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Stigmatization of Illicit Drug Use among Puerto Rican Health Professionals in Training[1]

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Abstract

Social stigma continues to be a barrier for health promotion in our society. One of the most stigmatized health conditions in our time continues to be addiction to illicit drug use. Although it has been widely recognized as a health concern, criminalizing approaches continue to be common in Puerto Rico. Health professionals need to engage in challenging the stigma of illicit drug use in order to foster policies and government efforts with health-oriented approaches. Still, personal stigmatizing attitudes among them continue to be a barrier for the implementation of this agenda. Therefore, the main objectives of this study were to document stigma towards illicit drug use among a sample of health professionals in training, and explore differences in such attitudes among participants from different areas of training. In order to achieve this objective we carried out a sequential mixed method approach with a sample of 501 health professionals in training or practice from the disciplines of medicine, nursing, psychology and social work. Results evidence the continued existence of stigmatizing attitudes among this population. We discuss some of the implications for public health and potential strategies for action.

Keywords

Illicit Drug Use; Stigma; Puerto Rico; Health Professionals

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Illicit Drug use in Puerto Rico

Illicit drug use is attributed as the source of a plethora of social problems in Puerto Rico. Media outlets constantly report on drug related issues and directly or indirectly suggest illegal drug use as the problem's source. Still, less than ten studies have attempted to assess the magnitude of illicit drug use in Puerto Rico (1-2-3-4-5-6). Although these studies used different methodological approaches, they all evidence the phenomenon of illicit drug use and subsequent dependence affects less than 8.2% of the population (7). Nevertheless, the social consequences of the approaches taken towards illicit drug use yield even more negative consequences than the drugs themselves. For example, it has been stated that illicit drug trade in Puerto Rico is responsible for 63% of the homicides in the Island (8). While in 1986 1.6 of homicides were related to illicit drug trade, by 2001 this number had increased 63% (SPAPRV, 2004). Ever since the seventies the homicide rate (per 100,000 people) in Puerto Rico has continued to grow: 8.7 in 1970, 15 in 1980, 16.5 in 1990, and 18.3 in 2000 (9). In 2008 the homicide rate was 20 per 100,000 (10).

Another area of concern is the incarceration rate. Close to 61% of the inmate population in Puerto Rico is incarcerated due to a drug related conviction (11). Although illicit drug consumption in Puerto Rico is not associated with income or educational background (12), the majority of the arrests carried out are of the poor, young, and unemployed (Nevárez, 2008). The profile of the arrested provides a glimpse of the marginalization that fosters illicit drug use: 61% only reached the 9th grade of formal education, 91% were unemployed when arrested, 81% did not have any formal occupation, and 52% were younger than 21 years of age (13).

This marginalized sector of the population is trapped in our conceptualization of illegal drug use as a crime, and not a health problem. Despite the fact that the United States' National Institutes of Health have identified illicit drug addiction as a chronic disease, similar to type II diabetes (14), the most frequent treatment option used in Puerto Rico and the United States continues to be jail. At present, one out of every 35 male Latinos is in prison in the United States (15-16). This model is imitated in Puerto Rico with 402 inmates per 100,000 inhabitants, ranking the Island as the 12th state in the world with regards to incarceration (10). To make this scenario even worse, despite of the existence of more than 104,756 cases of illicit drug use dependence, the actual capacity for treatment accounts for only eight percent of this population (12). Even if treatment was sought, it could not be provided efficiently for all. This precarious scenario is facilitated and fostered by the stigmatization of illicit drug users.

The Stigmatization of Illicit Drug Use

Stigmatization is the term used to denote the devaluation of an individual due to their appearance, behaviors or group affiliations (17). Although stigmas are intimately linked to the individual targeted, socio-structural conditions such as poverty, inequality, and social oppression work to strengthen these socially shared negative opinions and actions (18). Therefore, in order to truly understand stigma, we must explore beyond the affected individual, and assess the power dynamics that underlie the stigmatizing process itself (19). This is a difficult process, as most stigmatizing conditions are attributed to individual responsibility rather than to the socio-structural conditions that create them (20).

For example, the stigmatization of illicit drug users emanates from religious and medical beliefs that view addiction as self induced, or due to lack of will power, among people incapable of controlling their deviant behavior (21). Public perceptions of drug users as dangerous deviants, who pose a threat to moral and socioeconomic stability, have lead to the formulation of laws and policies intended to impose external controls on their behaviors (21-22-23). Upon the enactment of this anti-narcotics legislation, the perception of drug users as deviant criminals is generated and maintained (24).

