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Patterns of Ketamine Use Among Young Injection Drug Users†

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Abstract

Ketamine is a dissociative anesthetic that has emerged as an increasingly popular choice among young drug users. Recent research indicates the presence of hidden populations of young people who inject ketamine in New York and other U.S. cities. Applying an ethno-epidemiological approach, the authors recruited 40 young injection drug users (IDUs) (< 25 years old) in New York City to explore health risks associated with ketamine use. This analysis looks at the varying patterns and frequencies of ketamine injection by examining personal, social, and cultural aspects of these young people's lives. We learned that drug-using histories, experiential dimensions, sociocultural characteristics, and associations with other young people help account for the different patterns of injecting ketamine within the sample. In particular, these findings indicate that young people who were more frequent ketamine injectors had the following characteristics: initiated injection drug use with ketamine; enjoyed the effects of ketamine, were stably housed; lived in the vicinity of New York City; and associated with others who also injected ketamine.

Keywords

ethnography; high-risk youth; injection drug use; ketamine

Injection drug use among young people has expanded beyond heroin, cocaine, and methamphetamine, and into less commonly injectable substances, such as crack, Ecstasy, and ketamine (CEWG 2005; Lankenau et al. 2004; Lankenau & Clatts 2002). Recent studies indicate the presence of hidden populations of young people who inject ketamine in New York and other U.S. cities (Lankenau & Clatts 2005, 2004). Ketamine, a congener of phencyclidine (PCP), is a Schedule III drug with “dissociative” properties that produces a disconnection between, a user's body and mind (Jansen 2001). Ketamine was originally patented for human use as a surgical anesthetic (Corssen & Domino 1966), and while the drug is still used for such purposes among children (Bergman 1999), ketamine is also commonly used as a general veterinary anesthetic (Armitage et al. 2005). Ketamine is referred to colloquially as “Special K,” “Vitamin K” or simply “K,” and a desired state among some ketamine users is to achieve a “K-hole”—an intense psychological and somatic state experienced while under the influence of ketamine (Jansen 2001). Ketamine has also been considered a “club drug” due to its popularity within dance club venues (ONDCP 1997; Reynolds 1997) where the drug is primarily administered intranasally (Copeland & Dillon 2005; CEWG 2005; Curran & Morgan 2000).

Explaining why young people initiate various types of drug use—from smoking marijuana (Becker 1953) to injecting heroin (Roy et al. 2002; Fuller et al. 2001; Crofts et al. 1996)—has been a frequent research aim. Yet, few studies attempt to explain why some drug users use

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more or less of a particular substance following initiation. While continued use of drugs such as heroin, cocaine, crack, methamphetamine and alcohol has been explained by the processes of addiction, limited research has focused on explaining patterns of use for emerging substances, such as ketamine. This article explains different patterns of ketamine use among a small sample of young injection drug users recruited in New York City. It is argued that ketamine injection can be explained by drug-using histories, experiential dimensions of ketamine, sociocultural characteristics, and variable associations with other young people.

THEORETICAL BACKGROUND

The twentieth century witnessed important shifts in the way social scientists conceptualized young drug users. From drug use being considered an activity among the few and marginalized (Becker 1963), particularly among poor, ethnic minority communities (Cloward & Ohlin 1960; Finestone 1957), to the use of specific drugs being considered a “normal” aspect of popular youth culture across socioeconomic lines (Parker, Williams & Aldridge 2002; Parker, Aldridge & Measham 1998; Parker, Measham & Aldridge 1995), these transformations in the conceptualizations of young drug users are significant. The literature indicates that young people use different drugs for different reasons, and that the significance and centrality of drug use within young people’s lives varies considerably both across and within certain populations (see e.g. Ray & Ksir 2003).

