

ALCOHOL RELATED VIOLENCE AND UNWANTED SEXUAL ACTIVITY ON THE COLLEGE CAMPUS

Mary E. Nicholson, PhD
Min Qi Wang, PhD
Dolores Maney, PhD
Jianping Yuan
Beverly S. Mahoney, PhD
Daniel D. Adame, PhD

Abstract: *The purpose of this study was to explore the relationships among alcohol consumption, sexual assault and rape, and nonsexual violence in a college population at a large Northeastern university. A 49-item questionnaire was designed to elicit responses from both victims and perpetrators. Of the 1,084 respondents: 518 were male, 566 were female, the majority were White (91.8%), and in the 18-21 age range. Unwanted sexual activity, rape, and violence were significantly related to alcohol consumption on the college campus studied. These data indicated that alcohol was involved in: a) unwanted sexual activity—both from the victim's perspective (85.7%) and from the perpetrator's perspective (76.0%); b) rape—both from the victim's perspective (69.0%) and from the perpetrator's perspective (100%); and nonsexual violent acts from the same sex (59.5%), and (c) from the opposite sex (58.9%). The findings are consistent with those of previous studies that indicate a persistent trend in the negative consequences of violence linked to alcohol use and abuse among college students. [Am J Health Studies 1998; 14(1): 1-10]*

Assault and rape crimes are serious but often unreported in the United States. These crimes had been steadily increasing in the general public for the last decade, but since 1992 violent crimes and rape have declined slightly, while there was no change in aggravated assault (U.S. Department of Justice, 1995). Two age groups, teens and young adults, have documented increases in violent incidents. Reports of these crimes also continue to escalate on college campuses (Abbey, 1991; Koss, Gidycz, & Wisniewski, 1987; Pezza & Bellotti, 1995a). Many studies have been conducted in recent years that document the prevalence of rape and lesser forms of sexual aggression in the college population (Koss & Dinero, 1989; Meilman, Riggs, & Turco, 1990;

Muehlenhard & Linton, 1987). Other investigators have explored the relationship between alcohol consumption and sexual behavior (Abbey, Ross, McDuffie, & McAuslan, 1996; Meilman, 1993). Results from several empirical studies have suggested strong associations between alcohol consumption and sexual aggression on campus (Crowe & George, 1989; Commission on Substance Abuse at Colleges and Universities, 1994). Few data have been reported that have included the incidence and prevalence of alcohol related non-sexual violence among college students. This study explored the relationships among alcohol consumption, sexual assault and rape, and non-sexual violence in a college population at a large Northeastern university.

Mary E. Nicholson, PhD, is a Professor of Health Education and Biobehavioral Health, **Dolores Maney, PhD**, is an Assistant Professor of Kinesiology, **Jianping Yuan** is a Research Associate, and **Beverly S. Mahoney, PhD**, is an Assistant Professor of Health Education at the Pennsylvania State University. **Min Qi Wang, PhD**, is a Professor of Health Studies at The University of Alabama. **Daniel D. Adame, PhD**, is an Associate Professor of Health Education at Emory University. Address correspondence to: **Mary E. Nicholson, PhD**, Pennsylvania State University, 311 East Henderson Building, University Park, PA 16802.

In one frequently cited national study, Koss et al., (1987) surveyed 6,159 men and women enrolled in 32 universities about their experiences with rape, attempted rape, and sexual coercion. Results showed that 27.5% of college women reported an experience in their college life that met a legal definition of rape, and that 7.7% of college men reported perpetrating an act that met legal definitions of rape. Since almost none of the victims or perpetrators has been involved with the justice system, these experiences are not reflected in official crime statistics.

Campus violence is demonstrated primarily by occurrences of non-sexual physical attacks such as assault, fighting, or mugging, followed by unwanted sexual activity other than intercourse and rape (Pezza & Bellotti, 1995b). The authors concluded that a major factor of campus violence is the failure of students to recognize violence as a crime and students' rationalization of recognized violent behavior.