This process of stigmatization of drug addicts is intertwined with historic racial and ethnic prejudice. During the beginning of the 20th century cocaine use was associated with Blacks, marihuana with Mexicans and opium with Chinese immigrants in the United States. The passage of laws against the drug users allowed people to perpetrate racial discrimination against these groups without remorse. For example, by 1909 the association of opium with Chinese migrants was so strong, that they were almost totally excluded from entering the United States (22).

In Puerto Rico the stigmatization of illegal drug users is reflected in the governmental allocation of resources. Since the early 1970s the priority of the State budget has veered towards law enforcement and the prosecution of users, rather than focusing on treatment and prevention initiatives. These allocations of resources are carried out ignoring the scientific evidence that points to the cost effectiveness of investing in treatment rather than incarceration (25).

Stigma and Health Professionals

Health professionals manifest stigmatization towards drug users. One of the consequences of these negative attitudes is the denial of the basic standards of care to this population (7). One of the most common stigmatizing notions towards drug users is the idea that illicit drug dependence is a self-inflicted condition, attributing its roots to character flaws. The case of heroin addiction is particularly revealing. For example, research has shown that even among health professionals that work with illicit drug users, methadone treatment is deemed preferable to heroin use but significantly less desirable than the person functioning without drugs (26). Research suggests that methadone treatment programs whose staff adhere to an abstinence-oriented models have decreased retention of patients, increased in-treatment heroin use, and an increased likelihood of relapse to heroin addiction after discharge (26-27).

Stigmatization influences why the best standards of care are not usually followed with the people who suffer from illicit drug related health conditions. From 1998 to 2002 the Puerto Rican government reduced the existing treatment options for illicit drug addicts by 41% under a disguised “health reform” (28). As part of this undertaking, any illicit drug addict that relapsed was deemed as a failure and not entitled to treatment. This was done ignoring the fact that drug addiction is characterized by compulsive behaviors to use and relapses are common (14). One of the most notorious stigmatization procedures with illicit drug addict is to demand “zero tolerance” for drug use while in treatment. This demand, based on the stigmatization of drug use and relapses, is unethical and violates public health principles due to its stigmatization of the user. Furthermore, it denies relapse as a valid and common part of treatment (7). It seems to validate the fact that, besides incarceration, no treatment at all seems to be the most common option in Puerto Rico (16).

Health professionals that provide services to illicit drug users need to overcome the stigma associated with a disease that is criminalized in our society. This is the initial step towards the development of policies that conceptualize illicit drug dependence as a medical and not criminal problem. The stigmatization of illicit drug use is an important barrier to overcome in order to offer a more compassionate and effective health approach towards those affected.

In order to develop effective intervention to reduce stigma towards drug use among health professionals, we initially need to understand the manner in which such attitudes are manifested among this sector of the population. In light of this urgent need, the main objectives of this study were to: 1) document stigma towards illicit drug use among a sample of health professionals in training, and 2) explore differences in such attitudes among participants from different areas of training.

Method

In order to achieve the proposed objective of the study we implemented an exploratory and sequential mixed method approach using qualitative and quantitative techniques (29). We carried out qualitative in-depth interviews with health professionals in training. Afterwards, we administered a quantitative questionnaire addressing negative attitudes towards illicit drug use to a sample of health professionals in training.

Participants

The total sample of the study was composed of 501 participants. In the qualitative stage we interviewed 80 participants from the disciplines of medicine, nursing, psychology, and social work. These were equally divided among practicing professionals (n=40) and health professionals in training (n=40). In the quantitative stage we administered the questionnaire to a sample of 421 health professionals in training; of those, 414 were from the same four disciplines. All participants were older than 21 years of age and engaged in the study voluntarily. All procedures were approved by the Institutional Review Board (IRB) at the University of Puerto Rico's Río Piedras Campus.

Selection and Screening

The research team recruited a convenience sample of participants throughout hospitals and university based training programs in Puerto Rico. The initial steps in the recruitment process were telephone calls to the directors of these institutions to explain the purpose of the study and to request permission to invite employees and health professionals in training to participate in the study. After we obtained permission, the research team personally identified potential participants in order to ensure that they did not feel obliged by supervisors or teachers to participate in the study. Students that wished to participate completed an informed consent form.