While determining why young people initiate drug use is an important research question, explaining patterns of drug use (such as experimental versus frequent use) is also a significant area of inquiry. Illicit drug use, whether at an experimental, occasional, or frequent level, is often premised on a variety of interpersonal, social, and cultural considerations. In particular, theorists and researchers have focused on several areas: personal preference for the drug (Becker 1967, 1963, 1953; Lindesmith 2001 [1938]); the establishment of a ready supply (Carnwath & Smith 2002; Faupel 1991; Winick 1980; Preble & Casey 1969); and how the drug is perceived among, the user’s social network (Parker, Williams & Aldridge 2002; Measham, Aldridge & Parker 2001; Parker, Aldridge & Measham 1998; Parker, Measham & Aldridge 1995; Pearson 1987; Zinberg 1984).

First, finding the effects of a drug pleasurable is an important reason people continue to use a particular drug and become regular users. Associating the effects of a drug with a particular mode of administration, such as smoking or injection, while also finding the effects to be pleasurable are significant social processes involved in continued drug use (Becker 1967, 1963, 1953; Lindesmith 2001 [1938]). In particular, Becker (1963, 1953) emphasized the centrality of finding the effects of marijuana pleasurable en route to becoming a regular marijuana user, and similar sentiments were echoed in his discussion of the continued use of LSD (Becker 1967).

Second, establishing and maintaining a ready supply of an illicit drug has been described as being a fundamental component of regular drug use. Preble and Casey (1969), for instance, found that heroin users spent much of their day “taking care of business”—finding ways to earn money, which, once obtained, was quickly used to purchase heroin from one of many known dealers (see also Johnson et al. 1985). Importantly, these heroin users knew many people who sold heroin within their active life (Carnwath & Smith 2002; Faupel 1991). Similarly, Winick (1980), who also understood the importance of drug supply and its relationship to drug dependence, argued that illicit drug use prevails within certain subgroups due to accessibility. Recent research by Howard Parker and colleagues (2002, 1998, 1995) stresses the wide availability of certain drugs as a central component of the “normalization” thesis.

Lastly, the social climate in which illicit drugs are used is significant when considering explanations of experimental or frequent drug use. Zinberg (1984), for instance, highlighted two important aspects of illicit drug use that have been echoed in subsequent research: set and setting. “Set” refers to the attitude towards drug use while “setting” is the actual environment in which illicit drug use took place. Since individuals conduct many behaviors within the context of a group, groups act as social control mechanisms governing acceptable and nonacceptable behaviors for in-group members (*inter alia* Gottfredson & Hirschi 1990; Cooley 1964). For an individual to become a regular drug user, they must be part of a larger social network that sanctions the use of that drug. Likewise, Howard Parker and colleagues (2002, 1998, 1995) forwarded that an important tenet of the normalization thesis is a drug’s acceptability. In other words, a drug must be considered largely acceptable by a population to be considered normalized within that particular population. In club settings, for instance, research indicates the acceptability of illicit drugs in general varies considerably: Ecstasy use and that of other club drugs (amphetamine, cocaine, GHB, and ketamine) are relatively accepted, but other drugs, particularly heroin and crack, are not (Sanders 2005; Forsyth, Barnard & McKeganey 1997; Release 1997).

METHODS

This research applied an ethno-epidemiological approach (Lankenau & Clatts 2005; Clatts et al. 2002; Clatts, Welle & Goldsamt 2001; Agar 1996) to the study of ketamine use and health; it uses both narrative accounts to report data grounded in meaning and context (ethnographic) and descriptive statistics to illustrate broader patterns of drug use (epidemiologic). This methodology is particularly useful for uncovering hidden populations of young injection drug users who are often underreported in epidemiological sentinel data.

The data for this report were collected during a two-phased study of ketamine injectors conducted in New York City between September, 2000 and July, 2002. The Phase I data, which consisted of brief, exploratory interviews with 25 ketamine injectors, detailed injection practices and risk behaviors associated with the most recent injection of ketamine (Lankenau & Clatts 2002). Primary goals of Phase I were to learn how to identify and recruit a sample of young ketamine injectors, and to refine interview questions focusing on ketamine injection practices. Based upon the Phase I findings, the lead author recruited a sample of young ketamine injectors using a combination of chain referral sampling (Penrod et al. 2003; Biernacki & Waldorf 1981) and targeted sampling (Watters & Biernacki 1989), which are nonrandom but effective methods for sampling hidden populations. We sampled three contiguous public settings in Manhattan’s East Village—a park and two street scenes containing both street-involved youth and young IDUs. Over a period of months, we developed a research presence by spending two to three days per week in the East Village and became recognizable to variety of area locals, which helped facilitate rapport with the target population. While observing and interacting in these public settings, we engaged young people in informal conversations about health and risk behaviors, and details such as physical appearances, social networks, and drug-using history were recorded into field notes. A series of screening questions were utilized to determine enrollment eligibility. Ultimately, 40 ketamine injectors were enrolled into the study.

