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Short communication

Methamphetamine use among young adults: Health and social consequences

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Abstract

The current research analyzed the relationship between methamphetamine use and health and social outcomes. Interviews were conducted with a sample of 106 respondents. Virtually all of the respondents experienced negative consequences of methamphetamine use. The most serious, but least prevalent, methamphetamine-related health problem was seizures and convulsions. The most prevalent health effect was weight lose. A substantial number of respondents experienced severe psychological symptoms: depression, hallucinations, and paranoia. Of the 106 respondents, 34.9% had committed violence while under the influence of methamphetamine. The data suggest that methamphetamine-based violence was more likely to occur within private domestic contexts, both family and acquaintance relationships.

It is apparent from the findings that methamphetamine use heightens the risk for negative health, psychological, and social outcomes. Having said this, it is crucial to acknowledge that there was no evidence of a single, uniform career path that all chronic methamphetamine users follow. Furthermore, a significant number of sample members experienced limited or no serious social, psychological, or physical dysfunction as a result of their methamphetamine use.

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The use of a variety of drugs by adolescents and young adults continues to be an important public health problem. Drug use may have important implications for the future health and well-being of many

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adolescents and young adults as they negotiate the transition to adulthood. Adolescents and young adults who use drugs may have especially high risks of developing mental or physical problems that interfere with educational and occupational pursuits, and which undermine long-term life chances.

Although the use of certain types of drugs has decreased recently (Monitoring the Future, 2003), there is evidence that methamphetamine use is becoming more prevalent. According to the National Survey on Drug Use and Health (2003), 5.3% (over 12 million people) of the U.S. population reported trying methamphetamine at least once in their lifetime. The highest rate of methamphetamine use was among the 26 to 34 age group, with 6.7% reporting lifetime methamphetamine use during 2002. The second highest group was young adults (18–25), with 5.7% reporting lifetime methamphetamine use during 2002. According to the 2002 Monitoring the Future Study (2003), 6.7% of high school seniors reported using methamphetamine within their lifetime. Lifetime use among 8th and 10th graders was 3.5% and 6.1%, respectively. Also during 2002, 4.7% of high school seniors reported using Ice, also known as crystal methamphetamine, within their lifetime. During 2002, 11.9% of college students and 14.8% of young adults (ages 19–28) reported using methamphetamine at least once during their lifetimes.

Despite these reports indicating a greater availability and consumption of methamphetamine, little is known about the association of its use and health over time, particularly during the formative stages of adolescence and young adulthood. The present research examined the inter-relationships among methamphetamine use, physical symptoms, and psychological and social well-being in a community sample of young adults living in Los Angeles.

1. Methods

1.1. The sample

The research was based primarily on in depth, life-history interviews with 106 individuals who used methamphetamine for a minimum of 3 months and who resided in Los Angeles County. The respondents were recruited from two social settings: (1) methamphetamine users participating in ADAPT, a drug treatment program for methamphetamine users and (2) methamphetamine users at liberty in the community and having little or no contact with treatment or criminal justice institutions.

The sample contains 55 respondents (51.9%) in drug treatment and 51 (48.1%) active community methamphetamine users. The majority of respondents were male (59.4%), Hispanic (62.3%), high school graduates (83.0%), in their twenties (86.2%), possessing, on average, 25 months of work experience (see Table 1). The youngest respondent was 18 years old and the oldest 25; the median age was 22 years. Most of the respondents worked in a legitimate job (83%). Table 2 shows self-reported lifetime prevalence of drug use, drug selling, and non-violent and violent crimes. Respondents reported that they were engaged in a wide range of criminal and deviant activities. Nearly all said they were experienced drug users. This is not surprising since the criterion for inclusion in this study was methamphetamine use.

1.2. Interview protocol

Structured, but open-ended interview guides were used. The interviews included items on personal demographics, family background, detailed life history information about prior involvement in drug use,

Table 1 Sample characteristics (N=106)

Sex		(%)
Male		59.4
Male Female		40.6
Age		40.0
Mean		21.58
Median		22.00
Race		22.00
White		30.20
Black		7.50
		62.30
Hispanic		
Education (mean years completed)		11.88
School dropouts		17.00
Marital status at interview		26.4
Married/living together	26.4	
Never married		69.8
Other		3.8
Children		24.0
Have children		34.0
Number (mean)		2.1
Employment history		15.0
Never worked		17.0
Sales/cashier/foodworker		24.5
Clerical		9.4
Non-skilled		21.7
Skilled		10.4
Semi-professional/professional		17.0
Problems while in school	Prevalence (%)	Age at initiation (mean)
Fighting	72.6	11.64
Weapons possession	27.4	13.34
Alcohol use	45.3	13.69
Drug use	78.4	13.86
Intact family (%)	82.1	
Family problems	(%)	
Someone arrested	48.1	
Substance abuse	53.7	
Family mental health	11.3	
Family violence while using drugs/alcohol	26.4	

questions about lifestyle, health and psychological problems, and items on violence toward others. Participants who reported health, psychological, and social problems were asked to provide a description of the problem event/act (the most recent one for multiple episodes) and its consequences. Also, a narrative account of how these drugs and drug states were related to violent event was obtained.