Instruments

Participants completed three instruments as part of the study. These included a socio demographic data questionnaire, a qualitative in-depth interview guide, and the Negative Attitudes Towards Drug Users Scale.

Socio demographic data questionnaire—This self-administered questionnaire included 30 questions addressing variables such as gender, age, sexual orientation, marital status, area of residence, employment status, professional training, and income.

In-depth interview guide (30)—This interview guide served to maintain a minimum level of uniformity in the subjects that were explored during the interviews. This guide was composed of questions addressing attitudes towards drug use, perceived causes of illicit drug use and social consequences of addiction.

Negative Attitudes towards Drug Users Scale-NADU (31)—This is a translated and adapted version of the Substance Abuse Attitude Survey. This version is composed of 12 items addressing attitudes towards substance abuse. It encompasses five dimensions: permissiveness towards drug use, characteristics of treatment interventions for abusers, stereotypes surrounding users, optimism regarding the possibility of successful treatment, and moral issues associated with substance abuse. It is answered through a 5 point Likert-type scale, ranging from: strongly agree to strongly disagree. Mean scores were computed by taking the mean of the 12 items for respondents who answered 75% or more of the items. Its reliability has been documented with samples of health professionals with alphas ranging from .63 to .81. (32). The reliability has stayed the same when administered to health professionals in Puerto Rico.

Procedure

We initially carried out the qualitative in-depth interviews. These were held in private places chosen by participants in order to ensure confidentiality. After the person agreed to participate, they signed the consent form, completed the socio demographic data questionnaire, and proceeded to participate in the interview. The interviews lasted on average an hour and a half. When the interviews were completed, they were transcribed by trained personnel and submitted to a qualitative analysis.

After the interviews were completed, we translated and adapted the NADU quantitative measure to assess attitudes towards illicit drug use. The NADU's questions were subjected to a process of back translation to ensure their content validity. The scale was reviewed by a panel of experts to ensure its cultural appropriateness for our setting. Afterwards we pilot tested the scale with a sample of 100 health profession students (from the same disciplines included in the final sample) and deemed it reliable with a Cronbach alpha value of .80. After this process was completed we administered the quantitative scale to health professionals in training.

Analysis

The information gathered through the in-depth interviews was subjected to a qualitative analysis. The research team met on a weekly basis to identify themes or patterns in the data related to our objectives. Once those themes were identified the research team searched for text that evidenced them. All selected text blocks were discussed to ensure that they were representative of the themes they were associated with (33). Once these blocks of text were selected, they were coded with the use of qualitative analysis computer software (Nudist Nvivo V.1.).

The quantitative data gathered through the questionnaire from Stage 2 were analyzed with the use of SAS version 9.2. Initial descriptive analyses documented the frequencies and, for continuous variables, measures of central tendency for participant characteristics and the NADU scale. Following descriptive analyses, inferential analyses investigated mean differences in attitudes towards drug users among the four health profession groups (physicians, nurses, psychologists, and social workers), controlling for the following participant characteristics: age in years, gender (male = 1; female = 2), residential location (1 = urban; 2 = rural), marital status (0 = unmarried; 1 = married), importance of religion (1 = not important; 2 = slightly important; 3 = important; 4 = very important), degree of religious participation (1 = no participation; 2 = visit church yearly; 3 = visit church monthly; 4 = visit church weekly), tested for HIV in the past (0 = no; 1 = yes), and annual income. Income was measured via a variable with six categories that captured levels of annual income in increments of $10,000, beginning with a category for $0-$10,000 through a category for $50,001-$60,000, a seventh additional category for all participants who made more than $60,000 per year, and an eighth refusal to disclose category.