To qualify for an interview, a young person had to meet basic two criteria: aged between 18 and 25 years old, and had ever injected ketamine. We focused on 18 to 25 year olds to enroll a population of young IDUs who were in various states of their injection drug using careers, since important differences in health risks are based upon length of an IDU’s injection career (Des Jarlais et al. 1999). The criterion of “ever injected ketamine” screened out numerous young people who had sniffed ketamine but never injected the drug. Two persons met both the age and drug use history criteria but refused to participate in the study.

Upon meeting the enrollment criteria, we administered a tape-recorded, semistructured survey, which consisted of open and closed-ended questions centering on details of particular ketamine-using events and important demographic characteristics. The interview focused on specific drug-using events which included ketamine injection initiation, most recent ketamine injection, and most recent ketamine sniffing event. For each event, interviewees were asked specific questions, such as composition of the drug-using group, drug preparation and administration practices, drug high or experience, and risk and protective behaviors. Additionally, young people were asked about their frequency of both injecting and sniffing ketamine within the past 12 months. Collectively, these responses comprised a detailed description of a particular drug-using event and an understanding of patterns of ketamine use. Prior to being interviewed, all subjects signed a written consent form approved by an institutional review board and each received \$20 for participating in the study.

SAMPLE DEMOGRAPHICS AND ANALYTICAL CATEGORIES

Table 1 presents demographic characteristics of this sample of ketamine injectors. The median age at interview was 21 years old with an age range of 18 to 25 years old. The total sample identified predominantly as male, White, and heterosexual. Over two-thirds obtained a high school diploma, received a G.E.D., or attended some college. Over one-third were homeless at interview, while approximately three-quarters had been homeless at some point during their lifetime. The majority of the sample was actively involved in the street economy at the time of interview. Over one-third panhandled as a primary means of earning money. Selling drugs and participating in additional aspects of the local street economy were also common sources of income. Working in the formal economy was slightly more common than being unemployed.

To categorize different frequencies of ketamine use, we divided the sample into three groups—"experimental," "occasional," or "frequent" injectors (see Table 2)—based on the number of independent occasions they reported injecting ketamine within the 12 months prior to being interviewed. Young people in the "experimental" group ($n = 15$) had injected ketamine between zero and three separate occasions. (Four young people in this group injected ketamine over a year ago, and constitute "zero" use.) Young people in the "occasional" category ($n = 12$) had injected ketamine on between four and 11 separate occasions, or less than once a month on average. Young people in the "frequent" category ($n = 13$) had injected ketamine on 12 or more separate occasions, or more than once a month on average. As indicated in Table 2, approximately the same numbers of young people are found in each category based upon the number of ketamine injections in the previous 12 months.

The sample was then further subdivided into "low" or "high" groups based on the number of separate occasions the young person sniffed ketamine within the previous 12 months. Young people who had sniffed ketamine on less than twelve separate occasions (on average less than once a month over the previous 12 months) were considered "low sniff," while those who had sniffed ketamine on twelve or more separate occasions (on average once a month or more over the previous year) were categorized as "high sniff." While our primary focus is on frequency of injection, we include frequency of sniffing to provide additional variability and contrasting patterns of ketamine use. Based upon these two sets of categories, the sample can be described according to "experimental inject, low sniff," "occasional inject, low sniff," "frequent inject, high sniff," and so on.