Muehlenhard & Linton (1987) conducted a study of 635 college men and women to explore sexual aggression in dating situations. Their findings showed that 77.6% of the women experienced some form of sexual aggression and 14% had engaged in unwanted sexual intercourse. For the men, 57.3% reported involvement in some form of sexual aggression, and 7.1% reported unwanted intercourse. Heavy alcohol use, defined as "moderately to extremely intoxicated" (p.192), was implicated as a major risk factor for both sexual aggression and rape. Of those men who acknowledged committing sexual assault on a date, 55% reported being intoxicated at the time. An additional 29% said they were "mildly buzzed" (p.193).

Other investigators also have reported associations between heavy drinking and sexual assault among college men and women (Koss & Dinero, 1989; Miller & Marshall, 1987). In the Miller and Marshall study, 60% of the women who engaged in unwanted sexual intercourse reported that they had been using alcohol or other drugs when coerced. Koss & Dinero reported that alcohol use was one of the four primary predictors associated with a collegewoman's chances of being raped.

Meilman et al., (1990) reported findings from a randomly selected sample of campus males and females about unwanted sexual experiences. Of the females, 33.2% reported being victims of unwanted attempted intercourse; and 11.5% of the females reported unwanted completed intercourse during their college years. Of those men and women reporting attempted unwanted sexual experiences, slightly over one-half said that alcohol was involved. In a more recent study which did not focus on sexual coercion, Meilman (1993) investigated the relationship between alcohol and campus sexual activity. Survey results indicated that alcohol influenced 35% of the students' sexual activities in some form, and that 18% had experienced sexual intercourse as a direct result of drinking alcohol.

Abbey et al. (1996) reported findings from self-administered surveys given to 1,160 collegewomen. Of 338 African American and 700 Caucasian females, 59% had experienced some form of sexual assault and 23% had experienced rape. Alcohol was used by the perpetrator in 55% of the sexual assaults and by the women in 39% of the unwanted sexual encounters. Overall, African American women reported less alcohol consumption than did Caucasian women. As expected, sexual assaults on Caucasian women more frequently involved alcohol use, by both the perpetrator and the victim, than did assaults on African American women.

A 1994 report, compiled from surveys conducted by Johnston, O'Malley, & Bachman (1992), Wechsler & Isaac (1992), Anderson (1994), and others, and issued by the Commission on Substance Abuse at Colleges and Universities (1994) revealed that 90% of all college rapes occurred when either the victim or the attacker were under the influence of alcohol. Other findings included: 60% of college women who acquired sexually transmitted diseases, including HIV/AIDS, had been drinking at the time of infection; alcohol abuse on college campuses is increasing; and although college men continue to drink more than college women, the consequences of alcohol abuse are more severe for women.

One particular area of concern has been the reluctance of sexual assault victims to

report their experiences to campus or local law enforcement authorities (Koss & Oras, 1982; Miller & Marshall, 1987). In many cases these crimes were not recognized as such by victims even when their descriptions of the assault met most legal definitions of rape (Koss et al., 1987; Muehlenhard & Linton, 1987). In the Koss et al. study (N=6159), of the 27.5% of women who experienced an act that met a legal definition of rape, only one-quarter of the women labeled the act as rape, only 10% told someone about the assault, and none reported the assault to any authority. One explanation of the underreporting could be that when women have been assaulted while under the influence of alcohol, they tend to feel more responsible for the attack than do women who were sober (Kanin, 1985). Other explanations involve the victims' feelings of guilt, shame, and helplessness, particularly when the women knew their assailant (Miller & Marshall, 1987). When the assailant is a friend or date, not only has the woman's body been violated, but her trust in others has been betrayed and her faith in her own judgment has been shaken.

