteria for last year alcohol dependence and an additional 7.7% of the study sample met

criteria for alcohol abuse. These percentages represent 123,133 persons meeting criteria for alcohol dependence and an additional 191,148 persons meeting criteria for alcohol abuse.

- One out of every 33 respondents (3.0%) met criteria for last year drug dependence and an additional 1.2% met criteria for drug abuse. In population terms, the study estimated that 74,289 individuals 15 to 64 years old are currently affected by a drug dependence disorder and an additional 30,467 are affected by a drug abuse disorder.
- One out of every three (31.4%) respondents with an alcohol dependence disorder met criteria for a co-occurring major depression or generalized anxiety disorder. Major depression and Generalized anxiety disorders were somewhat higher among individuals with a drug dependence disorder (41.4%).
- Only 10.6% of the individuals who met criteria for alcohol dependence had received specialized treatment services during the 12 months previous to the study interview. A somewhat higher percentage of the individuals who met criteria for drug dependence had received specialized treatment services during the same period, 27.3%.
- Nine out of ten individuals (89.4%) who met criteria for last year alcohol dependence had not received specialized treatment services during the 12 months previous to the study interview.
- Close to three out of four (72.7%) of the individuals who met criteria for drug dependence had not received specialized treatment services during the same period.
- Potential demand of treatment services for alcohol dependence disorders was estimated to be twice as large as actual use of services (21.1% of demand versus 10.6% of use). Similarly for drug

dependence disorders, potential demand for services was approximately 1.5 times larger than actual use (41.9% demand versus 27.3% use).

In conclusion, the results of this study estimate that 7.1% of the Puerto Rico population, approximately 178,000 individuals, is in need for specialized substance dependence treatment services and that an additional 186,000 individuals (7.5%) need help with their substance abuse. Among those with a substance dependence disorder, only 15.0% received specialized treatment services during the previous year. Among those with a substance abuse disorder, scarcely 3.4% received any service either in the general, specialty or informal sector, for their substance abuse condition. This study has further estimated that the potential demand for substance dependence specialized treatment services is close to twice as large (27.9%) as the rate of actual use (15.0%).

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I. Introduction

A. The Puerto Rico Substance Abuse Needs Assessment Program

The Puerto Rico Substance Abuse Needs Assessment Program (PR.SANAP) was established in 1995 with funding from the Center for Substance Abuse Treatment (DHHS/SAMHSA) to continuously provide updated, reliable, and systematic information on the need, unmet need and demand for substance abuse treatment services, as well as on the availability of the existing treatment system and the gaps between need and availability of services.

Substance abuse is widely considered Puerto Rico's most compelling socio-medical problem both in its magnitude as well as in its social, economic, and public health consequences. The crime and AIDS epidemics, endemic school drop-out, family disruption, domestic violence, and child abuse are all assumed to be highly associated to substance abuse in Puerto Rico. The high level of public concern over substance abuse has been consistently accompanied by a growing allocation of resources to drug treatment and prevention programs. However, the types of data required to develop policy and assess the effectiveness of programs have been, for the most part, lacking.

PR.SANAP consists of a family of three core studies designed to examine the overall needs and service availability of the island population which are repeated every 4-5 years and special studies to examine sub-populations and to be conducted on a as-needed basis. The three core studies are a household survey of the general population, a social indicator study, and a survey of all treatment providers. These three core studies were initially conducted in 1998 and repeated in 2002. One special study has been conducted to date to examine the service needs of the prison inmate population.

A household survey of approximately 5,000 individuals constitutes the principal study of the core studies. This survey estimates prevalence rates of substance abuse/dependence and the need of treatment services in the general adult and adolescent population. The sampling procedures have been designed to increase the number of individuals in need in the sample. The second study uses existing indicator

data series to develop synthetic estimates of need at the level of Municipality. The indicator data series have been collected and used to classify the Municipalities into high, medium, and low drug problem intensity Municipalities. This classification was used to develop the stratification criteria for the household survey. Lastly, a provider survey comprises the third study. This survey is intended to provide information about capacity, and capacity utilization by health region, and type of treatment service. The results of the last study, coupled to the results of the other studies, can be used to detect the gaps in service availability.

B. The 2002 Household Survey

Policies and programs aimed at stemming the rise of substance use disorders require systematic, ongoing, population-based epidemiologic surveillance systems to detect at-risk populations and monitor trends over time (Choi 1998; McQueen 1999). However, until recently community surveys of substance use disorders were limited by the lack of adequate instrumentation with which to measure disorders in the general population and conduct cross-cultural comparisons. The diagnostic classification systems of substance use disorders have now converged to the point at which the criteria of the American Psychiatric Association (American Psychiatric Association, 1994) and that of the World Health Organization (World Health Organization, 1993) are nearly identical (Bucholz, 1999). Concurrent with the increasing convergence of the diagnostic systems, a number of standardized diagnostic instruments that can be used in epidemiological studies of substance use disorders have been developed (Hall, 1996). Nonetheless, studies of substance use disorders in the general population continue to be limited to a small number of countries and are seldom repeated periodically.

In Puerto Rico, the first available estimates of substance use disorders date from the 1980s. Alcohol abuse was studied in 1984 with a probability sample of 1,554 adults 17 to 64 years old. In 1987, a follow-up study of 912 respondents from the 1984 sample provided an opportunity to examine illicit drug use disorders. Using a translated and adapted version of the Diagnostic Interview Schedule (Bravo et al, 1991), these studies found lifetime alcohol abuse and/or dependence in 12.6% of the study sample; twelve-month prevalence was 4.8% (Canino, Burnam and Caetano, 1992). The lifetime

prevalence of illicit drug use was found to be 8.0% and abuse/dependence 1.2% (Canino et al, 1993). These studies contributed the first estimates of the prevalence of substance use disorders in the population of Puerto Rico. Nonetheless, there were a number of limitations to these studies. They evaluated disorders with diagnostic criteria now superseded by the DSM-IV, and lacked adequate sample sizes with which to examine the covariates of illicit drug use disorders. Moreover, these estimates are now more than ten years old and are of limited use to policy makers, public health professionals, and researchers.

The 1998 PR.SANAP household survey updated estimates of substance use disorders for the population of Puerto Rico and attempted to improve on the limitations of the previous studies in several ways (Colón et al., 2002). The study utilized a probability sample of 4,709 late adolescents and adults, over sampled high-risk areas and high-risk sub-populations to increase the probability of selecting drug abusers in the sample and implemented DSM-IV diagnostic criteria. The study design combined an area probability sample and telephone interviewing to ensure full coverage of the population while increasing the anonymity of the interview process. Lifetime use of alcohol was reported by 77.2% of the sample, and 10.7% of respondents reported ever using illicit drugs. Overall, 14.7% of the sample met criteria for a lifetime substance use disorder, and 4.9% for a past year substance use disorder. The rate of lifetime disorders was 13.1% for alcohol abuse or dependence and 4.1% for illicit drug abuse or dependence. Past year abuse or dependence was 4.3% for alcohol and 1.3% for illicit drugs. The 1998 PR.SANAP household survey represented an important contribution to Puerto Rico's substance abuse epidemiology. Nonetheless, a number of limitations were detected in the survey. Most notably, examination of drug metabolites in hair specimens collected from the household sample revealed considerable under-reporting of recent drug use (Colón, et al, 2001; Colón, Robles and Sahai, 2002).

This report contains the results of the second PR.SANAP household survey conducted during 2001-02. The sample for this second household survey is also representative of all persons 15 to 64 years old, not including institutionalized or homeless individuals. A total of 4,332 individuals completed the assessment interview, a response rate of 81.7%. The assessment interview ascertained use of alcohol, controlled and illicit

substances, last year disorders of substance abuse and dependence, use of services for alcohol and drug problems, and potential demand of services. To reduce under-reporting of drug use, the 2002 survey introduced the use of a self-administered questionnaire to ascertain drug use and disorders, and collection of hair specimens from all participants as a way of communicating to respondents that their responses, although anonymous, could be verified with biological markers. Other salient features of the household survey were 1) the use of an area probability sample stratified by health region, oversampling of adolescents and women, and application of a standardized diagnostic interview to assess substance abuse and dependence based on the most recent Psychiatric nosology (DSM-IV). A detailed description of the methods and procedures of the household sample can be found in Section IV.

C. Organization of this Report and Operational Definitions

The main findings of the 2002 household survey are presented in Section II. This section discusses the estimates of need, unmet need, and potential demand of treatment services for substance use disorders.

The full results of the household survey are presented in Section III. The results have been organized in seven series of tables. The series correspond to estimates of A) lifetime use of substances, B) last year use of substances, C) last year substance use disorders, D) co-occurring mental disorders among individuals with substance use disorders E) last year use of treatment services for substance use disorders, F) unmet need for substance use disorders, and G) potential demand of services for substance use disorders. Each series show the population and percent estimates broken down by 1) gender, 2) gender and age group, 3) pregnant women and women with children, 4) health region, 5) school and work settings, and 6) type of health insurance.

Calculations of the error margins for each sub-group and a full description of the methods and procedures are presented in Section IV.

Table titles and notes briefly describe the measures used. Operational definitions of each measure follows:

Series A

Lifetime use. Lifetime use refers to the use of a substance at least once at any time in the past. Substances ascertained included alcohol, prescription drugs (opiates, amphetamines, and tranquilizers), and illicit drugs (marihuana, cocaine, heroin, hallucinogens, and inhalants). Over-the-counter drugs and legitimate uses of drugs under a doctor's prescription were not included. Respondents were asked to report only uses of drugs that were not prescribed for them.

Series B

Last year use refers to the use of a substance at least on one occasion during the last 12 months.

Series C

Last year abuse and/or dependence. Abuse and dependence are the formal diagnostic categories of the substance use disorders. Diagnoses of substance use disorders are based on a configuration of symptoms. The interview protocol used in this study ascertained the period of time when the symptoms occurred and ascertained abuse and dependence disorders according to the DSM-IV criteria and occurring during the 12-month period previous to the study interview.

Abuse is defined as reporting at least one of the following symptoms:

- Substance use resulting in failure to fulfill major role obligations at work, school, or home.
- Recurrent substance use in physically hazardous situations .
- Recurrent substance-related legal problems.
- Continued use despite having persistent or recurrent social or interpersonal problems caused or exacerbated by substance.

Dependence is defined as reporting at least three of the following symptoms during a 12 month period:

- Tolerance.
- Withdrawal symptoms.
- The substance is taken in larger amounts or over longer periods than intended.

- Persistent desire or unsuccessful efforts to cut down or control use.
- Great deal of time spent to obtain, use, or recover from effects.
- Important social, occupational, recreational activities given up or reduced because of substance use.
- Substance use is continued despite knowledge of having a persistent or recurrent physical or psychological problem that is likely to have been caused or exacerbated by the substance.

Series D

Comorbidity with Other Mental Conditions. A screening instrument, based on the DSM-IV criteria, was used to evaluate the probability of a respondent having an affective or anxiety disorder during the last 12 months. The affective disorders screened included Major Depression and Dysthymia. The anxiety disorders screened included General Anxiety Disorder, Phobias (Specific, Social, and Agoraphobia), and Panic Attacks. Series G tables show the estimates of respondents with a substance use disorder that were also affected during the previous 12-month period by Major Depression or General Anxiety Disorder.

Series E

Use of Services for Substance Use Disorders By Type of Sector. Individuals with substance use disorders (as defined above) and who reported having seen a physician, psychiatrist, psychologist, social worker, or counselor for their substance use problem in the last year were considered to have met their need of services. Participation in a substance abuse program or in a self-help group was also considered as having met the need of services. The General Sector includes services received in general hospitals, emergency rooms, health centers, and physicians in solo practice. The Specialty Sector includes substance abuse programs, psychiatric hospitals, psychiatric emergency rooms, and psychiatrists, psychologists, social workers, or counselors in solo practice. The Informal Sector includes self-help programs, and visits to priests or ministers to discuss substance-related problems. Series D tables exclude respondents that did not meet criteria for substance use disorders.

Series F

Unmet Need of Services. Individuals with substance use disorders (as defined above) and who reported having received no service in the specialty sector for their substance use problem in the last year were considered to have their need of services unmet. Series E tables exclude respondents that did not meet criteria for substance use disorders.

Series G

Potential Demand of Services. Individuals with substance use disorders (as defined above) and who reported an elevated level of readiness to receive formal help for their substance use problem were considered as potentially in demand of services. Readiness for treatment was measured with the Treatment Readiness scale. This scale consists of six questions that examine the extent to which the respondent believes his or her substance use is a problem and he or she needs formal help to treat the substance use problem. Respondents endorsing at least five of the six questions were deemed to be ready to request services. Series F tables exclude respondents that did not meet criteria for substance use disorders.