Drug-Using Histories

Drug-using history reveals much about a young person's reluctance or acceptance towards injecting drugs, and was an important factor underlying patterns of ketamine injection. More than half the sample ($n = 23$) reported ketamine was the first drug ever injected—"ketamine initiates"—while less than half ($n = 17$) initiated with another drug—"other initiates"—such

as heroin or cocaine. Though not presented in Table 2, other initiates were mainly concentrated in the experimental injection group whereas ketamine initiates were largely located in the frequent injection group. The occasional group consisted of approximately equal numbers of ketamine and other initiates. These findings suggest that young people who frequently injected ketamine were more likely to have initiated injection drug use with ketamine—a group of IDUs that could be described as “ketamine specialists.” A ketamine initiate, a 21-year-old male occasional injector and high sniffer, explained ketamine use as part of a regime of specialized drug use:

I used to say “stay away from this drug, this drug, this drug” except for K, liquor and pot. Straight up. Those are the drugs that I can do, and can still go to work, function, everything’s all right, my body feels fine ... After doing K you can go home and go to bed. You don’t feel it the next day, your workday.

Alternatively, experimental ketamine injectors typically injected a variety of substances, such as heroin, cocaine, or methamphetamine, and exhibited “cafeteria style”¹ injecting practices. For instance, this other initiate, a 21-year-old male, who once injected cough syrup, said: “I’ll do anything. I’ll do any drug that’s around. That’s usually how I’ll do K—if it’s around.”

Likewise, another other initiate, an 18-year-old female and experimental injector, expressed similar sentiments:

I’m one of those people who’ll try anything. Though, ketamine hasn’t been around me at all lately. I haven’t had any at all for two years almost. Right now, I wouldn’t know where to get, but I don’t really go out and look for it.

Overall the drug that a young person first injected—whether ketamine or another drug—often revealed specific differences about their varying patterns of ketamine injection within the past year.

Enjoying the Effects of Ketamine

Enjoying the effects of a drug is an important part of becoming a regular user. The interviews revealed a range of reactions associated with the experiences following an injection of ketamine and the act of injecting ketamine. Some young people described the experience as compelling and transformative, while others indicated more frightening episodes or particular fears associated with ketamine use (see Jansen 2001 and Siegel 1978 for parallel examples). These dissimilar reactions help explain the varying rates of ketamine injection within the sample. For instance, most people in the experimental injection group did not enjoy the effects from injecting ketamine. A 21-year-old man and experimental injector described a particularly disorienting experience: “I did one [shot] and I was fucking freaking out. It became really weird—I felt like I was reborn in the world and I didn’t know where I was. It was nutty.” Similarly, a 20-year-old female experimental injector said: “It made me feel like a fuckin’ zombie. It kind of makes you sit there and totally zone out—drool on yourself. A bunch of people were throwing up.”

Others within the experimental group said they enjoyed the effects of ketamine, but not necessarily injecting it. For instance, a 21-year-old man described a reluctance to frequently inject ketamine and run the risks associated with injection drug use. This young man, along with two others in the occasional injector groups, indicated a specific aversion to using needles. As he described it:

¹“Cafeteria style” is borrowed from Klein (1971;1995), who utilizes the term in a discussion of offending among youth gang members in order to describe a range of offences such individuals engaged in.

I might do it again [inject ketamine]—I’m not going to say no—but I’m really not down with that whole needle stuff. Sharing needles—that’s completely out of the question. Fuck that. That’s how you get that hepatitis and shit. I’m trying to live as long as I can.

Similarly, others within the experimental injector/high sniff group indicated they liked the effects from both sniffing and injecting ketamine, but only on occasion. These young people talked about limiting their ketamine usage for a variety of personal reasons. For instance, an 18-year-old male said he uses ketamine from time to time “just as long as it doesn’t take over my life.” Or, a 26-year-old male mentioned trying to stay away from “hard” drugs in general. For others, decisions to limit or stop ketamine use evolved out of important life changes or losing interest in the “scene” associated with the drug.