The consistency of the results from these studies show a strong association between alcohol use and sexual violence on college campuses, and the underreporting of these crimes. Similar data on alcohol-related non-sexual physical violence on college campuses have been difficult to assemble (Bausell, Bausell, & Siegel, 1991; Koss & Dinero, 1989; Volkwein, Szelest, & Lizotte, 1995). In addition, the campus on which this study was conducted has presented to the academic community a well coordinated, multi-faceted, awareness program over the past three to four years, directed towards sexual assault prevention and the reporting of violent incidents. The program was coordinated by The Center for Women Students and involved The Student Health Center, The Office of Resident Life, The Campus Police Services, and several administrative offices. The objectives of the program were: to make students aware of the existence and nature of victim assistance options, to encourage victims to report campus crimes, and to assure confidentiality and sensitivity on the part of counselors. Pamphlets were widely circulated;

presentations were made at Freshmen student orientations, student centers, dormitories, and in classrooms; and announcements appeared in the campus newspapers. It was anticipated that these intervention efforts would result in a higher percentage of reported incidents in this study when compared with those of previous studies. The purpose of this study was to explore the relationships among alcohol consumption, sexual assault and rape, and non-sexual violence for students who have been victims and students who have been perpetrators on a large Northeastern university campus. Also, given the recent increased attention to, and availability of services for victims of sexual assault, the respondents were asked to indicate whether incidents had been reported to helping agencies or police officials.

METHODS

A 49-item instrument was developed to elicit responses from students at one large university campus about drinking alcohol and being both victims and perpetrators of sexual and non-sexual assault. Respondents were asked about unwanted sexual activity of any kind (7 questions); attempted uncompleted, unwanted sexual intercourse (7 questions); rape (8 questions); non-sexual violence (7 questions); the involvement of alcohol in any of these experiences (8 questions); and demographic information (12 questions). Many of these items were adapted from The Sexual Experiences Survey developed by Koss and her colleagues (Koss et al., 1987). Definitions of terms, updated for our purposes, were as follows:

- ❖ unwanted sexual activity of any kind: kissing, touching, petting, etc., but not intercourse;
- ❖ attempted uncompleted, unwanted sexual intercourse: no penile penetration;
- ❖ rape: unwanted sexual intercourse (penile penetration) - no matter how slight;
- ❖ violence: slapping, pushing, or other physical force;
- ❖ alcohol involvement: any amount of alcohol used by either the victim or the perpetrator;

- ❖ perpetrator: the initiator of the act of aggression, whether male or female;
- ❖ victim: the recipient of the aggression, whether male or female

To establish face validity, the current instrument was circulated to three investigators with extensive experience in victimization research and survey construction. After several revisions, the survey was pilot-tested in a health education majors' class ($n=74$). In addition to responding to the survey items, students were asked to comment on the clarity, readability, and relevance of the items. Students were administered the identical survey with a two-week interval between testings. The reported test-retest reliability was $\alpha = .82$.

Questionnaires were administered during class periods to students enrolled in one-credit health education classes during the Spring 1994 semester. Since all university undergraduates are required to take one credit of health education before graduation, these courses have been documented in previous studies as reflecting a representative cross-section of university majors (Nicholson, Wang, Mahoney, Adame, & Bechtel, 1995). A total of 1,084 undergraduate students responded. None of the students present in class when the surveys were administered refused to participate. However, not all students answered all questions on the survey.

RESULTS

Other than demographics, all responses were either yes or no. Analysis of data consisted of frequencies, percents, and chi-squares. Of the 1,084 respondents, 518 were male and 566 were female. The majority of students were White (91.8%) and in the 18-21 age range (78.1%) (see Table 1).