II. Results

A. Lifetime Use of Substances

Over two thirds (69.3%) of the population 15 to 64 years old have used alcohol at some point in their lives. Lifetime use of other drugs, including non-medical use of prescription drugs and use of illicit drugs, was reported by 14.2% of the population. The drugs most frequently mentioned were marihuana (10.9%) and cocaine (5.1%). Males were more likely to report use of alcohol (80.8%) and other drugs (19.6%) than females (58.9% and 9.3%, respectively). Lifetime use of alcohol among males increased steadily across age groups while among women it peaked in the 18-24 age group and decreased among older age groups. Lifetime use of other drugs peaked in the 25-34 age group (25.8%) among males and in the 18-24 age group among females (12.7%). Among females that had been pregnant at some point during the 12 months previous to the study interview, lifetime use of alcohol was 66.9% and lifetime use of other drugs was 13.1%. Two thirds (65.6%) of women that had children under their care reported lifetime use of alcohol and 9.8% of these women reported lifetime use of other drugs. The population residing in the West and Central health regions reported the highest percentage of lifetime use of alcohol (73.2%). The highest percentage of lifetime use of other drugs was reported in the San Juan health region (18.1%). Compared to respondents attending high school or colleges, respondents attending a workplace were more likely to report lifetime use of alcohol and other drugs (76.1% and 15.0%, respectively). Respondents with no health insurance were more likely to report lifetime use of alcohol (75.3%) and lifetime use of other drugs (28.3%) than respondents with a government paid health insurance (69.8% and 14.3%, respectively) and those with a privately paid health insurance (67.6% and 11.2%, respectively).

B. Last Year Use of Substances

Close to half (47.2%) of the population 15 to 64 years old used alcohol during the 12-month period previous to the study interview. Last year use of other drugs, including non-medical use of prescription drugs and use of illicit drugs, was reported by 7.8% of

the population. The drugs most frequently mentioned were marijuana (4.7%) and cocaine (2.4%). Males were more likely to report last year use of alcohol (59.4%) and other drugs (10.2%) than females (35.9% and 5.6%, respectively). Last year use of alcohol among males increased steadily across age groups and peaked in the 25-34 age group (64.2%) while among women last year use of alcohol peaked in the 18-24 age group (49.9%) and decreased among older age groups. Last year use of other drugs peaked in the 25-34 age group (15.5%) among males and in the 18-24 age group among females (6.7%). Among females that had been pregnant at some point during the 12 months previous to the study interview, use of alcohol during the same period was 31.8% and use of other drugs was 5.0%. Forty percent of women that had children under their care reported use of alcohol in the previous 12 months and 5.2% reported use of other drugs during the same time period. The population residing in the West and Central health regions reported the highest percentage of last year use of alcohol (52.1%). The highest percentage of last year use of other drugs was reported in the East and Northeast health regions (9.9%). Compared to respondents attending high school or colleges, respondents attending a workplace were more likely to report last year use of alcohol (57.3%). Respondents attending colleges were more likely to report last year use of other drugs (8.7%) than respondents attending high school or workplaces (7.0% and 6.7%, respectively). Respondents with no health insurance were more likely to report last year use of alcohol (57.7%) and last year use of other drugs (21.4%) than respondents with a government paid health insurance (44.9% and 8.3%, respectively) and those with a privately paid health insurance (48.0% and 4.3%, respectively).

C. Last Year Substance Use Disorders (Estimates of Need)

One in 20 respondents (4.9%) met criteria for last year alcohol dependence and an additional 7.7% of the study sample met criteria for alcohol abuse. One out of every 33 respondents (3.0%) met criteria for last year drug dependence and an additional 1.2% met criteria for drug abuse. Overall, we estimate that 178,413 individuals in Puerto Rico need services for alcohol or drug dependence and that an additional 186,388 individuals need services for alcohol or drug abuse. As expected, males were more likely to meet

criteria for any substance use disorder (22.4%) than females (7.4%). Among males, the 18-24 age group showed the highest percentages of individuals with last year alcohol or drug dependence (14.3%) and alcohol or drug abuse (14.2%). A similar age pattern was observed among women with the 18-24 age group showing the highest percentages of last year alcohol or drug dependence (3.1%) and alcohol or drug abuse (8.3%). Among females that had been pregnant at some point during the 12 months previous to the study interview, 1.5% met criteria for alcohol or drug dependence and 3.5% met criteria for alcohol or drug abuse. Among women that had children under their care, 2.1% met criteria for alcohol or drug dependence and 5.3% met criteria for alcohol or drug abuse. Last year alcohol or drug dependence was highest in the East and Northeast health regions (8.8%) and alcohol or drug abuse was highest in the Metropolitan health region (9.6%). Compared to respondents attending high school or colleges, respondents attending a workplace were more likely to meet criteria for alcohol or drug dependence (7.4%). Respondents attending colleges were more likely to meet criteria for alcohol or drug abuse (9.7%) than respondents attending high school or workplaces (4.8% and 9.0%, respectively). Respondents with no health insurance were more likely to meet criteria for last year alcohol or drug dependence (17.7%) and for alcohol or drug abuse (9.4%) than respondents with a government paid health insurance (7.4% and 6.4%, respectively) and those with a privately paid health insurance (4.7% and 8.4%, respectively).

D. Co-Occurring Other Mental Health Disorders Among Individuals with Substance Use Disorders

One out of every three (31.4%) respondents with an alcohol dependence disorder met criteria for a co-occurring major depression or generalized anxiety disorder. Major depression and Generalized anxiety disorders were somewhat higher among individuals with a drug dependence disorder (41.4%). Females with an alcohol dependence disorder and females with a drug dependence disorder were more likely to meet criteria for a co-occurring major depression or generalized anxiety disorder (49.0% and 47.6%, respectively) than males with alcohol dependence disorders (27.7%) and males with drug dependence disorders (38.3%). Among males with alcohol dependence disorders,

those in the 15-17 age group had the highest prevalence of co-occurring major depression or generalized anxiety disorders (33.9%). Among females with alcohol dependence disorders, it was those in the 35+ age group that had the highest prevalence of co-occurring major depression or generalized anxiety disorders (52.6%). Among respondents with drug dependence disorders, the highest prevalence of co-occurring major depression or generalized anxiety disorders occurred in males in the 25-34 age group (46.9%) and in females occurred in the 35+ age group (71.2%). Among females that had been pregnant at some point during the 12 months previous to the study interview and who met criteria for either an alcohol or a drug dependence disorder, all met criteria for either a co-occurring major depression or a generalized anxiety disorder. Among women that had children under their care, 29.6% of those who had an alcohol dependence disorder and 48.6% of those who had a drug dependence disorder also met criteria for either major depression or generalized anxiety. Co-occurring major depression or generalized anxiety disorders among respondents with an alcohol dependence disorder and among respondents with a drug dependence disorder were most prevalent in the East and Northeast health regions (42.2% and 58.0%, respectively). Co-occurring major depression or generalized anxiety disorders among respondents with an alcohol dependence disorder and among respondents with a drug dependence disorder were most prevalent in respondents attending a workplace (25.8% and 31.1%, respectively), compared to respondents attending high school and college. Co-occurring major depression or generalized anxiety disorders among respondents with an alcohol dependence disorder and among respondents with a drug dependence disorder were most prevalent in respondents with public health insurance (41.1% and 49.3%, respectively), compared to respondents with no health insurance (12.0% and 31.4%, respectively) and respondents with a privately paid health insurance (23.6% and 33.7%, respectively).

E. Use of Treatment Services for Substance Use Disorders (Estimates of Met Need)

Only 10.6% of the individuals who met criteria for alcohol dependence had received specialized treatment services during the 12 months previous to the study interview. A

somewhat higher percentage of the individuals who met criteria for drug dependence had received specialized treatment services during the same period, 27.3%. Males with an alcohol dependence disorder were less likely to have received specialized treatment (9.3%) than females (16.5%). However, males with a drug dependence disorder were as likely to have received specialized treatment as females with a drug dependence disorder (27.4% and 26.9%, respectively). Among both males and females, none of the respondents in the 15-17 age group reported using specialized treatment for either alcohol or drug dependence disorders. Among females that had been pregnant at some point during the 12 months previous to the study interview, none reported using specialized treatment for their alcohol or drug dependence disorders. Among women that had children under their care, 25.3% reported using specialized treatment for their alcohol dependence disorder and 23.6% used specialized treatment for a drug dependence disorder. Last year alcohol and drug dependence disorders were least likely to be treated among individuals residing in the Metropolitan health region (3.6% and 0.0%, respectively) and in the Northwest and Northcentral health regions (3.9% and 10.5%, respectively). Among respondents attending college, none of the respondents reported using specialized treatment for an alcohol dependence disorder. Compared to respondents attending high school, respondents attending a college or workplace were less likely to reported using specialized treatment for a drug dependence disorder (43.4% versus 28.7% and 23.2%, respectively). Respondents with a private health insurance were less likely to have received specialized treatment for alcohol and drug dependence disorders (6.5% and 24.0%, respectively) than respondents with no health insurance (12.8% and 25.5%, respectively) and respondents with a public health insurance (12.0% and 29.4%).

F. Unmet Need for Substance Use Disorders

Nine out of ten individuals (89.4%) who met criteria for last year alcohol dependence had not received specialized treatment services during the 12 months previous to the study interview. Close to three out of four (72.7%) of the individuals who met criteria for drug dependence had not received specialized treatment services during the same period. Males were more likely to have unmet their need for specialized treatment of an

alcohol dependence disorder (90.7%) than females (83.5%). However, males were as likely to have unmet their need for specialized treatment of a drug dependence disorder as females (72.6% and 73.1%, respectively). Among both males and females, all of the respondents in the 15-17 age group who met criteria for alcohol or drug dependence disorders had unmet their need for specialized treatment. All the females who had been pregnant at some point during the 12 months previous to the study interview and who met criteria for an alcohol or drug dependence disorder had unmet their need for specialized treatment. Among women that had children under their care, 74.7% reported not having received specialized treatment for their alcohol dependence disorder and 76.4% did not receive specialized treatment for a drug dependence disorder. The need for specialized treatment of alcohol and drug dependence disorders was more likely to have remained unmet among individuals residing in the Metropolitan health region (96.4% and 100.0%, respectively) and in the Northwest and Northcentral health regions (96.1% and 89.5%, respectively). Among respondents attending college, all of the need for specialized treatment for an alcohol dependence disorder had remained unmet. Compared to respondents attending high school, respondents attending a college or workplace were more likely to report not receiving specialized treatment for a drug dependence disorder (56.6% versus 71.3% and 76.8%, respectively). Respondents with a private health insurance were more likely to have their need for specialized treatment of alcohol and drug dependence disorders unmet (93.5% and 76.0%, respectively) than respondents with no health insurance (87.2% and 74.5%, respectively) and respondents with a public health insurance (88.0% and 70.6%).

G. Potential Demand for Substance Use Disorders

Potential demand of treatment services for alcohol dependence disorders was estimated to be twice as large as actual use of services (21.1% of demand versus 10.6% of use). Similarly for drug dependence disorders, potential demand for services was approximately 1.5 times larger than actual use (41.9% demand versus 27.3% use). Females with an alcohol dependence disorder were more likely to be in demand of treatment services (28.6%) than males (19.5%). However, males were as likely to be in

demand of treatment services for drug dependence disorders as females (42.4% and 40.7%, respectively). Among males, potential demand of services increased with age from 0% in the 15-17 age group with alcohol dependence disorders to 24.7% in the 35+ age group and from 0% in the 15-17 age group with drug dependence disorders to 55.3% in the 35+ age group. Among females, there was no demand of services for alcohol dependence detected in the 15-17 and 18-24 age groups. In the same age groups, however, there was substantial demand of services for drug dependence; 100.0% in the 15-17 age group and 42.5% in the 18-24 age group. Demand of services for alcohol dependence disorders among females was highest in the 25-34 age group (51.8%) and demand for drug dependence disorders was highest in the 35+ age group (46.7%). Among females that had been pregnant at some point during the 12 months previous to the study interview, potential demand for treatment services was 53.3% and 100.0%, respectively, for alcohol and drug dependence disorders. Among women that had children under their care and who had a substance use disorder, 20.2% were in demand for alcohol dependence services and 41.8% for drug dependence services. Potential demand for alcohol dependence services was highest in the San Juan health region (31.0%). For drug dependence services potential demand was highest in the East and Northeast health regions (56.2%). Compared to respondents attending high school and workplaces, respondents attending college were more likely to express potential demand of services for an alcohol dependence disorder (17.1% and 16.8% versus 23.5%, respectively). For drug dependence services, potential demand was highest among respondents attending high school (100.0%). Potential demand for alcohol and dependence services was higher among respondents with a public health insurance (25.1% and 55.2%, respectively) than among respondents with no health insurance (12.4% and 27.1%, respectively) and those with privately paid health insurance (18.2% and 29.0%, respectively).