While most young people in the experimental injector groups *did not* particularly enjoy the effects of ketamine, most in the occasional and frequent injector groups did. For instance, a 21-year-old male and frequent injector equated his first injection of ketamine to a profoundly pleasurable experience:

While I was on it, it was so deep and the forest was so dark. I couldn’t see anything. It felt like I was waiting my whole life for the injection. That was the [K] hole that I was in. That’s what I felt like ... It was interesting. It liked it.

In the occasional and frequent injector groups, many young people enjoyed the effects from sniffing ketamine and later transitioned into injection as the preferred mode of administration. Two primary, sometimes overlapping, reasons emerged explaining the transition to injection. The first related to the belief that injecting ketamine produced a “greater high” as this 19-year-old male hinted, “I usually sniffed it [ketamine] but injection is the next level.” Others reported a preference for injecting over sniffing since the latter caused blockage of the nasal passages. For instance, a 21-year-old male occasional injector elaborated:

Sniffing K really fucks up your nose, bro. For the next two days you feel like you have a cold ... and you can’t breathe. And it sucks. If you can shoot it, the next day you can breathe, It’s just like, “Wow! That’s a big plus.”

Similarly, two young men—frequent injectors and low sniffers—both pointed to reasons for transitioning to injection. A 20-year-old male felt that injecting ketamine was “the cleanest thing you can do,” which simultaneously “gets you more fucked up.” Likewise, a 25-year-old male said that “booting” ketamine (injecting the drug intramuscularly) was “so much cleaner... so much more intense” when compared to sniffing. Interestingly, whereas several in the expert mental injector groups indicated a fear of using needles, these individuals in the occasional and frequent injector groups described a dislike of sniffing or snorting drugs, as a 22-year-old male explicitly stated, “I don’t like putting things up my nose... I don’t like sniffing things at all.”

According to these accounts, patterns of ketamine injection were based upon two principal considerations: finding the actual ketamine injecting experience pleasurable, and feeling comfortable with injection as a mode of administration. In this sample, young people who both liked the ketamine high and embraced injection drug use were more likely to become regular ketamine injectors. However, enjoying the drug and being comfortable with a particular mode of administration were only two factors among several that characterize patterns of frequent ketamine injection.

Ketamine Supply, Associations, and Housing Status

Illicit drug supply pathways are crucial to understanding rates of illicit drug use. In this sample, having easy access to a supply of ketamine indicated much about the varying patterns of using

ketamine. For instance, most young people in the experimental injector group reported some difficulty finding ketamine. A 21-year-old male and experimental injector explained:

We've actually been having a tough time the last two or three weeks. The one guy that my cousin usually gets it from has been dry for the past two weeks. And this other connection we have—a guy that does inventory for an animal clinic—hasn't been around.

Likewise, others within the experimental group discussed a ketamine “drought.” An 18-year-old female elaborated: “Lately, it's been hard. Right now, there is a drought of K. Last summer around this exact time—no K.”

While young people in the experimental injector groups tended to have a difficult time acquiring ketamine, individuals in the occasional and frequent injector groups often reported having access to a supply of ketamine. Hence, moving from the experimental to frequent injector groups, more young people mentioned finding ketamine with relative ease, which helps explain differential patterns of injecting. For instance, a 23-year-old male in the frequent injector/high sniff group described his ability to obtain ketamine:

Powder ketamine is not difficult at all. I can get it right away. I just have to call somebody and get it. I know a couple people. It's the same thing with liquid K. I can get it whenever I want.

Significantly, several of those within the frequent injector groups either had a history of selling ketamine or currently sold the drug, which indicated links or “connections” with others at the distribution level (see Carnwath & Smith 2002; Measham, Aldridge & Parker 2001; Ruggiero & South 1995; Dorn & South 1990). Clearly, the existence of these connections helps explain their relative access to ketamine, and, perhaps, their greater frequency of injecting the drug.