Sample members were asked if they had experienced any of 13 drug-related problems while using methamphetamine. The 13 problems covered a wide range of intrapsychic, personal and interpersonal difficulties. Factor analysis with varimax rotation and a Kaiser criterion was used to create indices of

Table 2 Crime, drug use and drug selling history (N=106)

	Prevalence (%)	Age at initiation
Non-violent crimes		
Auto theft	42.5	14.36
Shoplifting	68.9	12.62
Forgery	8.5	19.67
Prostitution	.9	19.00
Burglary	13.2	15.79
Violent crimes		
Assault	36.7	15.71
Robbery	16.0	15.59
Weapons possession	54.3	15.34
Attempted murder	16.0	16.18
Murder	6.6	15.86
Drug used		
Alcohol	100	13.59
Marijuana	96.2	13.95
Inhalants	28.3	14.87
Hallucinogens	55.2	15.74
PCP	29.3	15.77
Methamphetamine	100	16.80
Depressants	17.9	16.05
Cocaine	76.2	16.92
Crack	50.9	16.95
Heroin	2.8	20.00
Drug sold		
Methamphetamine	60.9	
Cocaine	16.9	
Crack	14.6	
Marijuana	32.0	

drug problems. For example, intrapsychic problems related to methamphetamine use included depression, paranoia, hallucinations, anxiety/irritability, and sleeplessness. A second factor involved difficulties in social functioning and in fulfilling role obligations, including trouble at school, trouble at work, family problems, and financial problems.

In addition, respondents were asked to describe the relationship, if any, between the problems and methamphetamine use, including amounts of specific substances ingested prior to the time of the incident by the respondent, the state of intoxication or other drug states (e.g., 'crashing') manifested by the respondent prior to the reported behavior.

1.3. Consequences of methamphetamine use

Data reported in Table 3 reveal that the majority of sample members were addicted to methamphetamine (68.9% used on a daily basis). An overwhelming number of respondents increased

Table 3 Characteristics of methamphetamine use (N=106)

	N	Percent
Frequency of use		
Weekends	20	18.9
3-6 days/week	13	12.2
Daily	73	68.9
Weekly cost		
Range	\$0-800	
Mean	\$136	
Median	\$60	
Primary method of use		
Snort	82	77.4
Smoke	20	18.9
Inject	4	3.7
Binge		
Never	3	2.8
2–5 days	78	73.5
6–10 days	25	23.7
Range	2–21 days	
Mean	4.18 days	
Median	3.00 days	

their use of methamphetamine within days of their initial experience. This pattern of rapid escalation not only can be attributed to the physical and psychological effects of the drug but also with the general availability of methamphetamine. A key factor often cited as contributing to escalating use was the seductive nature of the drug itself. Most stated that methamphetamine effects offered not only increased energy, but a sense of well-being and a feeling of mastery and power that was so reinforcing it often led them to use more frequently than they expected. Casual weekend use, often led to greater use during the week. Even those who initially limited their use to specific situations—parties, sexual activities, work—gradually found themselves using methamphetamine in a variety of activities. All this helps to explain why many users escalated their use over time. It is important to note, however, that such escalation was not inevitable; approximately 20% of the respondents maintained stable use patterns over many years without increasing doses.

Respondents varied in their length of use (the average length of use was 3.8 years). Ninety-seven percent of the sample reported that they engaged in binge behavior. Approximately 4 days was the average reported binge duration. In light of this level of use, it is not surprising that the respondents reported a wide range of side effects from methamphetamine use. Their experiences are summarized in Table 4.