H. Conclusions

The results of this study estimate that 7.1% of the Puerto Rico population, approximately 178,000 individuals, is in need for specialized substance dependence treatment services and that an additional 186,000 individuals (7.5%) need help with

their substance abuse. Among those with a substance dependence disorder, only 15.0% received specialized treatment services during the previous year. Among those with a substance abuse disorder, scarcely 3.4% received any service either in the general, specialty or informal sector, for their substance abuse condition. This study has further estimated that the potential demand for substance dependence specialized treatment services is close to twice as large (27.9%) as the rate of actual use (15.0%).

The prevalence rates of substance use disorders in this study are considerably higher than those found in the previous household survey conducted in 1998 (Colón et al., 2002). Last year alcohol dependence and abuse was estimated in 1998 to be 1.0% and 3.1%, respectively. The present estimates are 4.9% and 7.7%, respectively. Last year drug dependence and abuse was estimated in 1998 to be 0.5% and 0.8%, respectively. The current estimates are 3.0% and 1.2%, respectively. The present estimates are, on average, 2½ times higher than the estimates derived from the 1998 study. These differences are most likely due to the differences in the interviewing methods of the two studies. Several studies have shown that drug use reports are sensitive to interview mode effects (Tourangeau and Smith, 1996; Harrison, 1998). Specifically, it has been shown that self-administered questionnaires yield higher rates of drug use reports than face-to-face interviews and telephone interviews (Turner, Lessler and Devore, 1992; Aquilino 1994; Rogers, Miller and Turner, 1998).

The estimates in this study seem to be similar to the rates estimated for the U.S. general household population in 2001. The annual National Household Survey on Drug Abuse (NHSDA) samples the U.S. mainland household population 12 years old and over (Substance Abuse and Mental Health Services Administration, 2002). Our study sampled the Puerto Rico household population 15 to 64 years old. Thus, the overall results of both studies cannot be compared. However, the published results of the NHSDA for specific age groups can be compared to estimates from our study derived from equivalent age groups. For example, in the 18-25 age group the 2001 NHSDA estimated that last year alcohol dependence and abuse was 5.8% and 9.0%, respectively. The estimates derived from the present study for the same age group are 5.5% and 11.6%, respectively. Last year drug dependence and abuse was estimated the 2001 NHSDA for the 18-25 age group to be 4.7% and 2.4%, respectively. The

estimates derived from the present study for the same age group are 3.6% and 2.7%, respectively.

Only a minority of individuals with substance use disorders reported receiving services for their alcohol or drug problems. The use of services was particularly low among individuals with substance abuse disorders. This finding is consistent with previous studies on substance abuse and other psychopathologies (Anthony and Helzer 1991; Alegría, Robles and Freeman 1991). Lack of service availability might have exerted an influence over the rates of utilization found in this study. The survey of substance abuse service providers conducted as part of the family of studies of the present study, estimated an average capacity utilization of over 75% (Administración de Servicios de Salud Mental y Contra la Adicción, 2002). Such a high rate of capacity utilization means that substance abusers are already using what specialty services are available. Service utilization is not likely to increase significantly without first increasing the availability of substance abuse treatment. Efforts to increase service use by motivating affected individuals to seek help (i.e., increasing demand) without concomitant increases in the availability of services (i.e., increasing supply) are not likely to prove effective and might result in lengthening waiting periods and further discouraging substance abusers from seeking care.

III. Tables

A. Lifetime Use of Substances

Table III A.1 Lifetime use of substances by gender, Puerto Rico Household Population 15 to 64 years old, 2002.						
Lifetime Use of:	Males		Females		Total Population	
	n	%	n	%	n	%
Alcohol	963,942	80.8	767,559	58.9	1,731,502	69.3
Other Drugs	233,663	19.6	121,081	9.3	354,743	14.2
Prescription Drugs	59,445	5.0	54,745	4.2	114,191	4.6
Opiates	30,539	2.6	28,034	2.2	58,572	2.3
Amphetamines	8,588	0.7	10,473	0.8	19,061	0.8
Tranquilizers	49,635	4.2	41,770	3.2	91,404	3.7
Illicit Drugs	217,027	18.2	82,584	6.3	299,611	12.0
Marihuana	197,662	16.6	75,539	5.8	273,202	10.9
Cocaine	96,784	8.1	30,038	2.3	126,822	5.1
Heroin	43,108	3.6	10,158	0.8	53,266	2.1
Hallucinogens	21,149	1.8	3,304	0.3	24,453	1.0
Inhalants	13,281	1.1	4,026	0.3	17,308	0.7

Notes:
 Unweighted sample size = 4,332
 * None reported

**Table III A.2 Lifetime use of substances by gender and age groups,
Puerto Rico Household Population 15 to 64 years old, 2002.**

Lifetime Use of:	Male Age Groups								Female Age Groups							
	15-17		18-24		25-34		35+		15-17		18-24		25-34		35+	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%
Alcohol	60,624	63.2	167,795	77.9	209,968	80.3	525,555	84.6	49,566	54.2	150,301	69.3	182,728	65.9	384,965	53.6
Other Drugs	10,905	11.4	46,651	21.7	67,320	25.8	108,786	17.5	7,634	8.3	27,530	12.7	30,925	11.2	54,992	7.7
Prescription Drugs	1,399	1.5	8,772	4.1	18,310	7.0	30,964	5.0	1,892	2.1	3,899	1.8	14,705	5.3	34,250	4.8
Opiates	*	-	4,407	2.0	8,455	3.2	17,676	2.8	1,578	1.7	1,321	0.6	8,728	3.1	16,407	2.3
Amphetamines	329	0.3	*	-	2,376	0.9	5,883	0.9	568	0.6	*	-	2,692	1.0	7,213	1.0
Tranquilizers	1,070	1.1	8,404	3.9	14,368	5.5	25,793	4.2	314	0.3	2,577	1.2	8,380	3.0	30,498	4.2
Illicit Drugs	10,274	10.7	45,650	21.2	64,857	24.8	96,245	15.5	6,624	7.2	27,023	12.5	20,565	7.4	28,373	4.0
Marihuana	9,506	9.9	43,118	20.0	59,664	22.8	85,375	13.7	6,275	6.9	26,515	12.2	18,123	6.5	24,626	3.4
Cocaine	352	0.4	11,242	5.2	36,646	14.0	48,544	7.8	1,681	1.8	3,684	1.7	7,553	2.7	17,120	2.4
Heroin	352	0.4	5,569	2.6	13,062	5.0	24,125	3.9	*	-	1,628	0.8	3,132	1.1	5,398	0.8
Hallucinogens	*	-	5,886	2.7	4,325	1.7	10,938	1.8	*	-	642	0.3	2,345	0.8	317	0.0
Inhalants	1,299	1.4	1,365	0.6	4,169	1.6	6,449	1.0	*	-	507	0.2	1,557	0.6	1,962	0.3

Notes:
 Unweighted sample size = 4,332
 * None reported
 * None reported

**Table III A.3 Lifetime use of substances among pregnant women and women with children,
Puerto Rico Household Population 15 to 64 years old, 2002.**

Lifetime Use of:	Pregnant Women ¹		Women with Children ¹		All Women	
	n	%	n	%	n	%
Alcohol	60,491	66.9	388,378	65.6	767,559	58.9
Other Drugs	11,881	13.1	57,874	9.8	121,081	9.3
Prescription Drugs	5,388	6.0	28,178	4.8	54,745	4.2
Opiates	4,613	5.1	18,271	3.1	28,034	2.2
Amphetamines	*	-	6,832	1.2	10,473	0.8
Tranquilizers	2,345	2.6	18,972	3.2	41,770	3.2
Illicit Drugs	8,009	8.9	37,884	6.4	82,584	6.3
Marihuana	8,009	8.9	35,427	6.0	75,539	5.8
Cocaine	1,524	1.7	12,732	2.1	30,038	2.3
Heroin	702	0.8	4,322	0.7	10,158	0.8
Hallucinogens	*	-	1,159	0.2	3,304	0.3
Inhalants	702	0.8	1,159	0.2	4,026	0.3

Notes:

Unweighted sample size = 4,332

* None reported

¹ During the past 12 months

**Table III A.4 Lifetime use of substances by health region¹,
Puerto Rico Household Population 15 to 64 years old, 2002.**

Lifetime Use of:	Northwest and Northcentral		Central and West		Southeast and Southwest		Metropolitan		San Juan		East and Northeast	
	n	%	n	%	n	%	n	%	n	%	n	%
Alcohol	277,444	60.7	349,615	73.2	246,678	70.8	242,382	70.7	190,184	67.8	425,198	71.9
Other Drugs	64,146	14.0	65,349	13.7	30,472	8.7	47,022	13.7	50,696	18.1	97,057	16.4
Prescription Drugs	18,053	3.9	18,323	3.8	12,136	3.5	11,620	3.4	13,428	4.8	40,631	6.9
Opiates	4,517	1.0	8,388	1.8	6,050	1.7	7,279	2.1	6,125	2.2	26,213	4.4
Amphetamines	3,143	0.7	2,723	0.6	2,052	0.6	1,640	0.5	2,878	1.0	6,626	1.1
Tranquilizers	16,651	3.6	16,555	3.5	7,955	2.3	7,719	2.3	10,875	3.9	31,650	5.4
Illicit Drugs	51,271	11.2	57,533	12.1	25,177	7.2	39,101	11.4	45,385	16.2	81,144	13.7
Marihuana	48,453	10.6	51,597	10.8	23,366	6.7	35,110	10.2	42,864	15.3	71,811	12.1
Cocaine	14,525	3.2	23,731	5.0	12,228	3.5	11,020	3.2	17,951	6.4	47,367	8.0
Heroin	2,472	0.5	11,059	2.3	8,604	2.5	1,747	0.5	5,375	1.9	24,008	4.1
Hallucinogens	2,189	0.6	3,783	1.3	1,893	0.8	2,142	0.6	3,083	1.2	7,438	1.3
Inhalants	2,727	0.6	6,315	1.3	1,498	0.4	987	0.3	973	0.3	4,808	0.8

Notes:

Unweighted sample size = 4,332

* None reported

¹ See composition of health regions on page 59

**Table III A.5 Lifetime use of substances by school and work setting,
Puerto Rico Household Population 15 to 64 years old, 2002.**

Lifetime Use of:	In High School ¹		In College ²		In Workplace ³	
	n	%	n	%	n	%
Alcohol	105,345	61.2	159,011	65.3	839,285	76.1
Other Drugs	18,087	10.5	35,100	14.4	165,111	15.0
Prescription Drugs	4,754	2.8	8,011	3.3	48,138	4.4
Opiates	2,408	1.4	3,863	1.6	26,155	2.4
Amphetamines	897	0.5	738	0.3	5,884	0.5
Tranquilizers	3,161	1.8	7,344	3.0	37,835	3.4
Illicit Drugs	16,447	9.6	32,336	13.3	141,812	12.9
Marihuana	15,329	8.9	31,723	13.0	129,636	11.8
Cocaine	2,409	1.4	7,253	3.0	54,200	4.9
Heroin	1,144	0.7	710	0.3	15,560	1.4
Hallucinogens	1,144	0.7	4,341	1.8	10,465	0.9
Inhalants	1,299	0.8	2,415	1.0	5,024	0.5

Notes:

Unweighted sample size = 4,332

* None reported

¹ Population 15-18 years old attending high school

² Population attending college

³ Population employed in a formal job

**Table III A.6 Lifetime use of substances by type of health insurance,
Puerto Rico Household Population 15 to 64 years old, 2002.**