Associations with other ketamine users and a general acceptability of ketamine use also indicated something about frequency of injecting ketamine. Interestingly, a 25-year-old male and frequent injector related the variability of ketamine's acceptance to generic social groups. As he described it, young people involved in the “party scene” were likely to find the drug acceptable, whereas “strict drinkers” who occasionally used marijuana held more critical attitudes:

Ketamine is one of the more accepted drugs on the scene today. It's accepted among people in the party scene—doing Ecstasy and things like that [clubbing]. People that are strict drinkers and are willing to smoke their joints when they're partying, they look at K as actually worse than coke and the dope—though they may've experimented with both coke and dope. They will stick far away from ketamine because of the scene that it's supposedly associated with.

The number of associations between young people in this sample and others who injected ketamine varied, which related to the sample's differential patterns of injection. Those who injected ketamine only a couple of times were less likely to have friends or acquaintances who injected ketamine. Alternatively, those who injected ketamine occasionally or more frequently were more likely to know others doing the same. In the experimental groups, only a few young people mentioned having other friends who also used ketamine; most mentioned none. Conversely, nearly all of the young people in the occasional and frequent injector groups knew others who used ketamine. For instance, a 19-year-old male who was an occasional injector and high sniffer mentioned that ketamine was common among his friends:

That ketamine was the thing to do. Everybody was fucking doing it because it was the newest thing out. People didn't really know too much about it. People were liking it. Everybody thought it was cool.

Likewise, a 21 year-old male—an occasional injector and high sniffer—made a similar observation: “Everybody I know does K. I’d say about three years ago it became like a fad to shoot up K... And then someone told me, ‘Yo bro, you’ve got to try it once’. So I was like, ‘Yeah.’”

Both access to ketamine and the number of associations the young people discussed who also injected ketamine were related to their housing status. In general, young people who were currently homeless were typically in the experimental injector group. Many of these homeless youths considered themselves “travelers” and moved from city to city in search of work, shelter, and new adventures. As a result, these young people often had looser connections to both the local population and the local drug markets. Alternatively, young people living in New York or in neighboring New Jersey had tighter associations and less ephemeral relationships with local individuals involved in using and selling ketamine. These social relationships not only helped establish a consistent supply of ketamine, but also promoted regular interaction with others who used the drug. The lower frequency of ketamine injection among homeless young people may indicate an absence of connections to supplies of ketamine or acquaintances who were also users.

Lastly, we examined patterns of ketamine use and several other characteristics of the sample, such as age, ethnicity, educational attainment, income earning strategies, parents’ socioeconomic status, and history of drug treatment. These factors, however, revealed little. Additionally, we examined drugs (both legal and illegal) consumed the previous day, but also found little distinguishing the groups. For instance, young people who used “hard” drugs, such as heroin and crack, those who used “soft” and licit drugs, such as marijuana and alcohol, and others who refrained from using any substances the previous day were represented commonly in the experimental, occasional, and frequent injector groups.

CONCLUSION

In this article, we examined various characteristics of a small sample of young people recruited in New York City to describe their varying patterns of ketamine use. Several findings emerged which were consistent with the literature on young people and drug use, and helped to describe patterns of ketamine injection. These included drugs the young people had previously injected, whether or not they enjoyed ketamine (injecting and/or sniffing), associations with others who also injected ketamine, and the number of individuals they knew who sold ketamine. In this sample, young people who *did not* enjoy the effects of ketamine, who exhibited a “cafeteria” style of injection drug use (i.e. injecting “what’s around”), were homeless, or who lived outside the area where the field work was conducted (Manhattan’s East Village) were more likely to be found within the experimental injector groups. Conversely, young people in the sample who initiated injection drug use with ketamine, who *did* enjoy the effects of ketamine, were housed, lived in or near the area where the field work was conducted, and associated with other ketamine injectors were more likely to be in the occasional or frequent injector groups.

While these personal characteristics and sociocultural processes characterized the young people who became frequent ketamine injectors, the same cannot be said for the reverse. In other words, if a young person enjoyed injecting ketamine, had only injected ketamine, was well placed within a matrix of other ketamine users, and could easily obtain ketamine, this did not necessarily mean they would become a frequent ketamine injector. Several within our sample possessed these characteristics, yet failed to move beyond the occasional or experimental injection of ketamine. We attempted to illustrate that without the discussed personal, interactive, and situational considerations, young people were unlikely to become frequent ketamine injectors.