SEXUAL VIOLENCE

As shown in Table 2, significantly ($p < .001$) more females (35.6%) than males (7.5%) reported experiencing unwanted sexual activity of any kind. Females were significantly ($p < .05$) more likely (87.9%) to report that alcohol had been involved in the unwanted sexual activity than males (73.7%). Of those reporting unwanted

Table 1
Frequencies of Demographic Characteristics of Respondents ($N=1084$)

	Male		Female		Total	
	N	(%)	N	(%)	N	(%)
Age						
16-17	5	(1.0)	5	(0.9)	10	(0.9)
18-19	195	(37.6)	256	(45.2)	451	(41.6)
20-21	191	(36.9)	205	(36.2)	396	(36.5)
Over 21	127	(24.5)	100	(17.7)	227	(20.9)
Ethnic Group						
White	451	(90.2)	515	(93.3)	966	(91.8)
Black	11	(2.2)	9	(1.6)	20	(1.9)
Hispanic	9	(1.8)	7	(1.3)	16	(1.5)
Asian	27	(5.4)	17	(3.1)	44	(4.2)
Other	2	(0.4)	4	(0.7)	6	(0.6)

sexual activity, 47.9% of the females and 25.8% of the males indicated it had happened more than once ($p < .01$), with alcohol being involved in 77.6% of the incidents. It is important to note, however, that males (94.1%) were more likely to report that alcohol was involved in the unwanted sexual activity more than once, than were the females (74.7%).

Also shown in Table 2 is information regarding the perpetration of unwanted sexual activity. Fifty-one respondents, or 4.8% of the total sample, reported being the perpetrator of unwanted sexual activity. Of those who said they were perpetrators of unwanted sexual activity ($n=51$), significantly ($p < .001$) more were male (8.1%) than were female (1.8%). When asked if alcohol was involved in the perpetration of the unwanted sexual activity, over three-fourths (77.5%) of the perpetrators responded yes. There were no significant differences based on gender among perpetrators who said alcohol was involved in the perpetration of unwanted sexual activity. Interestingly, when asked if they perpetrated sexual activity more than once when alcohol was involved, over one-quarter (26.7%) of all respondents said yes.

Table 3 illustrates those who reported the frequency of attempted but uncompleted,

Table 2
Students Reporting Any Kind of Unwanted Sexual Activity, With and Without Involvement of Alcohol Consumption

	Male		Female		Total		Chi-Square
	N	%	N	%	N	%	
Victim in Unwanted Sexual Activity	39	(7.5)	201	(35.6)	240	(22.1)	123.563***
Alcohol was involved	28	(73.7)	175	(87.9)	203	(85.7)	5.27*
Victim more than once/ unwanted Sexual Activity	17	(25.8)	101	(47.9)	118	(42.6)	10.051**
Alcohol was involved	16	(94.1)	74	(74.7)	90	(77.6)	3.13
Perpetrator in Unwanted Sexual Activity	41	(8.1)	10	(1.8)	51	(4.8)	22.559***
Alcohol was involved	31	(77.5)	7	(70.0)	38	(76.0)	0.247
Perpetrator more than once/ unwanted Sexual Activity	20	(33.9)	7	(16.7)	27	(26.7)	3.719
Alcohol was involved	4	(12.9)	1	(3.4)	5	(8.3)	1.753

Note: * $p < .05$ ** $p < .01$ *** $p < .001$

unwanted, sexual intercourse and rape with regard to the frequency that alcohol was involved. The total number of respondents who reported being the victim of attempted but unwanted sexual intercourse was 9.9%. The victims were significantly ($p < .001$) more likely to be female (15.8%) than male (3.7%). There was, however, no significant difference between males and females regarding the use of alcohol and being the victim of unwanted sexual intercourse. A total of 47 (34.8%) respondents reported that they were a victim more than once of an attempted but uncompleted act of sexual intercourse.

Next, participants were asked whether, as a college student, they had ever been a victim of rape (see Table 3). A total of 43 respondents (4%) indicated that they had been a victim of rape. Females were significantly ($p < .001$) more likely to be victims of rape (5.6%; $n=31$) than males (2.3%; $n=12$). Over two-thirds (69%; $n=29$) of all those reporting rape said that alcohol was involved. Respondents also were asked if they had been a victim of rape more than once; eight said yes, seven of whom were female. Of the respondents raped more

than once, two females and one male noted that alcohol was involved.