Lifetime Use of:	Uninsured		Publicly Insured ¹		Privately Insured	
	n	%	n	%	n	%
Alcohol	153,563	75.3	906,191	69.8	671,747	67.6
Other Drugs	57,753	28.3	185,984	14.3	111,006	11.2
Prescription Drugs	17,953	8.8	59,089	4.5	37,149	3.7
Opiates	8,866	4.3	30,049	2.3	19,658	2.0
Amphetamines	2,228	1.1	12,086	0.9	4,747	0.5
Tranquilizers	13,231	6.5	48,834	3.8	29,339	3.0
Illicit Drugs	54,686	26.8	156,234	12.0	88,690	8.9
Marihuana	48,301	23.6	138,948	10.7	85,952	8.6
Cocaine	26,130	12.8	72,836	5.6	27,857	2.8
Heroin	13,330	6.5	35,330	2.7	4,605	0.5
Hallucinogens	4,002	2.0	12,700	1.0	7,751	0.8
Inhalants	749	0.4	10,310	0.8	6,248	0.6

Notes:

Unweighted sample size = 4,332

* None reported

¹ Includes participation in Medicare, Medicaid, Veteran's health program, or PR government health reform plan

B. Last Year Use of Substances

**Table III B.1 Last year use of substances by gender,
Puerto Rico Household Population 15 to 64 years old, 2002.**

Last Year Use	Males		Females		Total Population	
	n	%	n	%	n	%
Alcohol	709,340	59.4	468,400	35.9	1,177,739	47.2
Other Drugs	121,527	10.2	72,477	5.6	194,006	7.8
Prescription Drugs	33,646	2.8	38,237	2.9	71,883	2.9
Opiates	14,904	1.2	16,435	1.3	31,337	1.3
Amphetamines	1,657	0.1	6,900	0.5	8,558	0.3
Tranquilizers	26,216	2.2	30,600	2.3	56,815	2.3
Illicit Drugs	107,264	9.0	43,947	3.4	151,211	6.1
Marihuana	81,614	6.8	36,412	2.8	118,025	4.7
Cocaine	44,862	3.8	15,993	1.2	60,854	2.4
Heroin	29,006	2.4	7,118	0.5	36,123	1.4
Hallucinogens	7,393	0.6	1,956	0.2	9,349	0.4
Inhalants	1,765	0.1	1,557	0.1	3,323	0.1

Notes:

Unweighted sample size = 4,332

* None reported

**Table III B.2 Last year use of substances by gender and age groups,
Puerto Rico Household Population 15 to 64 years old, 2002.**

Last Year Use	Male Age Groups								Female Age Groups							
	15-17		18-24		25-34		35+		15-17		18-24		25-34		35+	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%
Alcohol	39,742	41.5	137,554	63.9	167,879	64.2	364,165	58.6	31,212	34.1	108,280	49.9	126,222	45.6	202,685	28.2
Other Drugs	8,207	8.6	30,491	14.2	40,593	15.5	42,237	6.8	5,131	5.6	14,474	6.7	17,995	6.5	34,878	4.9
Prescription Drugs	301	0.3	7,667	3.6	12,952	5.0	12,726	2.0	882	1.0	2,256	1.0	10,786	3.9	24,313	3.4
Opiates	*	-	4,039	1.9	3,218	1.2	7,646	1.2	882	1.0	507	0.2	6,190	2.2	8,855	1.2
Amphetamines	*	-	*	-	724	0.3	933	0.2	*	-	*	-	2,243	0.8	4,658	0.6
Tranquilizers	301	0.3	7,298	3.4	10,458	4.0	8,159	1.3	*	-	1,749	0.8	6,288	2.3	22,562	3.1
Illicit Drugs	7,906	8.2	29,489	13.7	38,130	14.6	31,739	5.1	5,131	5.6	13,966	6.4	9,760	3.5	15,090	2.1
Marihuana	7,137	7.4	26,963	12.5	29,079	11.1	18,435	3.0	4,782	5.2	13,966	6.4	7,706	2.8	9,957	1.4
Cocaine	352	0.4	5,035	2.3	19,215	7.4	20,260	3.3	1,332	1.5	2,242	1.0	3,766	1.4	8,652	1.2
Heroin	352	0.4	5,200	2.4	10,144	3.9	13,309	2.1	*	-	1,628	0.8	2,009	0.7	3,481	0.5
Hallucinogens	*	-	4,134	1.9	2,474	0.9	785	0.1	*	-	321	0.1	1,635	0.6	*	-
Inhalants	769	0.8	997	0.5	*	-	*	-	*	-	*	-	1,557	0.6	*	-

Notes:
Unweighted sample size = 4,332
* None reported

**Table III B.3 Last year use of substances among pregnant women and women with children,
Puerto Rico Household Population 15 to 64 years old, 2002.**

Last Year Use	Pregnant Women ¹		Women with Children ¹		All Women	
	n	%	n	%	n	%
Alcohol	28,749	31.8	246,537	41.6	468,400	35.9
Other Drugs	4,504	5.0	30,963	5.2	72,477	5.6
Prescription Drugs	2,806	3.1	20,692	3.5	38,237	2.9
Opiates	1,628	1.8	11,681	2.0	16,435	1.3
Amphetamines	*	-	5,583	0.9	6,900	0.5
Tranquilizers	2,046	2.3	15,567	2.6	30,600	2.3
Illicit Drugs	2,400	2.7	15,610	2.6	43,947	3.4
Marihuana	1,698	1.9	15,015	2.5	36,412	2.8
Cocaine	702	0.8	4,643	0.8	15,993	1.2
Heroin	702	0.8	2,338	0.4	7,118	0.5
Hallucinogens	*	-	1,159	0.2	1,956	0.2
Inhalants	*	-	1,159	0.2	1,557	0.1

Notes:

Unweighted sample size = 4,332

* None reported

¹ During the past 12 months

**Table III B.4 Last year use of substances by health region¹,
Puerto Rico Household Population 15 to 64 years old, 2002.**

Last Year Use	Northwest and Northcentral		Central and West		Southeast and Southwest		Metropolitan		San Juan		East and Northeast	
	n	%	n	%	n	%	n	%	n	%	n	%
Alcohol	171,174	37.4	248,731	52.1	167,014	48.0	170,530	49.8	127,162	45.3	293,128	49.6
Other Drugs	40,749	8.9	36,408	7.6	22,205	6.4	16,921	4.9	19,060	6.8	58,661	9.9
Prescription Drugs	14,928	3.3	10,704	2.2	7,558	2.2	6,421	1.9	4,961	1.8	27,312	4.6
Opiates	3,529	0.8	4,232	0.9	3,039	0.9	2,680	0.8	1,969	0.7	15,890	2.7
Amphetamines	2,182	0.5	933	0.2	1,303	0.4	*	-	341	0.1	3,799	0.6
Tranquilizers	14,003	3.1	9,779	2.0	5,289	1.5	4,958	1.4	3,642	1.3	19,145	3.2
Illicit Drugs	29,619	6.5	31,623	6.6	18,454	5.3	11,447	3.3	16,193	5.8	43,874	7.4
Marihuana	26,965	5.9	20,440	4.3	13,986	4.0	10,416	3.0	14,137	5.0	32,081	5.4
Cocaine	6,187	1.4	11,952	2.5	9,622	2.8	1,467	0.4	5,405	1.9	26,223	4.4
Heroin	1,598	0.3	9,391	2.0	7,446	2.1	*	-	1,341	0.5	16,347	2.8
Hallucinogens	1,650	0.4	4,288	.09	1,929	0.6	*	-	772	0.3	710	0.1
Inhalants	450	0.1	2,162	0.5	*	-	*	-	*	-	710	0.1

Notes:
 Unweighted sample size = 4,332
 * None reported
¹ See composition of health regions on page 59

**Table III B.5 Last year use of substances by school and work setting,
Puerto Rico Household Population 15 to 64 years old, 2002.**

Last Year Use	In High School ¹		In College ²		In Workplace ³	
	n	%	n	%	n	%
Alcohol	67,867	39.4	120,742	49.5	631,392	57.3
Other Drugs	12,054	7.0	21,079	8.7	73,782	6.7
Prescription Drugs	2,646	1.5	5,782	2.4	30,147	2.7
Opiates	1,712	1.0	2,116	0.9	15,996	1.5
Amphetamines	*	-	*	-	2,712	0.2
Tranquilizers	2,078	1.2	5,413	2.2	22,095	2.0
Illicit Drugs	11,753	6.8	19,221	7.9	52,666	4.8
Marihuana	10,636	6.2	18,609	7.6	42,275	3.8
Cocaine	2,061	1.2	4,004	1.6	17,394	1.6
Heroin	1,144	0.7	*	-	8,758	0.8
Hallucinogens	1,144	0.7	3,310	1.4	2,499	0.2
Inhalants	769	0.4	997	0.4	*	-

Notes:

Unweighted sample size = 4,332

* None reported

¹ Population 15-18 years old attending high school

² Population attending college

³ Population employed in a formal job

**Table III B.6 Last year use of substances by type of health insurance,
Puerto Rico Household Population 15 to 64 years old, 2002.**

Last Year Use	Uninsured		Publicly Insured ¹		Privately Insured	
	n	%	n	%	n	%
Alcohol	117,611	57.7	583,379	44.9	476,750	48.0
Other Drugs	43,621	21.4	107,587	8.3	42,796	4.3
Prescription Drugs	13,148	6.4	38,976	3.0	19,759	2.0
Opiates	5,464	2.7	18,172	1.4	7,702	0.8
Amphetamines	724	0.4	6,020	0.5	1,814	0.2
Tranquilizers	10,340	5.1	30,280	2.3	16,196	1.6
Illicit Drugs	40,251	19.7	81,280	6.3	29,680	3.0
Marihuana	31,397	15.4	60,532	4.7	26,096	2.6
Cocaine	16,370	8.0	37,729	2.9	6,755	0.7
Heroin	10,126	5.0	24,070	1.9	1,927	0.2
Hallucinogens	2,950	1.4	3,089	0.2	3,310	0.3
Inhalants	*	-	1,159	0.1	2,162	0.2

Notes:

Unweighted sample size = 4,332

* None reported

¹ Includes participation in Medicare, Medicaid, Veteran's health program, or PR government health reform plan

C. Last Year Substance Use Disorders (Estimates of Need)

Table III C.1 Last year substance use disorders by gender, Puerto Rico Household Population 15 to 64 years old, 2002.						
Substance Use Disorders (last year)	Males		Females		Total Population	
	n	%	n	%	n	%
Alcohol						
No use	481,136	40.3	835,049	64.0	1,316,185	52.7
Use, did not meet disorder criteria	475,154	39.8	391,489	30.0	866,642	34.7
Abuse only	135,508	11.4	55,640	4.3	191,148	7.7
Dependence	101,862	8.5	21,271	1.6	123,133	4.9
Drugs						
No use	1,068,402	89.5	1,229,593	94.3	2,297,994	92.0
Use, did not meet disorder criteria	50,962	4.3	43,395	3.3	94,358	3.8
Abuse only	21,876	1.8	8,591	0.7	30,467	1.2
Dependence	52,420	4.4	21,869	1.7	74,289	3.0
Any Substance						
No use	458,254	38.4	808,282	62.0	1,266,535	50.7
Use, did not meet disorder criteria	467,730	39.2	398,042	30.5	865,771	34.7
Abuse only	126,230	10.6	60,158	4.6	186,388	7.5
Dependence	141,447	11.8	36,966	2.8	178,413	7.1
Notes: Unweighted sample size = 4,332 * None reported						

**Table III C.2 Last year substance use disorders by gender and age groups,
Puerto Rico Household Population 15 to 64 years old, 2002.**

Substance Use Disorders (last year)	Male Age Groups								Female Age Groups							
	15-17		18-24		25-34		35+		15-17		18-24		25-34		35+	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%
Alcohol																
No use	55,350	57.7	77,845	36.1	91,485	35.0	256,456	41.3	60,231	65.9	108,657	50.1	150,879	54.4	515,282	71.8
Use, did not meet disorder criteria	30,052	31.3	82,289	38.2	111,652	42.7	251,160	40.4	28,887	31.6	88,231	40.7	107,832	38.9	166,539	23.2
Abuse only	6,781	7.1	32,694	15.2	37,186	14.2	58,848	9.5	1,494	1.6	15,874	7.3	15,642	5.6	22,629	3.2
Dependence	3,677	3.8	22,571	10.5	21,038	8.0	54,576	8.8	831	0.9	4,175	1.9	2,749	1.0	13,516	1.9
Drugs																
No use	87,653	91.4	182,509	84.7	220,768	84.5	577,472	93.0	85,963	94.0	202,463	93.3	259,107	93.4	682,059	95.0
Use, did not meet disorder criteria	6,780	7.1	11,963	5.6	15,005	5.7	17,215	2.8	4,715	5.2	8,670	4.0	10,532	3.8	19,478	2.7
Abuse only	1,098	1.1	9,070	4.2	7,040	2.7	4,668	0.8	416	0.5	2,440	1.1	2,276	0.8	3,459	0.5
Dependence	329	0.3	11,858	5.5	18,548	7.1	21,685	3.5	349	0.4	3,363	1.6	5,187	1.9	12,970	1.8
Any Substance																
No use	52,682	55.0	74,785	34.7	86,620	33.1	244,166	39.3	58,425	63.9	103,530	47.7	145,868	52.6	500,459	69.7
Use, did not meet disorder criteria	31,293	32.6	79,147	36.7	106,808	40.9	250,481	40.3	30,694	33.6	88,689	40.9	107,249	38.7	171,410	23.9
Abuse only	7,879	8.2	30,563	14.2	33,427	12.8	54,361	8.8	1,145	1.3	17,993	8.3	17,175	6.2	23,845	3.3
Dependence	4,006	4.2	30,904	14.3	34,505	13.2	72,031	11.6	1,180	1.3	6,725	3.1	6,809	2.5	22,253	3.1

Notes:
Unweighted sample size = 4,332
* None reported

Table III C.3 Last year substance use disorders among pregnant women and women with children, Puerto Rico Household Population 15 to 64 years old, 2002.