Analysis of covariance (ANCOVA) was used to test mean differences on the NADU scale score among the four health profession groups. Age, importance of religion, and degree of religious participation were treated as continuous covariates in the analyses described below. Supremum tests available in SAS PROC GENMOD (34) were used to test whether it was reasonable to assume linear relationships between these covariates and the NADU scale score. Residual-by-predicted value plots, univariate histogram plots of residuals, and quantile-quantile (Q-Q) plots of residuals were used to assess the normality and homoscedasticity of model residuals. Homogeneity of regression slopes for the covariate-NADU relationships across the health profession groups were assessed by fitting an ANCOVA model containing the main effect for health profession group, the main effects of all covariates, and the two-way interactions of the health profession group variable with each covariate. Following assessment

of the homogeneity of regression slopes assumption, the ANCOVA model was refitted with main effects of the health profession group variable and the covariates. Following evaluation of the omnibus test of significance for the health profession group variable, paired comparisons of the four health profession groups' adjusted means were performed. P-values from these multiple comparisons were adjusted via a simulation-based logical step-down method based on 1,000,000 simulations from the multivariate *t* distribution (35). All ANCOVA analyses except the supremum tests described above were conducted using SAS PROC GLIMMIX.

Results

Due to our sequential mixed method approach we were able to gather data from both qualitative and quantitative perspectives. Below we present each type of data individually.

Qualitative Analysis Results

Sample Characteristics—Participants in the qualitative interviews were mostly females (n=56; 70%) as the health professions we included in the study are mostly composed by them. Half of the sample reported having received training in HIV/AIDS related issues (n=42; 51%) and knowing someone with the disease (n=60; 75%). Furthermore, almost half of the sample reported providing services to PLWHA (n=60; 75%). The mean age for participants in the qualitative component of our study was 32. The most common income range for participants was $20,000-$30,000 (n=47; 59%).

Our qualitative results evidenced a worrisome scenario as stigmatizing attitudes towards illicit drug users were constantly manifested without evident concern for social desirability. Four main themes emerged form our analysis: 1) that people who are addicted to illicit drugs cannot, or do not wish, to be helped, 2) that addicts do not care for their well-being, 3) that prevention efforts motivate further drug use, and 4) that addicts are a social burden. Let us examine each one individually.

One of the most common stigmatization mechanisms of people addicted to illicit drugs is the idea that they cannot be helped. This notion fosters the perception that addicts do not want to be helped, and that doing so would have no potential benefits for them. One female medical student mentioned the following:

> "I agree with the idea that whoever is sick is because he wants to. I mean, whoever uses drugs is because he can't... he is sick. He is in a vice, a lack of control to the point that getting better is of no interest to the person. Pity does not work with me... if he is in that state it's because he wants to"

In this verbalization we can see a combination of factors that are important for understanding the stigmatization of addiction to illicit drug use. The participant recognizes that addiction is a health problem as the word "sick" is used to describe the addicted individual. One would expect this concept to foster empathy and the onset of help strategies from the health professional. Still, stigmatization interferes with the conceptualization fostering lack of pity and the general idea that addicts want to be in their current situation.

The second theme that emerged from our qualitative data was the idea that addicts do not want to be helped. This was mentioned by several participants and specifically by a female nurse while describing her experiences in the emergency room. She mentioned the following with regards to needle sharing:

> "When they are in need, it does not matter. They even take them (needles) from the ground and use them! They don't care if they get celluitis or an ulcer. As long as I get a hit, forget about it"

This idea was echoed by a physician who described addict's lack of concern for their personal health and hygiene. It is interesting to note that this apparent lack of concern for self-care is linked to other behaviors that are considered socially inappropriate, such as prostitution. She mentioned the following:

> "Well... the lack of hygiene, while using needles and all that stuff. Truthfully, they don't care. All they want is to be hyper. They sell their bodies for money..."

Participants also spoke about the effectiveness of needle exchange programs to help addicts protect themselves from HIV and Hepatitis. Although these programs have been documented as effective, the interviewed health professionals considered that their consequences were overall negative. In this scenario, stigmatization of illicit drug use can impact the potential promotion of such treatment efforts. One male psychology student mentioned the following:

> "Look, I know they exist (programs), where they hand out needles. Bring me the old and I'll give you new ones. But what I think is that they should not continue to promote drug use. They are promoting more drug use. What they should foster is that they do not use drugs. They should also make them conscious... not to use drugs. Do not stimulate more drug use"

Finally, participants described addicts as a social burden. This description was also accompanied by the idea that when addicts become sick, they are individually responsible for it. In this quote the idea of addicts as a social burden is described as a process with personal implications for the health professional, and economic consequences for society in general. One male physician mentioned the following:

> "That guy that uses needles does not care. All he cares about is getting a hit. He shared the needle and became infected. That was because of his irresponsibility. And if by being irresponsible he infects me... It bothers me because it becomes a social burden, due to the medication he needs. But that was irresponsible"