We reported that many regular ketamine injectors initiated their injecting careers with ketamine, and had no prior experience injecting “hard drugs,” such as heroin or cocaine. In contrast, young people who initiated injection drug use with heroin or cocaine frequently remained experimental or occasional injectors of ketamine. This relationship between frequency of ketamine injection and history of injection drug use may challenge existing “gateway theories,” which propose that the use of hard drugs succeed the use of “soft drugs,” such as marijuana (Kandel, Yamaguchi & Chen 1992; Kandel 1975). The drug-using histories and current injection drug-using practices among young people in this sample did not unfold in a developmental or stepwise fashion as suggested by such perspectives.

Additionally, these findings on frequency of ketamine injection and user attitudes towards ketamine suggest the drug may transcend the hard/soft drug distinction, or that its location along this spectrum is still being worked out among users. As reported earlier, one injector indicated that ketamine was accepted among Ecstasy users in the club scene, yet viewed unfavorably by young people who were primarily alcohol and marijuana users. This corroborates research findings indicating that ketamine and other club drugs, such as Ecstasy and GHB, are viewed by users as distinctly different from either marijuana and alcohol, or heroin and cocaine (Carlson et al. 2004). The particular scheduling of ketamine by the DEA may contribute to divergent perspectives on the drug: ketamine is a Schedule III drugs, yet its effects on the mind and body are more powerful than Schedule I drugs such as marijuana and Ecstasy (Jansen 2001). The fact that ketamine can be easily injected increases the drugs versatility and associated risks, and may lead to varying perceptions about its potency and location within the hard/soft drug classification.

Our research on ketamine injectors has a number of implications for drug policy. A substantial percentage of money for the “war on drugs” attends issues of supply (Nurco, Kinlock & Hanlon 2001). The present research illustrates that supply remains one of a number of crucial considerations on the path towards experimental, occasional or frequent drug use among young people. The supply of ketamine circulating within the U.S. has been manufactured by pharmaceutical companies and no reports (yet) exist of the drug being manufactured in homemade laboratories. Closer inspections of ketamine producing companies and individuals or businesses that use ketamine for legitimately intended purposes (e.g. veterinarians; farmers) may stem the flow of ketamine into young people’s environments. But controlling supply should only be one aspect. Further education on a variety of drugs, including ketamine—not just the “usual suspects,” such as marijuana, cocaine, and heroin—would provide greater knowledge of these drugs. Finally, ketamine has been considered a “date-rape drug” (Saum et al. 2001) and a “club drug” (ONDCP 1997; Reynolds 1997), but our research indicates clearly that ketamine is used outside of club environments and outside the context of date-rapes. Towards these ends, accurate information on the risks associated with ketamine injection should be disseminated at both individual and community levels to promote greater public health awareness.

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TABLE 1

Sample Demographics

	Total (n = 40)	f
Gender	%	
Male	73	29
Female	28	11
Race/Ethnicity	%	
Caucasian/White	65	26
Biracial	18	7
latino/Hispanic	13	5
Asian-American	3	1
Native American	3	1
Sexual Identity	%	
Straight/Heterosexual	95	38
Bisexual	5	2
Education	%	
H.S. grad/GED+	68	27
Homeless	%	
At interview	38	15
Ever	73	29
Work status	%	
Panhandle	35	14
Sell drugs	25	10
Informal economy	23	9
Formal economy	13	5
Unemployed	8	3
Age at Interview		
Median	21	
Range	18–25	
Recruitment venue	%	
Street	68	27
Park	33	13
First drug injected	%	
Ketamine	58	23
Other	43	17

TABLE 2

Number of Ketamine Injection Events and Sniffing Events within the Past 12 Months (N=40)

	Experimental (0–3 Events)	Occasional (4–11 events)	Frequent (12+ Events)	Total
Sniffing Frequency				
Low (< 12 Events)	10	8	6	24
High (12+ Events)	5	4	7	16
Total	15	12	13	40