Substance Use Disorders (last year)	Pregnant Women ¹		Women with Children ¹		All Women	
	n	%	n	%	n	%
Alcohol						
No use	61,683	68.2	345,894	58.4	835,049	64.0
Use, did not meet disorder criteria	24,681	27.3	209,893	35.4	391,489	30.0
Abuse only	2,753	3.0	28,298	4.8	55,640	4.3
Dependence	1,315	1.5	8,345	1.4	21,271	1.6
Drugs						
No use	85,928	95.0	561,468	94.8	1,229,593	94.3
Use, did not meet disorder criteria	3,353	3.7	21,142	3.6	43,395	3.3
Abuse only	450	0.5	3,829	0.6	8,591	0.7
Dependence	702	0.8	5,992	1.0	21,869	1.7
Any Substance						
No use	59,925	66.3	338,221	57.1	808,282	62.0
Use, did not meet disorder criteria	25,989	28.7	210,653	35.6	398,042	30.5
Abuse only	3,202	3.5	31,226	5.3	60,158	4.6
Dependence	1,315	1.5	12,330	2.1	36,966	2.8

Notes:
 Unweighted sample size = 4,332
 * None reported
¹ During the past 12 months

**Table III C.4 Last year substance use disorders by health region¹,
Puerto Rico Household Population 15 to 64 years old, 2002.**

Substance Use Disorders (last year)	Northwest and Northcentral		Central and West		Southeast and Southwest		Metropolitan		San Juan		East and Northeast	
	n	%	n	%	n	%	n	%	n	%	n	%
Alcohol												
No use	285,954	62.6	226,616	47.5	180,594	51.8	172,066	50.2	152,877	54.5	298,077	50.4
Use, did not meet disorder criteria	110,757	24.2	195,185	40.9	125,729	36.1	125,380	36.6	90,301	32.2	219,290	37.1
Abuse only	36,762	8.0	30,192	6.3	27,312	7.8	33,528	9.8	26,958	9.6	36,396	6.2
Dependence	23,655	5.2	25,421	5.3	14,672	4.2	11,621	3.4	10,322	3.7	37,442	6.3
Drugs												
No use	413,067	90.4	441,006	92.4	325,759	93.4	325,329	95.0	260,290	92.8	532,544	90.1
Use, did not meet disorder criteria	20,878	4.6	18,040	3.8	5,735	1.6	11,159	3.3	8,499	3.0	30,046	5.1
Abuse only	5,114	1.1	5,065	1.1	4,762	1.4	1,860	0.5	3,801	1.4	9,866	1.7
Dependence	18,070	4.0	13,303	2.8	12,052	3.5	4,248	1.2	7,866	2.8	18,749	3.2
Any Substance												
No use	271,198	59.3	219,430	46.0	176,143	50.5	167,655	48.9	148,496	52.9	283,614	48.0
Use, did not meet disorder criteria	115,388	25.2	191,929	40.2	123,459	35.4	127,340	37.2	89,295	31.8	218,361	36.9
Abuse only	31,348	6.9	31,870	6.7	27,918	8.0	32,763	9.6	25,259	9.0	37,230	6.3
Dependence	39,195	8.6	34,185	7.2	20,787	6.0	14,838	4.3	17,407	6.2	52,001	8.8

Notes:
 Unweighted sample size = 4,332
 * None reported
¹ See composition of health regions on page 59

**Table III C.5 Last year substance use disorders by school and work setting,
Puerto Rico Household Population 15 to 64 years old, 2002.**

Substance Use Disorders (last year)	In High School ¹		In College ²		In Workplace ³	
	n	%	n	%	n	%
Alcohol						
No use	103,513	60.1	122,940	50.5	469,174	42.5
Use, did not meet disorder criteria	54,401	31.6	87,416	35.9	466,100	42.3
Abuse only	7,530	4.4	27,152	11.1	105,303	9.5
Dependence	6,704	3.9	6,173	2.5	61,988	5.6
Drugs						
No use	159,745	92.8	221,587	90.9	1,028,071	93.2
Use, did not meet disorder criteria	8,035	4.7	9,650	4.0	42,626	3.9
Abuse only	1,731	1.0	5,488	2.3	5,434	0.5
Dependence	2,637	1.5	6,957	2.9	26,433	2.4
Any Substance						
No use	99,868	58.0	119,026	48.8	455,367	41.3
Use, did not meet disorder criteria	55,804	32.4	88,493	36.3	466,040	42.3
Abuse only	8,279	4.8	23,757	9.7	99,614	9.0
Dependence	8,197	4.8	12,405	5.1	81,543	7.4

Notes:

Unweighted sample size = 4,332

* None reported

¹ Population 15-18 years old attending high school

² Population attending college

³ Population employed in a formal job

**Table III C.6 Last year substance use disorders by type of health insurance,
Puerto Rico Household Population 15 to 64 years old, 2002.**

Substance Use Disorders (last year)	Uninsured		Publicly Insured ¹		Privately Insured	
	n	%	n	%	n	%
Alcohol						
No use	85,957	42.1	713,456	54.9	516,772	52.0
Use, did not meet disorder criteria	75,189	36.8	432,627	33.3	358,827	36.1
Abuse only	22,660	11.1	84,717	6.5	83,771	8.4
Dependence	20,180	9.9	68,102	5.2	34,851	3.5
Drugs						
No use	159,996	78.3	1,187,604	91.4	950,395	95.6
Use, did not meet disorder criteria	13,193	6.5	55,673	4.3	25,492	2.6
Abuse only	7,623	3.7	17,319	1.3	5,525	0.6
Dependence	23,173	11.3	38,307	2.9	12,809	1.3
Any Substance						
No use	78,943	38.6	685,924	52.8	501,668	50.5
Use, did not meet disorder criteria	69,602	34.1	433,796	33.4	362,374	36.4
Abuse only	19,285	9.4	83,395	6.4	83,708	8.4
Dependence	36,156	17.7	95,787	7.4	46,471	4.7

Notes:

Unweighted sample size = 4,332

* None reported

¹ Includes participation in Medicare, Medicaid, Veteran's health program, or PR government health reform plan

D. Use of Services for Substance Use Disorders

Table III D.1 Use of services for substance use disorders by gender and service sector, Puerto Rico Household Population 15 to 64 years old, 2002.						
Used Services For	Males		Females		Total Population	
	n	%	n	%	n	%
Alcohol Use Disorders						
Abuse Only						
Used services in general sector	3,455	2.5	*	-	3,456	1.8
Used services in specialty sector	7,380	5.4	2,179	3.9	9,559	5.0
Used services in informal sector	3,627	2.7	696	1.3	4,323	2.3
Dependence						
Used services in general sector	8,100	8.0	2,378	11.2	10,479	8.5
Used services in specialty sector	9,483	9.3	3,520	16.5	13,003	10.6
Used services in informal sector	10,238	10.1	2,344	11.0	12,584	10.2
Drug Use Disorders						
Abuse Only						
Used services in general sector	*	-	*	-	*	-
Used services in specialty sector	1,620	7.4	397	4.6	2,018	6.6
Used services in informal sector	633	2.9	397	4.6	1,030	3.4
Dependence						
Used services in general sector	7,616	14.5	2,411	11.0	10,027	13.5
Used services in specialty sector	14,375	27.4	5,885	26.9	20,260	27.3
Used services in informal sector	9,269	17.7	2,192	10.0	11,461	15.4
Notes: Unweighted sample size = 4,332 * None reported						

Table III D.2 Use of services for substance use disorders by gender and age groups, and service sector, Puerto Rico Household Population 15 to 64 years old, 2002.

Used Services For	Male Age Groups								Female Age Groups							
	15-17		18-24		25-34		35+		15-17		18-24		25-34		35+	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%
Alcohol Use Disorders																
Abuse Only																
Used services in general sector	*	-	1,649	5.0	*	-	1,807	3.1	*	-	*	-	*	-	*	-
Used services in specialty sector	*	-	2,017	6.2	1,951	5.2	3,412	5.8	*	-	614	3.9	696	4.4	869	3.8
Used services in informal sector	*	-	1,384	4.2	*	-	2,243	3.8	*	-	*	-	696	4.4	*	-
Dependence																
Used services in general sector	*	-	2,509	11.1	*	-	5,591	10.2	*	-	814	19.5	863	31.4	702	5.2
Used services in specialty sector	*	-	2,877	12.7	749	3.6	5,856	10.7	*	-	814	19.5	1,540	56.0	1,167	8.6
Used services in informal sector	*	-	3,506	15.5	1,300	6.2	5,433	10.0	416	50.0	814	19.5	413	15.0	702	5.2
Drug Use Disorders																
Abuse Only																
Used services in general sector	*	-	*	-	*	-	*	-	*	-	*	-	*	-	*	-
Used services in specialty sector	769	70.0	*	-	*	-	852	18.2	*	-	*	-	397	17.4	*	-
Used services in informal sector	*	-	633	7.0	*	-	*	-	*	-	*	-	397	17.4	*	-
Dependence																
Used services in general sector	*	-	4,058	34.2	*	-	3,558	16.4	*	-	814	24.2	373	7.2	1,224	9.4
Used services in specialty sector	*	-	5,423	45.7	4,108	22.1	4,844	22.3	*	-	814	24.2	2,607	50.3	2,464	19.0
Used services in informal sector	*	-	5,054	42.6	749	4.0	3,466	16.0	*	-	814	24.2	770	14.8	608	4.7

Notes:
 Unweighted sample size = 4,332
 * None reported

Table III D.3 Use of services for substance use disorders among pregnant women and women with children, Puerto Rico Household Population 15 to 64 years old, 2002.