Quantitative Analysis Results

Sample Characteristics—Of the 421 participants, seven listed occupations other than physician, nurse, social worker or psychologist; those seven participants were excluded from further analyses. Seventy-six percent of the sample of the remaining 414 participants was female, 67% lived in an urban environment and 74% was unmarried. Fifty percent had been tested for HIV. The mean age was 27.84 (SD = 7.58; median = 25). For religious importance, 5.7% indicated it was not important, 12.6% indicated it was slightly important, 32.6 percent indicated it was important, and 49.1% indicated it was very important. Twenty-five percent of the survey respondents reported no formal participation in religious activities, 29.3% attended church once per year, 15% attended church monthly, and 30.7% attended church weekly. For annual income, 16.7% reported less than $10,000 per year, 21.1% reported $10,000-$20,000 per year, 20.7% reported $20,001-$30,000 per year, 12.2% reported $30,001-$40,000 per year, 7.5% reported $40,001-$50,000 per year, 6.5% reported $50,001-$60,000 per year, and 15.4% reported annual income greater than $60,000.

Negative Attitudes towards Drug Users—Table 1 displays the proportions of respondents who endorsed each category for each item of the NADU scale. Taken collectively, the table illustrates the high level of stigma against drug users in our sample. For instance, the majority of participants disagreed strongly that drug use in the home should be legal (62%). Over half the participants agreed strongly or somewhat that drug use is associated with a weak force of will and the majority participants also were of the opinion that confrontation is necessary in the treatment of drug addiction. Participants also strongly subscribed to the idea that recreational use of drugs leads to subsequent drug abuse, though fewer participants were willing to classify drug addicts as being disgraceful people (Table 1).

Analysis of Covariance Results—Of the 414 respondents, five omitted responses to one or more covariates and five lacked sufficient data to compute a mean NADU score. Those 10 cases were therefore excluded from inferential analyses, yielding $N = 400$ for the analyses that follow. Supremum tests evaluated the null hypothesis of linear associations of the NADU scale score with age, importance of religion, and degree of religious participation. Results from these tests indicated it was reasonable to treat these variables as continuous covariates (all p-values $> .25$). Predicted value, Q-Q, and histogram plots involving model residuals indicated that the residuals were approximately normally distributed and homoscedastic. As well, the homogeneity of regression slopes assumption was met: all covariate-by-health profession group interactions were non-significant at $p > .14$. Approximately equal numbers of nurses (26.6%), physicians (23.9%), social workers (25.4%), and psychologists (24.2%) participated in the study.

Results from the final ANCOVA model containing the main effects of the health profession group variable and the covariates described above indicated an overall difference in the adjusted means for health profession group ($F(3, 382) = 4.08$, $p = .007$). Importance of religion was the only statistically significant covariate (B = .26; β = .31; t (382) = 4.94, $p < .0001$); all other covariates were non-significant ($p > .12$). The adjusted mean for nurses ($M = 3.64$) was the highest among the four health profession groups, followed by physicians ($M = 3.60$), social workers ($M = 3.34$), and psychologists ($M = 3.38$). Physicians' and nurses' adjusted means were not significantly different (adjusted $p = .91$). Similarly, psychologists' and social workers' adjusted means were not significantly different (adjusted $p = .91$). Physicians' adjusted means were significantly higher than those of social workers (adjusted $p = .046$) and psychologists, however (adjusted $p = .042$). Nurses' adjusted means were also significantly higher than those of social workers (adjusted $p = .041$) and psychologists (adjusted $p = .03$).

Discussion

The need to address the illicit drug use epidemic from a public health perspective is urgent. Criminalization of drug use has unintended social consequences that affect individual health and social well-being. In turn, the criminalization of drug users fosters social stigma towards those affected, their families and communities. In order to begin fostering an era of a public health approach in Puerto Rico, health professionals need to combat social stigma related to drug use. As authority figures on health issues, their attitudes and social messages could serve to reduce stigma levels among the community in general and policy makers. Their potential role as advocates for the use of empirically tested approaches to treat addiction to illicit drug use is hampered by social stigma, particularly from their personal attitudes and beliefs on the subject. Our results evidence a long road to travel towards this objective.