Participants also were asked about their involvement in the perpetration of unwanted sexual intercourse and rape, and whether alcohol was involved. As depicted in Table 3, 1.6% ($n=17$) of all respondents reported being perpetrators in an attempted but uncompleted, unwanted sexual intercourse. Males, however, were significantly ($p < .05$) more likely to report perpetrating unwanted sexual intercourse (2.7%) than females. When asked if alcohol was involved in this perpetration, 80% of all respondents said yes. There was no significant difference between males (13.8%) and females (10.0%) who reported perpetrating uncompleted, unwanted sexual intercourse more than once.

Although 43 respondents (31 females; 12 males) indicated they had been raped, only four (3 females; 1 male) had reported the incident to the campus police, local police, or a helping agency. Helping agencies on this campus include The Center for Women Students which has a special program for victims of violence, The University Student Health Center, which has a separate

Table 3

Students Reporting Attempted but Uncompleted, Unwanted Act of Intercourse or Rape, With and Without Involvement of Alcohol Consumption

	N	Male %	N	Female %	Total N	Total %	Chi-Square
Victim in attempted but uncompleted, unwanted SI*	19	(3.7)	87	(15.8)	106	(9.9)	42.392***
Alcohol was involved	11	(57.9)	43	(50.0)	54	(51.4)	.388
Victim more than once in an attempted but uncompleted SI*	10	(23.8)	37	(39.8)	47	(34.8)	3.254
Alcohol was involved	4	(80.0)	12	(57.1)	16	(61.5)	.891
Victim of rape	12	(2.3)	31	(5.6)	43	(4.0)	7.271***
Alcohol was involved	8	(72.7)	21	(67.7)	29	(69.0)	.009
Victim of rape more than once	1	(3.4)	7	(17.5)	8	(11.6)	3.239
Alcohol was involved	1	(100.0)	2	(28.6)	3	(37.5)	1.905
Perpetrator in attempted but uncompleted, unwanted SI*	14	(2.7)	3	(.5)	17	(1.6)	8.102**
Alcohol was involved	11	(84.6)	1	(50.0)	12	(80.0)	1.298
Perpetrator more than once in attempted but uncompleted, unwanted SI*	4	(13.8)	2	(10.0)	6	(12.2)	.158
Alcohol was involved	4	(100.0)	1	(50.0)	5	(83.3)	2.400
Perpetrator in a rape	2	(.4)	2	(.4)	4	(.4)	.007
Alcohol was involved	1	(100.0)	2	(100.0)	3	(100.0)	0
Perpetrator more than once in act of rape	3	(15.0)	6	(30.0)	9	(22.5)	1.290
Alcohol was involved	1	(50.0)	3	(75.0)	4	(66.7)	.375

Note: * SI=Sexual Intercourse ** $p < .01$ *** $p < .001$

Women's Health Clinic, the community-based Women's Resource Center, and the Campus Counseling and Advising Center. Of those reporting to be a perpetrator in the act of rape ($n=4$), only two (1 female; 1 male)

had reported it to police or to a helping agency.

NON-SEXUAL VIOLENCE

The next section of the questionnaire dealt with non-sexual violence among op-

Table 4
Students Reporting Involvement in Acts of Violence, With and Without Involvement of Alcohol Consumption