Used Services For	Pregnant Women ¹		Women with Children ¹		All Women	
	n	%	n	%	n	%
Alcohol Use Disorders						
Abuse Only						
Used services in general sector	*	-	*	-	*	-
Used services in specialty sector	*	-	1,310	4.6	53,461	96.1
Used services in informal sector	*	-	696	2.5	54,944	98.7
Dependence						
Used services in general sector	702	53.3	1,264	15.1	18,893	88.8
Used services in specialty sector	*	-	2,114	25.3	17,751	83.5
Used services in informal sector	*	-	1,516	18.2	18,927	89.0
Drug Use Disorders						
Abuse Only						
Used services in general sector	*	-	*	-	*	-
Used services in specialty sector	*	-	397	10.4	8,194	95.4
Used services in informal sector	*	-	397	10.4	8,194	95.4
Dependence						
Used services in general sector	702	100.0	814	13.6	19,458	89.0
Used services in specialty sector	*	-	1,412	23.6	15,984	73.1
Used services in informal sector	*	-	814	13.6	19,677	90.0

Notes:
 Unweighted sample size = 4,332
 * None reported
¹ During the past 12 months

**Table III D.4 Use of services for substance use disorders by health region¹,
Puerto Rico Household Population 15 to 64 years old, 2002.**

Used Services For	Northwest and Northcentral		Central and West		Southeast and Southwest		Metropolitan		San Juan		East and Northeast	
	n	%	n	%	n	%	n	%	n	%	n	%
Alcohol Use Disorders												
Abuse Only												
Used services in general sector	1,016	2.8	*	-	*	-	633	1.9	413	1.5	1,394	3.8
Used services in specialty sector	1,947	5.3	397	1.3	852	3.1	2,093	6.2	2,007	7.4	2,263	6.2
Used services in informal sector	1,016	2.8	397	1.3	*	-	735	2.2	781	2.9	1,394	3.8
Dependence												
Used services in general sector	1,118	4.7	3,368	13.2	1,929	13.1	413	3.6	1,200	11.6	2,450	6.5
Used services in specialty sector	934	3.9	3,966	15.6	3,672	25.0	413	3.6	1,568	15.2	2,450	6.5
Used services in informal sector	934	3.9	4,353	17.1	3,094	21.1	964	8.3	787	7.6	2,450	6.5
Drug Use Disorders												
Abuse Only												
Used services in general sector	*	-	*	-	*	-	*	-	*	-	*	-
Used services in specialty sector	*	-	1,166	23.0	852	17.9	*	-	*	-	*	-
Used services in informal sector	*	-	397	7.8	*	-	633	34.0	*	-	*	-
Dependence												
Used services in general sector	1,016	5.6	2,190	16.5	2,303	19.1	*	-	781	9.9	3,738	19.9
Used services in specialty sector	1,889	10.5	4,908	36.9	4,744	39.4	*	-	3,401	43.2	5,317	28.4
Used services in informal sector	1,889	10.5	2,001	15.0	3,052	25.3	*	-	781	9.9	3,738	19.9

Notes:
 Unweighted sample size = 4,332
 * None reported
¹ See composition of health regions on page 59

**Table III D.5 Use of services for substance use disorders by school and work setting,
Puerto Rico Household Population 15 to 64 years old, 2002.**

Used Services For	In High School ¹		In College ²		In Workplace ³	
	n	%	n	%	n	%
Alcohol Use Disorders						
Abuse Only						
Used services in general sector	*	-	1,016	3.7	2,440	2.3
Used services in specialty sector	*	-	3,244	11.9	2,532	2.4
Used services in informal sector	*	-	1,384	5.1	1,807	1.7
Dependence						
Used services in general sector	1,144	17.1	997	16.1	3,951	6.4
Used services in specialty sector	1,144	17.1	*	-	5,349	8.6
Used services in informal sector	1,560	23.3	997	16.1	5,108	8.2
Drug Use Disorders						
Abuse Only						
Used services in general sector	*	-	*	-	*	-
Used services in specialty sector	769	44.4	*	-	*	-
Used services in informal sector	*	-	*	-	633	11.6
Dependence						
Used services in general sector	1,144	43.4	1,016	14.6	3,705	14.0
Used services in specialty sector	1,144	43.4	1,997	28.7	6,135	23.2
Used services in informal sector	1,144	43.4	1,384	19.9	4,333	16.4

Notes:

Unweighted sample size = 4,332

* None reported

¹ Population 15-18 years old attending high school

² Population attending college

³ Population employed in a formal job

Table III D.6 Use of services for substance use disorders by type of health insurance, Puerto Rico Household Population 15 to 64 years old, 2002.

Used Services For	Uninsured		Publicly Insured ¹		Privately Insured	
	n	%	n	%	n	%
Alcohol Use Disorders						
Abuse Only						
Used services in general sector	*	-	3,043	3.6	413	0.5
Used services in specialty sector	1,623	7.2	5,797	6.8	2,139	2.6
Used services in informal sector	397	1.8	3,145	3.7	781	0.9
Dependence						
Used services in general sector	*	-	9,278	13.6	1,200	3.4
Used services in specialty sector	2,588	12.8	8,145	12.0	2,270	6.5
Used services in informal sector	997	4.9	9,684	14.2	1,902	5.5
Drug Use Disorders						
Abuse Only						
Used services in general sector	*	-	*	-	*	-
Used services in specialty sector	397	5.2	852	4.9	769	13.9
Used services in informal sector	1,030	13.5	*	-	*	-
Dependence						
Used services in general sector	373	1.6	7,343	19.2	2,311	18.0
Used services in specialty sector	5,917	25.5	11,266	29.4	3,077	24.0
Used services in informal sector	1,977	8.5	6,776	17.7	2,708	21.1

Notes:

Unweighted sample size = 4,332

* None reported

¹ Includes participation in Medicare, Medicaid, Veteran's health program, or PR government health reform plan

E. Unmet Need of Services for Substance Use Disorders

Table III E.1 Unmet need of services for substance use disorders by gender, Puerto Rico Household Population 15 to 64 years old, 2002.						
Unmet Need For	Males		Females		Total Population	
	n	%	n	%	n	%
Alcohol Use Disorders						
Abuse Only	128,128	94.6	53,461	96.1	181,589	95.0
Dependence	92,379	90.7	17,751	83.5	110,131	89.4
Drug Use Disorders						
Abuse Only	20,256	92.6	8,194	95.4	28,450	93.4
Dependence	38,045	72.6	15,984	73.1	54,030	72.7

Notes:
 Unweighted sample size = 4,332
 * None reported

**Table III E.2 Unmet need of services for substance use disorders by gender and age groups,
Puerto Rico Household Population 15 to 64 years old, 2002.**

Unmet Need For	Male Age Groups								Female Age Groups							
	15-17		18-24		25-34		35+		15-17		18-24		25-34		35+	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%
Alcohol Use Disorders																
Abuse Only	6,781	100.0	30,677	93.8	35,235	94.8	55,435	94.2	1,494	100.0	15,260	96.1	14,946	95.6	21,761	96.2
Dependence	3,677	100.0	19,694	87.3	20,289	96.4	48,720	89.3	831	100.0	3,361	80.5	1,209	44.0	12,350	91.4
Drug Use Disorders																
Abuse Only	329	30.0	9,070	100.0	7,040	100.0	3,817	81.8	416	100.0	2,440	100.0	1,879	82.6	3,459	100.0
Dependence	329	100.0	6,435	54.3	14,440	77.9	16,841	77.7	349	100.0	2,549	75.8	2,580	49.7	10,507	81.0

Notes:
Unweighted sample size = 4,332
* None reported

Table III E.3 Unmet need of services for substance use disorders among pregnant women and women with children, Puerto Rico Household Population 15 to 64 years old, 2002.

Unmet Need For	Pregnant Women ¹		Women with Children ¹		All Women	
	n	%	n	%	n	%
Alcohol Use Disorders						
Abuse Only	2,753	100.0	26,988	95.4	*	200.0
Dependence	1,315	100.0	6,232	74.7	55,640	100.0
Drug Use Disorders						
Abuse Only	450	100.0	3,431	89.6	*	200.0
Dependence	702	100.0	4,580	76.4	8,591	100.0

Notes:
 Unweighted sample size = 4,332
 * None reported
¹ During the past 12 months

**Table III E.4 Unmet need of services for substance use disorders by health region¹,
Puerto Rico Household Population 15 to 64 years old, 2002.**

Unmet Need For	Northwest and Northcentral		Central and West		Southeast and Southwest		Metropolitan		San Juan		East and Northeast	
	n	%	n	%	n	%	n	%	n	%	n	%
Alcohol Use Disorders												
Abuse Only	34,815	94.7	29,795	98.7	26,461	96.9	31,435	93.8	24,951	92.6	34,133	93.8
Dependence	22,721	96.1	21,456	84.4	11,000	75.0	11,208	96.4	8,754	84.8	34,992	93.5
Drug Use Disorders												
Abuse Only	5,114	100.0	3,899	77.0	3,910	82.1	1,860	100.0	3,801	100.0	9,866	100.0
Dependence	16,181	89.5	8,395	63.1	7,308	60.6	4,248	100.0	4,466	56.8	13,433	71.6

Notes:

Unweighted sample size = 4,332

* None reported

¹ See composition of health regions on page 59

**Table III E.5 Unmet need of services for substance use disorders by school and work setting,
Puerto Rico Household Population 15 to 64 years old, 2002.**

Unmet Need For	In High School ¹		In College ²		In Workplace ³	
	n	%	n	%	n	%
Alcohol Use Disorders						
Abuse Only	7,530	100.0	23,908	88.1	102,771	97.6
Dependence	5,560	82.9	6,173	100.0	56,639	91.4
Drug Use Disorders						
Abuse Only	963	55.6	5,488	100.0	5,434	100.0
Dependence	1,493	56.6	4,960	71.3	20,298	76.8

Notes:

Unweighted sample size = 4,332

* None reported

¹ Population 15-18 years old attending high school

² Population attending college

³ Population employed in a formal job

Table III E.6 Unmet need of services for substance use disorders by type of health insurance, Puerto Rico Household Population 15 to 64 years old, 2002.

Unmet Need For	Uninsured		Publicly Insured ¹		Privately Insured	
	n	%	n	%	n	%
Alcohol Use Disorders						
Abuse Only	21,037	92.8	78,920	93.2	81,632	97.4
Dependence	17,592	87.2	59,958	88.0	32,581	93.5
Drug Use Disorders						
Abuse Only	7,226	94.8	16,467	95.1	4,757	86.1
Dependence	17,256	74.5	27,041	70.6	9,732	76.0

Notes:

Unweighted sample size = 4,332

* None reported

¹ Includes participation in Medicare, Medicaid, Veteran's health program, or PR government health reform plan

F. Potential Demand of Services for Substance Use Disorders

Table III F.1 Potential demand of services for substance use disorders by gender, Puerto Rico Household Population 15 to 64 years old, 2002.						
Potential Demand to Receive Formal Help For	Males		Females		Total Population	
	n	%	n	%	n	%
Alcohol Use Disorders						
Abuse Only	6,744	5.0	3,506	6.3	10,250	5.4
Dependence	19,878	19.5	6,080	28.6	25,958	21.1
Drug Use Disorders						
Abuse Only	2,845	13.0	*	-	2,845	9.3
Dependence	22,227	42.4	8,910	40.7	31,138	41.9

Notes:
 Unweighted sample size = 4,332
 * None reported

Table III F.2 Potential demand of services for substance use disorders by gender and age groups, Puerto Rico Household Population 15 to 64 years old, 2002.

Potential Demand to Receive Formal Help For	Male Age Groups								Female Age Groups							
	15-17		18-24		25-34		35+		15-17		18-24		25-34		35+	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%
Alcohol Use Disorders																
Abuse Only	*	-	*	-	3,086	8.3	3,658	6.2	349	23.4	*	-	299	1.9	2,858	12.6
Dependence	*	-	2,896	12.8	3,486	16.6	13,496	24.7	*	-	*	-	1,424	51.8	4,656	34.4
Drug Use Disorders																
Abuse Only	*	-	1,016	11.2	1,829	26.0	*	-	*	-	*	-	*	-	*	-
Dependence	*	-	3,285	27.7	6,942	37.4	12,001	55.3	349	100.0	1,428	42.5	1,074	20.7	6,059	46.7

Notes:
 Unweighted sample size = 4,332
 * None reported

Table III F.3 Potential demand of services for substance use disorders among pregnant women and women with children, Puerto Rico Household Population 15 to 64 years old, 2002.

Potential Demand to Receive Formal Help For	Pregnant Women ¹		Women with Children ¹		All Women	
	n	%	n	%	n	%
Alcohol Use Disorders						
Abuse Only	*	-	299	1.1	52,134	93.7
Dependence	702	53.3	1,689	20.2	15,191	71.4
Drug Use Disorders						
Abuse Only	*	-	*	-	*	-
Dependence	702	100.0	2,503	41.8	8,591	100.0

Notes:
 Unweighted sample size = 4,332
 * None reported
¹ During the past 12 months

**Table III F.4 Potential demand of services for substance use disorders by health region¹,
Puerto Rico Household Population 15 to 64 years old, 2002.**

Potential Demand to Receive Formal Help For	Northwest and Northcentral		Central and West		Southeast and Southwest		Metropolitan		San Juan		East and Northeast	
	n	%	n	%	n	%	n	%	n	%	n	%
Alcohol Use Disorders												
Abuse Only	2,897	7.9	*	-	587	2.1	299	0.9	1,839	6.8	4,628	12.7
Dependence	4,265	18.0	6,233	24.5	2,272	15.5	3,048	26.2	3,195	31.0	6,945	18.5
Drug Use Disorders												
Abuse Only	1,016	19.9	*	-	*	-	*	-	613	16.1	1,216	12.3
Dependence	6,554	36.3	5,512	41.4	4,967	41.2	595	14.0	2,980	37.9	10,530	56.2

Notes:
 Unweighted sample size = 4,332
 * None reported
¹ See composition of health regions on page 59

Table III F.5 Potential demand of services for substance use disorders by school and work setting, Puerto Rico Household Population 15 to 64 years old, 2002.