Virtually all of the respondents experienced negative consequences of methamphetamine use. A substantial number of respondents experienced severe psychological symptoms: depression, hallucinations, and paranoia. The most frequently mentioned form of paranoia was fear of others; feeling that people wished harm to or threatened the respondent. This type of psychotic symptom has particular relevance to violent behavior. Previous research suggests that when a person fears personal harm or feels

Table 4 Methamphetamine-related problems (N=106)

	%
Health problems	
Seizures/convulsions	3.8
Dehydration	8.5
Sleep	93.4
Weight	55.7
Depression	36.8
Paranoia	62.3
Hallucinations	37.7
Irritability	79.3
Social problems	
Family	49.1
School	15.1
Work	7.6
Financial	23.6
# of problems	%
Psychological problem index (sleep, depression, paranoia, hallucinations, irritability)	
1	11.8
2	19.4
3	23.7
4	24.7
5	20.4
Social problem index (family, school, work, financial)	
0	19.4
1	31.2
2	35.5
3	9.7
4	4.3

threatened by others, interpersonal violence become more likely (Link & Stueve, 1998). Approximately 38% of the respondents reported experiencing some form of hallucination. Hallucinations usually took the form of hearing voices familiar to the respondent that make insulting remarks or command the respondent to do certain things. Depressed users often had hallucinations with themes of guilt and personal inadequacy, such a hearing voices berating them for their shortcomings.

Despite the high level of addiction among sample members, the social effects of methamphetamine use were surprising small. Nineteen percent of the sample reported no social effects and approximately 31% reported experiencing only one social problem related to methamphetamine use. Methamphetamine use seemed to have the least impact on school, work and finances. Methamphetamine-related problems with spouses, lovers, or friends were more apparent. One in two respondents reported that methamphetamine use had negative effects on their interpersonal relationships.

Overall, the sample members that reported the greatest number of psychological and social problems are the respondents that reported the greatest methamphetamine use (see Table 5). Regardless of sex, the

Wear scores of males and	Psychological problem index		Social problem index	
	Male	Female	Male	Female
Frequency of use				
Weekends	2.00	2.50	.93	0
3-6 days/week	2.96	3.80	1.00	1.00
Daily	3 29	3.90	1 91	1.52

Table 5
Mean scores of males and females on frequency of methamphetamine use and drug problem indices

mean scores for psychological and social problems increase as the level of methamphetamine use increases.

1.4. Prevalence of methamphetamine-related violence

Of the 106 respondents, 37 (34.9%) had committed violence while under the influence of methamphetamine. Males comprised two-thirds of the 37 respondents (N=24). Of the total sample, 38% of males and 30% of females committed methamphetamine-related violence, respectively. Seventeen of the 37 respondents who committed methamphetamine-related violence (45.9%) reported that they had never committed a violent crime prior to the methamphetamine-based events. Overall, the 37 respondents reported 54 separate violent events while using methamphetamine. Of these 54 events, 33 (61.1%) acts of violence involved domestic relationships, 9 (16.7%) of the violent events were drug related, 7 (13%) were gang related, and 5 (9.3%) involved random acts of violence (e.g., road rage, stranger assault).

Methamphetamine use often increased the stakes in everyday interactions, transforming them from non-challenging verbal interactions into the types of "character contests" whose resolution often involved violence. Methamphetamine use exaggerated the sense of outrage over perceived transgressions of personal codes (respect, space, verbal challenges), resulting in violence to exert social control or retribution. A fairly common effect of methamphetamine was paranoia. Paranoia contributed to hostile attributions that created an air of danger and threat, leading to defensive or pre-emptive violence. Several sample members reported that their decision making within violent events was comprised. Perhaps the most common language respondents used to describe their behavior was "loss of control." The respondents spoke in terms of "being out of control," "blowing up," or having an "outburst of rage."

Overall, methamphetamine use provided several mechanisms for motivating violence. Cognitive effects included: inhibition of cues that normally control behavior, increased arousability, interference with communication and interpersonal interactions, and intensification of emotions. The findings suggest that a methamphetamine-related violent event results from the interaction of the individual, the substance, and the situation.

1.5. Conclusions

Study findings suggest that methamphetamine use has serious negative consequences for health and psychological functioning. It is also apparent from our findings that methamphetamine use heightens the

risk for violence. Everyone we interviewed agreed that methamphetamine has clear abuse and violence potential. Almost all of our respondents knew people who had gone "too far" with methamphetamine even if they themselves had not. Having said this, it is crucial to reiterate that we could find no evidence of a single, uniform career path that all chronic methamphetamine users follow. Progression from controlled use to addiction is not inexorable. Furthermore, a significant number of sample members experienced limited or no serious social, psychological, or physical dysfunction as a result of their methamphetamine use. Most germane to this study, we found that violence is not an inevitable outcome of even chronic methamphetamine use.

The variation in intoxicated behaviors within social contexts suggests that the context itself exerts a powerful influence on the violence outcomes of methamphetamine situations. This study has shown that the importance of social context for methamphetamine-related violence lies in the mediating processes that shape behaviors as well as in the specific interactions leading to violence between offenders and victims. Violent behavior resulted from a complex interaction among a variety of social, personality, environmental, and clinical factors whose relative importance varied across situations and time.

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