The qualitative results evidenced how participants held stigmatizing attitudes towards illicit drug users. These were manifested through the criminalization of this sector of the population and the general idea that people who are caught up in this disease wish to live in their situation. Participants showed no trust in scientifically tested interventions, such as harm reduction efforts, to curtail the injecting drug epidemic in Puerto Rico. It is evident that social stigma among this sector fosters detrimental descriptions of those who are affected, the negation of the potential rehabilitation, and the lack of support of effective interventions.

Our quantative results showed that stigma levels were higher among students training to be physicians and nurses, in comparison to social workers and psychologists. The lower stigma levels evidenced in social work and psychology students may be due to their training in behavioral models of change, which are basic building blocks of their education. This educational perspective could expose them to material that addresses addiction as a health issue. Training in social work and psychology focuses on environmental factors that foster

specific behaviors. Therefore, that training has the potential to avoid having health professionals blame individuals for their health situation, and take the environment into consideration for an explanatory hypothesis. If this is the case, interdisciplinary training linkages between these health professions might be an important step towards stigma reduction.

This stigma difference among health professions should also be interpreted in light of the day-to-day activities of physicians and nurses. These students are trained to minimize empathy in order to maintain their ability to remain detached and functional in hospitals and other settings where negative situations are faced on a daily basis. Social distance from a patient is taught in order to maintain mental equilibrium in the face of potentially devastating scenarios for patients, and health professionals themselves. This social distance can foster a process in which the illicit drug user patient is stigmatized, in order to differentiate him or her from the health professional who is deemed as a good person. This conceptualization can help to protect the health professional from distress, but it can also foster more social stigma towards patients.

Finally, demographic variables are crucial when interpreting the quantitative results from our study. Particularly, importance of religion was positively associated with stigma towards illicit drug use. Due to its historical relation to Spain and the United States, Judeo-Christian based religions are popular in Puerto Rico and play a present role on health issues. It is understandable that health professionals place importance on their religion, as this is part of everyday life for the Puerto Rican population. Furthermore, helping professions such as the ones included in our study have been historically tied to religious perspectives on illness and helping the sick. These variables need further attention in research addressing social stigma towards illicit drug use in Puerto Rico.

The results form this study point towards the need to provide specialized training for health professionals in their formative years. Since social stigma towards illicit drug use can foster the criminalization of relapse, promotion of abstinence only programs, and lack of effective treatment (36), its implications are far reaching for prevention of illegal drug use and treatment of those affected. Intervention strategies to reduce such stigma among health professionals in training are urgently needed. Although generalizations cannot be carried out from our findings due to the limitations of a convenience sample, they serve to establish an initial direction for research and intervention work geared towards understanding and reducing the stigma related to illicit drug use.

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Table 1

Responses to the Negative Attitudes towards Drug Users Scale (NADU).

Question	*N*	Strongly Agree	Agree Somewhat	Neither Agree Nor Disagree	Disagree Somewhat	Disagree Strongly
1. Marihuana should be legalized.	408	15.7	17.7	13.7	10.3	42.7
2. The use of marihuana among adolescents cold be a healthy experimentation.	409	3.2	7.3	8.3	16.4	64.8
3. The personal use of drugs in the privacy of one's home should be legal.	405	9.4	11.11	7.4	10.4	61.7
4. The daily use of marihuana cigarettes is not necessarily dangerous.	409	5.1	10.0	9.8	16.6	58.4
5. It is normal for an adolescent to experiment with drugs.	409	15.7	27.1	9.5	16.1	31.5
6. People who use marihuana do not respect authority.	408	20.1	19.1	8.8	27.9	24.0
7. The use of marihuana leads to mental illness.	405	18.8	24.0	17.0	19.3	21.0
8. Recreational drug use precedes drug abuse.	408	44.4	27.9	11.0	9.3	7.4
9. Drug addicts are disagreeable patients.	406	3.9	14.8	13.3	32.5	35.5
10. Confrontation is necessary in the treatment of drug users.	408	41.7	27.2	13.0	10.3	7.8
11. Drug abusers should be treated only by addiction specialists.	409	33.3	30.6	7.6	16.1	12.5
12. Drug use is associated with a weak will power.	408	25.3	26.0	12.5	15.0	21.3

Note: Questions 1-5 are reverse scored when used to compute the NADU scale score. Percentages may not sum to exactly 100% due to rounding.