Potential Demand to Receive Formal Help For	In High School ¹		In College ²		In Workplace ³	
	n	%	n	%	n	%
Alcohol Use Disorders						
Abuse Only	349	4.6	613	2.3	2,912	2.8
Dependence	1,144	17.1	1,449	23.5	10,416	16.8
Drug Use Disorders						
Abuse Only	*	-	613	11.2	*	-
Dependence	2,637	100.0	2,334	33.5	8,452	32.0

Notes:

Unweighted sample size = 4,332

* None reported

¹ Population 15-18 years old attending high school

² Population attending college

³ Population employed in a formal job

Table III F.6 Potential demand of services for substance use disorders by type of health insurance, Puerto Rico Household Population 15 to 64 years old, 2002.

Potential Demand to Receive Formal Help For	Uninsured		Publicly Insured ¹		Privately Insured	
	n	%	n	%	n	%
Alcohol Use Disorders						
Abuse Only	1,972	8.7	8,277	9.8	*	-
Dependence	2,503	12.4	17,126	25.1	6,329	18.2
Drug Use Disorders						
Abuse Only	*	-	2,845	16.4	*	-
Dependence	6,288	27.1	21,132	55.2	3,717	29.0

Notes:

Unweighted sample size = 4,332

* None reported

¹ Includes participation in Medicare, Medicaid, Veteran's health program, or PR government health reform plan

G. Co-Occurring Mental Disorders Among Individuals With Substance Use Disorders

Table III G.1 Co-occurring mental disorders among individuals with substance use disorders by gender, Puerto Rico Household Population 15 to 64 years old, 2002.						
In need of services for:	Males		Females		Total Population	
	n	%	n	%	n	%
Alcohol Use Disorders						
Abuse Only						
with Major Depression	17,636	13.0	20,878	37.5	38,513	20.1
with Generalized Anxiety Disorder	13,813	10.2	12,128	21.8	25,942	13.6
Dependence						
with Major Depression	22,912	22.5	10,015	47.1	32,929	26.7
with Generalized Anxiety Disorder	15,834	15.5	5,619	26.4	21,454	17.4
Drug Use Disorders						
Abuse Only						
with Major Depression	5,931	27.1	3,665	42.7	9,596	31.5
with Generalized Anxiety Disorder	6,738	30.8	1,295	15.1	8,033	26.4
Dependence						
with Major Depression	16,158	30.8	10,399	47.6	26,556	35.7
with Generalized Anxiety Disorder	16,519	31.5	6,736	30.8	23,255	31.3
Notes: Unweighted sample size = 4,332 * None reported						

Table III G.2 Co-occurring mental disorders among individuals with substance use disorders by gender and age groups, Puerto Rico Household Population 15 to 64 years old, 2002.

In need of services for:	Male Age Groups								Female Age Groups							
	15-17		18-24		25-34		35+		15-17		18-24		25-34		35+	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%
Alcohol Use Disorders																
Abuse Only																
with Major Depression	530	7.8	4,908	15.0	5,007	13.5	7,190	12.2	*	-	5,955	37.5	6,391	40.9	8,532	37.7
with Generalized Anxiety Disorder	*	-	3,917	12.0	4,557	12.3	5,340	9.1	*	-	2,194	13.8	3,105	19.9	6,829	30.2
Dependence																
with Major Depression	769	20.9	3,661	16.2	5,451	25.9	13,032	23.9	*	-	2,042	48.9	863	31.4	7,111	52.6
with Generalized Anxiety Disorder	478	13.0	1,002	4.4	2,239	10.6	12,116	22.2	*	-	614	14.7	1,276	46.4	3,729	27.6
Drug Use Disorders																
Abuse Only																
with Major Depression	*	-	633	7.0	1,216	17.3	4,082	87.4	*	-	*	-	847	37.2	2,818	81.5
with Generalized Anxiety Disorder	*	-	633	7.0	2,023	28.7	4,082	87.4	*	-	*	-	450	19.8	845	24.4
Dependence																
with Major Depression	*	-	2,163	18.2	8,092	43.6	5,903	27.2	*	-	814	24.2	346	6.7	9,238	71.2
with Generalized Anxiety Disorder	*	-	2,163	18.2	6,733	36.3	7,623	35.2	*	-	*	-	346	6.7	6,390	49.3

Notes:
 Unweighted sample size = 4,332
 * None reported

Table III G.3 Co-occurring mental disorders among individuals with substance use disorders among pregnant women and women with children, Puerto Rico Household Population 15 to 64 years old, 2002.

In need of services for:	Pregnant Women ¹		Women with Children ¹		All Women	
	n	%	n	%	n	%
Alcohol Use Disorders						
Abuse Only						
with Major Depression	1,747	63.5	11,363	40.2	*	200.0
with Generalized Anxiety Disorder	*	-	6,395	22.6	*	200.0
Dependence						
with Major Depression	1,315	100.0	2,472	29.6	55,639	100.0
with Generalized Anxiety Disorder	702	53.3	450	5.4	55,640	100.0
Drug Use Disorders						
Abuse Only						
with Major Depression	450	100.0	1,959	51.2	*	200.0
with Generalized Anxiety Disorder	450	100.0	954	24.9	*	200.0
Dependence						
with Major Depression	702	100.0	2,913	48.6	8,591	100.0
with Generalized Anxiety Disorder	702	100.0	1,008	16.8	8,592	100.0

Notes:
 Unweighted sample size = 4,332
 * None reported
¹ During the past 12 months

**Table III G.4 Co-occurring mental disorders among individuals with substance use disorders by health region¹,
Puerto Rico Household Population 15 to 64 years old, 2002.**

In need of services for:	Northwest and Northcentral		Central and West		Southeast and Southwest		Metropolitan		San Juan		East and Northeast	
	n	%	n	%	n	%	n	%	n	%	n	%
Alcohol Use Disorders												
Abuse Only												
with Major Depression	7,643	20.8	4,565	15.1	4,406	16.1	4,843	14.4	7,019	26.0	10,039	27.6
with Generalized Anxiety Disorder	4,602	12.5	1,667	5.5	2,863	10.5	5,786	17.3	4,991	18.5	6,032	16.6
Dependence												
with Major Depression	7,189	30.4	5,102	20.1	3,912	26.7	1,986	17.1	2,623	25.4	12,116	32.4
with Generalized Anxiety Disorder	1,854	7.8	3,326	13.1	2,378	16.2	1,460	12.6	1,901	18.4	10,535	28.1
Drug Use Disorders												
Abuse Only												
with Major Depression	954	18.7	1,005	19.8	852	17.9	880	47.3	341	9.0	5,565	56.4
with Generalized Anxiety Disorder	1,678	32.8	1,299	25.6	852	17.9	633	34.0	341	9.0	3,230	32.7
Dependence												
with Major Depression	6,568	36.3	3,803	28.6	3,213	26.7	2,419	56.9	1,784	22.7	8,770	46.8
with Generalized Anxiety Disorder	5,347	29.6	3,424	25.7	2,428	20.1	1,824	42.9	1,970	25.0	8,262	44.1

Notes:
 Unweighted sample size = 4,332
 * None reported
¹ See composition of health regions on page 59

Table III G.5 Co-occurring mental disorders among individuals with substance use disorders by school and work setting, Puerto Rico Household Population 15 to 64 years old, 2002.

In need of services for:	In High School ¹		In College ²		In Workplace ³	
	n	%	n	%	n	%
Alcohol Use Disorders						
Abuse Only						
with Major Depression	1,447	19.2	7,469	27.5	14,633	13.9
with Generalized Anxiety Disorder	633	8.4	2,212	8.1	10,543	10.0
Dependence						
with Major Depression	769	11.5	*	-	12,574	20.3
with Generalized Anxiety Disorder	*	-	*	-	7,427	12.0
Drug Use Disorders						
Abuse Only						
with Major Depression	633	36.6	*	-	504	9.3
with Generalized Anxiety Disorder	633	36.6	*	-	2,527	46.5
Dependence						
with Major Depression	*	-	*	-	7,618	28.8
with Generalized Anxiety Disorder	*	-	*	-	4,343	16.4

Notes:

Unweighted sample size = 4,332

* None reported

¹ Population 15-18 years old attending high school

² Population attending college

³ Population employed in a formal job

**Table III G.6 Co-occurring mental disorders among individuals with substance use disorders
by type of health insurance,
Puerto Rico Household Population 15 to 64 years old, 2002.**

In need of services for:	Uninsured		Publicly Insured ¹		Privately Insured	
	n	%	n	%	n	%
Alcohol Use Disorders						
Abuse Only						
with Major Depression	8,205	36.2	19,470	23.0	10,839	12.9
with Generalized Anxiety Disorder	4,719	20.8	12,489	14.7	8,733	10.4
Dependence						
with Major Depression	1,590	7.9	25,280	37.1	6,058	17.4
with Generalized Anxiety Disorder	1,175	5.8	16,986	24.9	3,292	9.4
Drug Use Disorders						
Abuse Only						
with Major Depression	1,638	21.5	7,617	44.0	341	6.2
with Generalized Anxiety Disorder	1,358	17.8	6,334	36.6	341	6.2
Dependence						
with Major Depression	6,668	28.8	15,571	40.6	4,318	33.7
with Generalized Anxiety Disorder	4,290	18.5	16,112	42.1	2,854	22.3

Notes:

Unweighted sample size = 4,332

* None reported

¹ Includes participation in Medicare, Medicaid, Veteran's health program, or PR government health reform plan

IV. Methods and Procedures

Study Sample

This study was a cross-sectional survey of non-institutionalized, non-transient adolescents and adults living in Puerto Rico. All non-institutionalized individuals 15 to 64 years old living in households in Puerto Rico constituted the study population. The study was based on a stratified, cluster area probability sample.

The island territory was stratified in six strata, each strata corresponding to one or two health regions. The ten health regions of Puerto Rico were grouped into six groups based on two criteria: geographical proximity and similarity of substance abuse service need as estimated from the 1998 household survey (Colón et al, 2002). Table IV.1 below shows the composition of the study strata.

Stratum 1 Northwest and Northcentral	Stratum 2 Central and West	Stratum 3 Southeast and Southwest	Stratum 4 Metropolitan	Stratum 5 San Juan	Stratum 6 East and Northeast
Aguada	Adjuntas	Arroyo	Bayamón	San Juan	Caguas
Aguadilla	Aguas Buenas	Coamo	Cataño		Canóvanas
Añasco	Aibonito	Guánica	Dorado		Carolina
Arecibo	Barranquitas	Guayama	Guaynabo		Ceiba
Barceloneta	Cabo Rojo	Guayanilla	Toa Baja		Culebra
Camuy	Cayey	Juana Díaz	Vega Alta		Fajardo
Ciales	Cidra	Maunabo			Gurabo
Florida	Comerio	Patillas			Humacao
Hatillo	Corozal	Peñuelas			Juncos
Isabela	Hormigueros	Ponce			Las Piedras
Lares	Jayuya	Salinas			Loíza
Manatí	Lajas	Santa Isabel			Luquillo
Moca	Las Marías	Yauco			Naguabo
Morovis	Maricao				Río Grande
Quebradillas	Mayagüez				San Lorenzo
Rincón	Naranjito				Trujillo Alto
Utua	Orocovis				Vieques
Vega Baja	Sabana Grande				Yabucoa
	San Germán				
	San Sebastián				
	Toa Alta				
	Villalba				

Household segments of approximately 10 households each were selected within each stratum in two stages. In a first stage, a systematic selection of census block groups (CBGs) was made with probability proportional to the number of households in the CBGs. In a second stage, one or more segments were selected at random within each selected CBG. Four replicate samples of household segments were generated with identical procedures, each replicate consisting of 192 household segments. During the field work three of the four replicates were implemented.

Respondent Selection and Recruitment

Interviewers visited each household in the selected household segments and listed all residents 15 to 64 years old and selected one potential participant using a table of random numbers. The table was designed to select adolescents 15 to 17 years old with a probability of one. Upon selection of the potential participants, field enumerators proceeded to contact and invite them to participate. Participation was voluntary and anonymous. No identifying information was collected. Active and passive refusal conversion was attempted up to five times. Consenting respondents were asked to answer an interview, complete a self-administered questionnaire, and provide a sample of scalp hair, and were offered \$20 for their time and effort. A field supervisor verified 10% of all enumerations and participant selection. Enumerators were able to access 98.0% of the selected household segments, and to enumerate the residents in 96.1% of the households in the accessed segments. Of the enumerated and selected respondents, 86.8% completed the assessment interview. A total of 4,332 respondents participated in the study. These data yield an overall response rate of 81.7%.