	Male		Female		Total		Chi-Square
	N	%	N	%	N	%	
Involved in violent act with person of opposite sex	60	(11.6)	163	(29.2)	223	(20.8)	50.381***
Alcohol was involved	30	(50.8)	99	(61.9)	129	(58.9)	2.165
Involved more than once in violent act with person of opposite sex	17	(28.3)	58	(41.7)	75	(37.7)	3.201
Alcohol was involved	8	(50.0)	37	(64.9)	45	(61.6)	1.175
Involved in violent act with person of same sex	244	(47.3)	59	(10.6)	303	(28.3)	177.541***
Alcohol was involved	145	(61.7)	28	(50.0)	173	(59.5)	2.569
Involved more than once in violent act with person of same sex	110	(57.3)	30	(46.9)	140	(54.7)	2.102
Alcohol was involved	78	(72.9)	10	(47.6)	88	(68.8)	5.221

Note: *** $p < .001$

posite and same sex respondents, and alcohol involvement. Table 4 shows that significantly ($p < .001$) more females (29.2%) than males (11.6%) had experienced a violent act with a person of the opposite sex, with alcohol involved in 58.9% of the incidents. Of those reporting violent acts, 37.7% had experienced violence from the opposite sex more than once, with alcohol involved in 61.6% of these cases. Significantly ($p < .001$) more males (47.3%) than females (10.6%) reported non-sexual violent acts with those of the same sex, with alcohol involved in 59.5% of the incidents. Over one-half (54.7%) indicated involvement in more than one violent act, with alcohol as a factor in 68.8% of the cases.

KNOWLEDGE OF OTHERS' EXPERIENCES

Finally, students were asked about knowing other students who had been vic-

tims of rape or non-sexual violence on the campus. Significantly ($p < .001$) more females (34.1%) than males (20.0%) knew of females who had been raped on campus; with alcohol involved in 42.9% of these incidents. Significantly ($p < .001$) more females (49.1%) than males (33.9%) knew of females who had been victims of non-sexual violence from the opposite sex; with alcohol reportedly involved in 35.3% of these incidents. There was no significant male-female difference in knowing females who were victims of violence from the same sex. There was no significant difference between females (5.3%) and males (4.4%) who reported knowing males who had been involved in a rape. Alcohol was involved in 53.2% of these incidents of rape. More females (24.7%) than males (20.1%) knew of males who had been a victim of violence from the opposite sex,

with alcohol involved in 52.1% of these incidents. Significantly ($p < .05$) more females (58.9%) than males (50.9%) knew males who had been a victim of non-sexual violence from other males, with alcohol being involved in 63.1% ($p < .01$) of the cases.

DISCUSSION

Two limitations are inherent in this study, the most important being a non-randomly selected sample. Although students were enrolled in courses previously documented as reflecting the general university population (Nicholson et al., 1995), findings cannot be validly generalized to other campuses. Second, the validity of self-reported sexual behavior has frequently been questioned. To address this concern, Koss et al. (1987) investigated the accuracy and truthfulness of self-reported sexual victimization using both male and female subjects. Matching self-reports with later interviews, the investigators reported a 93% accuracy rate with subjects rating their own honesty at 95%.

It appears that unwanted sexual activity, rape, and violence are clearly related to alcohol consumption on this college campus. These data indicate that alcohol was involved in: a) unwanted sexual activity—both from the victim's perspective (85.7%) and from the perpetrator's perspective (76.0%); b) rape—both from the victim's perspective (69.0%) and from the perpetrator's perspective (100%); and (c) non-sexual violent acts involving the same sex (59.5%) and involving the opposite sex (58.9%).

These findings are consistent with those of previous studies (Abbey et al., 1996; Commission on Substance Abuse at Colleges and Universities, 1994; Koss & Dinero, 1989; Koss et al., 1987; Miller & Marshall, 1987; Muehlenhard & Linton, 1987), that indicate a persistent trend in the negative consequences of violence linked to alcohol use and abuse among college students.

Of particular interest was that non-sexual violent incidents were more prevalent than sexual violent incidents for both men and women, with male same-sex violence having the highest reported incidence (47.3%). Yet, on this campus, no attention

has been given to initiating general or non-sexual violence prevention programs.