Interviewing & Measurements

The interview protocol included questions about demographic characteristics, the substance abuse modules of the World Health Organization Composite International Diagnostic Interview (CIDI) which implements DSM-IV Psychiatric nosology, use of health services within the previous year, including substance abuse services, and the short-CIDI modules of affective and anxiety disorders. The interview section lasted, on

average, 25 minutes. Respondents completed the self-administered questionnaires on average in 20 minutes.

Sample Weights

Sample weights were calculated as the inverse of the probability of selection. Post-stratification weighting was used to adjust for non-response.

Estimates of Standard Errors

Standard errors were estimated with SUDAAN (Research Triangle Institute, Research Triangle Park, NC, 1998). SUDAAN is a statistical software for the analysis of correlated data. Its estimation algorithms have been designed to take into consideration the effects of stratification and clustering of the sample. On average, the complex sample design of the household study had the effect of reducing the standard errors by approximately 10%. To ease the reading of the tables in Section III, standard errors were not included. Approximate error margins have been calculated and are shown in Table IV.2.

Table IV.2 Sampling errors of study estimates.

Study Group	Estimated Percent																											
	1.0	2.0	3.0	4.0	5.0	10.0	15.0	20.0	25.0	30.0	35.0	40.0	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0	90.0	95.0	96.0	97.0	98.0	99.0	
Total Population	0.3	0.4	0.5	0.5	0.6	0.8	1.0	1.1	1.2	1.2	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.2	1.2	1.1	1.0	0.8	0.6	0.5	0.5	0.4	0.3	
Males																												
All	0.4	0.6	0.7	0.8	0.9	1.3	1.5	1.7	1.9	2.0	2.1	2.1	2.2	2.2	2.2	2.1	2.1	2.0	1.9	1.7	1.5	1.3	0.9	0.8	0.7	0.6	0.4	
15-17 years old	1.2	1.7	2.0	2.3	2.6	3.6	4.3	4.8	5.2	5.5	5.7	5.9	6.0	6.0	6.0	5.9	5.7	5.5	5.2	4.8	4.3	3.6	2.6	2.3	2.0	1.7	1.2	
18-24 years old	1.1	1.6	1.9	2.2	2.4	3.3	4.0	4.5	4.8	5.1	5.3	5.5	5.6	5.6	5.6	5.5	5.3	5.1	4.8	4.5	4.0	3.3	2.4	2.2	1.9	1.6	1.1	
25-34 years old	1.0	1.4	1.7	1.9	2.1	2.9	3.5	3.9	4.2	4.5	4.7	4.8	4.9	4.9	4.9	4.8	4.7	4.5	4.2	3.9	3.5	2.9	2.1	1.9	1.7	1.4	1.0	
35 or older	0.6	0.8	1.0	1.2	1.3	1.8	2.1	2.4	2.6	2.8	2.9	2.9	3.0	3.0	3.0	2.9	2.9	2.8	2.6	2.4	2.1	1.8	1.3	1.2	1.0	0.8	0.6	
Females																												
All	0.3	0.5	0.6	0.7	0.7	1.0	1.2	1.4	1.5	1.6	1.6	1.7	1.7	1.7	1.7	1.7	1.6	1.6	1.5	1.4	1.2	1.0	0.7	0.7	0.6	0.5	0.3	
15-17 years old	1.1	1.6	2.0	2.3	2.5	3.5	4.1	4.6	5.0	5.3	5.5	5.6	5.7	5.8	5.7	5.6	5.5	5.3	5.0	4.6	4.1	3.5	2.5	2.3	2.0	1.6	1.1	
18-24 years old	0.9	1.3	1.5	1.8	2.0	2.7	3.2	3.6	3.9	4.1	4.3	4.4	4.5	4.5	4.5	4.4	4.3	4.1	3.9	3.6	3.2	2.7	2.0	1.8	1.5	1.3	0.9	
25-34 years old	0.7	1.0	1.2	1.4	1.6	2.2	2.6	2.9	3.1	3.3	3.4	3.5	3.6	3.6	3.6	3.5	3.4	3.3	3.1	2.9	2.6	2.2	1.6	1.4	1.2	1.0	0.7	
35 or older	0.5	0.6	0.8	0.9	1.0	1.4	1.6	1.8	2.0	2.1	2.2	2.3	2.3	2.3	2.3	2.3	2.2	2.1	2.0	1.8	1.6	1.4	1.0	0.9	0.8	0.6	0.5	
Pregnant Women	1.3	1.8	2.2	2.6	2.9	3.9	4.7	5.3	5.7	6.0	6.3	6.4	6.5	6.6	6.5	6.4	6.3	6.0	5.7	5.3	4.7	3.9	2.9	2.6	2.2	1.8	1.3	
Wom with Children	0.5	0.7	0.9	1.0	1.2	1.6	1.9	2.1	2.3	2.4	2.5	2.6	2.6	2.7	2.6	2.6	2.5	2.4	2.3	2.1	1.9	1.6	1.2	1.0	0.9	0.7	0.5	
Region																												
Northwest and Northcentral	0.6	0.9	1.1	1.2	1.4	1.9	2.2	2.5	2.7	2.9	3.0	3.0	3.1	3.1	3.1	3.0	3.0	2.9	2.7	2.5	2.2	1.9	1.4	1.2	1.1	0.9	0.6	
Central and West	0.7	0.9	1.1	1.3	1.4	2.0	2.4	2.6	2.9	3.0	3.1	3.2	3.3	3.3	3.3	3.2	3.1	3.0	2.9	2.6	2.4	2.0	1.4	1.3	1.1	0.9	0.7	
Southeast and Southwest	0.7	1.0	1.2	1.4	1.5	2.1	2.5	2.8	3.0	3.2	3.3	3.4	3.5	3.5	3.5	3.4	3.3	3.2	3.0	2.8	2.5	2.1	1.5	1.4	1.2	1.0	0.7	
Metropolitan	0.6	0.9	1.1	1.3	1.4	1.9	2.3	2.6	2.8	3.0	3.1	3.2	3.2	3.2	3.2	3.2	3.1	3.0	2.8	2.6	2.3	1.9	1.4	1.3	1.1	0.9	0.6	
San Juan	0.6	0.9	1.1	1.2	1.4	1.9	2.2	2.5	2.7	2.9	3.0	3.1	3.1	3.1	3.1	3.1	3.0	2.9	2.7	2.5	2.2	1.9	1.4	1.2	1.1	0.9	0.6	
East and Northeast	0.7	1.0	1.2	1.4	1.5	2.1	2.5	2.8	3.1	3.2	3.4	3.5	3.5	3.5	3.5	3.5	3.4	3.2	3.1	2.8	2.5	2.1	1.5	1.4	1.2	1.0	0.7	
Study/work settings																												
In High School	0.9	1.2	1.5	1.7	1.9	2.7	3.2	3.6	3.9	4.1	4.3	4.4	4.4	4.5	4.4	4.4	4.3	4.1	3.9	3.6	3.2	2.7	1.9	1.7	1.5	1.2	0.9	
In College	0.9	1.2	1.5	1.7	1.9	2.6	3.1	3.5	3.8	4.0	4.2	4.3	4.4	4.4	4.4	4.3	4.2	4.0	3.8	3.5	3.1	2.6	1.9	1.7	1.5	1.2	0.9	
In Workplace	0.4	0.6	0.7	0.8	0.9	1.3	1.5	1.7	1.8	1.9	2.0	2.1	2.1	2.1	2.1	2.1	2.0	1.9	1.8	1.7	1.5	1.3	0.9	0.8	0.7	0.6	0.4	
Type of Health Insurance																												
Uninsured	1.0	1.4	1.7	1.9	2.1	2.9	3.5	3.9	4.2	4.5	4.6	4.8	4.8	4.9	4.8	4.8	4.6	4.5	4.2	3.9	3.5	2.9	2.1	1.9	1.7	1.4	1.0	
Publicly Insured	0.4	0.5	0.6	0.7	0.8	1.1	1.3	1.5	1.6	1.7	1.8	1.8	1.9	1.9	1.9	1.8	1.8	1.7	1.6	1.5	1.3	1.1	0.8	0.7	0.6	0.5	0.4	
Privately Insured	0.4	0.6	0.7	0.8	0.9	1.2	1.5	1.7	1.8	1.9	2.0	2.0	2.1	2.1	2.1	2.0	2.0	1.9	1.8	1.7	1.5	1.2	0.9	0.8	0.7	0.6	0.4	

V. References

- Administración de Servicios de Salud Mental y Contra la Adicción. Puerto Rico Substance Abuse Needs Assessment Program: 2002 Treatment Capacity Survey. Hato Rey (PR): Administración de Servicios de Salud Mental y Contra la Adicción; 2002.
- Alegría M, Robles RR, Freeman DH. Patterns of mental health care utilization among island Puerto Rican poor. *Am J Public Health* 1991;81:875-9.
- American Psychiatric Association. Diagnostic and Statistical Manual of the Mental Disorders, 4th ed. Washington DC, American Psychiatric Association; 1994.
- Anthony JC, Helzer JE. Syndromes of drug abuse and dependence. In: Tsuang M, Tohen M, Zahner G, editors. *Textbook of psychiatric epidemiology*. New York: Wiley; 1991.
- Aquilino WS. Interview modes effects in surveys of drug and alcohol use. A field experiment. *Public Opinion Quarterly* 1994;58:210-40.
- Bravo M, Canino C, Rubio-Stipec M, Woodbury M. A cross-cultural adaptation of a diagnostic instrument: The DIS adaptation in Puerto Rico. *Cult Med Psychiatry* 1991;15:1-18.
- Bucholz KK. Nosology and epidemiology of addictive disorders and their comorbidity. *Psychiatr Clin North Am* 1999;22:221-40.
- Canino G, Anthony JC, Freeman D, Shrout P, Rubio-Stipec M. Drug abuse and illicit drug use in Puerto Rico. *Am J Public Health* 1993;83:194-200.
- Canino G, Burnam A, Caetano R. The prevalence of alcohol abuse and/or dependence in two Hispanic communities. In: Helzer J, Canino G, editors. *Alcoholism-North America, Europe and Asia: A Coordinated Analyses of Population from Ten Regions*, Oxford University Press; 1992. p. 131-58.
- Choi BC. Perspectives on epidemiologic surveillance in the 21st century. *Chronic Dis Can* 1998;19:145-51.
- Colón HM, Canino G, Robles RR, Sahai H. Prevalence and correlates of DSM-IV substance use disorders in Puerto Rico. *Boletín de la Asociación Médica de Puerto Rico* 2002 ???
- Colón HM, Robles RR, Sahai H. The validity of drug use responses in a household survey in Puerto Rico: Comparison of survey responses of cocaine and heroin use with hair-tests. *International Journal of Epidemiology* 2001;30:1042-1049.
- Colón HM, Robles RR, Sahai H. The validity of drug use self-reports among hard core drug users in a household survey in Puerto Rico: Comparison of survey responses of cocaine and heroin use with hair tests. *Drug and Alcohol Dependence*. 2002; 67:269-279.

- Hall W. What have population surveys revealed about substance use disorders and their co-morbidity with other mental disorders? *Drug and Alcohol Review* 1996;15:157-70.
- Harrison LD. The validity of self-reported drug use in survey research: An overview and critique of research methods. *NIDA Res Monogr* 1998;167:17-36.
- McQueen DV. A world behaving badly: The global challenge for behavioral surveillance. *Am J Public Health* 1999;89:1312-4.
- Rogers SM, Miller HG, Turner CF. Effects of interview mode on bias in survey measurements of drug use: Do respondent characteristics make a difference? *Subst Use Misuse* 1998;33:2179-200.
- Substance Abuse and Mental Health Services Administration. Results from the 2001 National Household Survey on Drug Abuse: Volume I. Summary of National Findings. Office of Applied Studies, NHSDA Series H-17, DHHS Publication No. SMA 02-3758, 2002, Rockville, MD.
- Tourangeau R, Smith TW. Asking sensitive questions: The impact of data collection mode, question format, and question context. *Public Opinion Quarterly* 1996;60:275-304.
- Turner C, Lessler J, Devore JW. Effects of mode of administration and wording on reporting of drug use. In: Turner C, Lessler J, Gfroerer HJ, editors. *Survey Measurement of Drug Use: Methodological Studies*. Rockville (MD): National Institute on Drug Abuse, US Department of Health and Human Services, 1992.
- World Health Organization. *The ICD-10 Classification of Mental and Behavioural Disorders: Diagnostic Criteria for Research*. Geneva: World Health Organization; 1993.