Also consistent with recent findings (Koss & Oras, 1982; Miller & Marshall, 1987) was the reluctance of victims to report sexual aggression to the authorities or to agencies that offer assistance to rape victims. According to Miller and Marshall, "The problem of coercive sex is complicated by the fact that often neither the man nor the woman sees the act as 'forced' or as a rape situation" (pp. 38-39). Furthermore, Miller and Marshall reported that, although 27% of their female respondents and 15% of male respondents "had been in forced sexual intercourse while in a dating situation," (p. 46), most had not reported these incidents. In a previous study by Koss and Oras, only 8% of women who were victims of rape or attempted rape ever reported their experiences to the authorities. There is a prevailing sentiment that reporting an act such as unwanted sexual activity or rape by an acquaintance implies that the woman was somehow at fault, and therefore women are reluctant to put themselves in the vulnerable position of making their actions a matter of public record. Given the concentrated attention toward students to report sexual aggression on this campus, it was disappointing to see only 9% of rape victims had reported the incident.

IMPLICATIONS

Because there is a reluctance within our culture to report being victims of attempted or completed unwanted sexual activity, many women still suffer in silence. The fact that, often, they have consumed alcohol prior to such experiences, makes them even less apt to report the events. Clearly there is room for primary and secondary prevention efforts on the college campus. It is not enough to make students and the larger community aware of the risks involved with alcohol-induced lowered inhibitions or situations related to basic safety. Young adults who are victims of such crimes must recognize that alcohol induced sexual or non-sexual violence is a complicated issue. The larger issue is to advocate and raise public awareness so that being the victim of such incidents will not threaten the victims' sense

of integrity or perception that to report such a crime automatically qualifies them to wear the proverbial scarlet letter.

Although these data are not causal, the relationships strongly suggest that, at least in some cases, the violent incidents might have been avoided had alcohol not been consumed. Therefore, educational efforts to reduce violence and sexual aggression should include the total college environment, with strong emphasis on violence prevention and safety during off-campus social drinking events for both men and women.

Recognition that the problem exists is the first step toward resolving alcohol-related violent incidents. There is an increasing awareness in the public health community that violence is a serious public health problem and that non-fatal interpersonal violence has far-reaching consequences in terms of morbidity and quality of life. Secondly, identifying the magnitude of the problem, particularly the antecedents and consequences of non-sexual violent aggression among college students is a necessary precursor for successful intervention. The underreporting and subsequent misdiagnosis of campus violence have prevented an accurate assessment of the phenomenon and its dimensions, which is the basis of effective program planning. What is needed on college campuses is a broader approach to the violence problem. According to Pezza and Bellotti (1995b), "the most powerful deterrent to campus violence is a residential community that finds any type of violence unacceptable" (p. 119).

Campus-wide efforts to reduce campus violence must target the entire academic community. Effective programming should be based on a framework that includes primary, secondary, and tertiary prevention. Primary prevention efforts involve reducing the risk that individuals on campus will be either victims or perpetrators of violence. These efforts might include training students in social skills, empowerment, assertiveness, sexual decision-making, conflict resolution, and self defense. Educational efforts should include how to convey and interpret sexual intentions to lessen miscommunication, the effects of alcohol and other drugs on violence and sexual

interactions, and the consequences of coercive sex.

Secondary prevention should be aimed at identifying and addressing existing problems, while reducing the consequences of those problems. Examples are raising awareness of campus violence, establishing clear consequences for violent offenses, and communicating to the campus community the guidelines for acceptable and unacceptable behavior.

Tertiary prevention would include services for victims such as medical care, personal protection, emotional and legal counseling, and other support as needed. Perpetrators may also receive assistance of various services, including substance abuse treatment programs. Improving access to these services may also promote increased reporting of violent incidences.

In addition to direct violence prevention efforts, health education programs could incorporate components of a violence prevention curriculum into classes other than sexuality and alcohol-focused courses. There are many opportunities at both the undergraduate and graduate level for health educators to address responsible behaviors, assertiveness, empowerment, peer pressure, and other topics that may influence the impact of drinking on behavioral outcomes. More research, including longitudinal studies, is needed to determine whether the statistically significant findings are typical of other campus populations, and to better define the circumstances and risk factors of the unwanted behaviors.

In summary, it appears that alcohol-related violence, of both sexual and non-sexual natures, continues to be an obstacle to the health of collegiate populations. The fact that findings of this study are consistent with previously documented data, on a campus that has recently instituted more aggressive measures to provide supports and alternative activities for students, lends even more credence to the need for wide-spread, community-based approaches to prevention of these behaviors. Educational strategies regarding both the consequences of violent behaviors, particularly those that are alcohol related, and healthy alternatives for alcohol free socializing, need to be

designed, implemented, and evaluated campus-wide.

REFERENCES

- Abbey, A. (1991). Acquaintance rape and alcohol consumption on college campuses: How are they linked? *Journal of the American College Health Association*, 39, 165-169.
- Abbey, A., Ross, L. T., McDuffie, D., & McAuslan, P. (1996). Alcohol and dating risk factors for sexual assault among college women. *Psychology of Women Quarterly*, 20, 147-169.
- Anderson, D. (1994). *College alcohol survey*. Fairfax, VA: George Mason University.
- Bausell, R. B., Bausell, C. R., & Siegel, D. G. (1991). *The links among alcohol, drugs, and crime on American College Campuses: A national follow-up study*. Silver Springs, MD: Business Publishers.
- Commission on Substance Abuse at Colleges and Universities (1994). *Rethinking rites of passage: Substance abuse on America's campuses*. New York: Columbia University, Center on Addiction and Substance Abuse.
- Crowe, L. C., & George, W. H. (1989). Alcohol and human sexuality: Review and integration. *Psychological Bulletin*, 105, 374-386.
- Johnston, L. D., O'Malley, P. M., & Bachman, J. G. (1992). *Smoking, drinking, and illicit drug use among American secondary school students, college students, and young adults, 1975-1991. Volume II: College Students and Young Adults*. Rockville, MD: U.S. Department of Health and Human Services, National Institute on Drug Abuse.
- Kanin, E. J. (1985). Date rapists. *Archives of Sexual Behavior*, 14, 219-231.
- Koss, M. P. & Dinero, T. E. (1989). Discriminant analysis of risk factors for sexual victimization among a national sample of college women. *Journal of Consulting and Clinical Psychology*, 57, 242-250.
- Koss, M. P., Gidycz, C. A., & Wisniewski, N. (1987). The scope of rape: Incidence and prevalence of sexual aggression and victimization in a national sample of higher education students. *Journal of Consulting and Clinical Psychology*, 55(22), 162-170.
- Koss, M. P., & Oras, C. J. (1982). Sexual experience survey: A research instrument investigating sexual aggression and victimization. *Journal of Consulting and Clinical Psychology*, 50, 455-457.
- Meilman, P. W. (1993). Alcohol-induced sexual behavior on campus. *American Journal of College Health*, 42, 27-31.
- Meilman, P. W., Riggs, P., & Turco, J. H. (1990). A college health service's response to sexual assault issues. *American Journal of College Health*, 39, 145-147.
- Miller, B., & Marshall, J. C. (1987). Coercive sex on the university campus. *Journal of College Student Personnel*, 28, 38-47.
- Muehlenhard, C. L., & Linton, M. (1987). Date rape and sexual aggression in dating situations: Incidence and risk factors. *Journal of Counseling Psychology*, 34(2), 186-196.
- Nicholson, M. E., Wang, M. Q., Mahoney, B. S., Adame, D. D., & Bechtel, L. (1995). Contraceptive education, condoms, and high risk sexual behavior: A three year assessment. *Wellness Perspectives*, 11(4), 5-18.
- Pezza, P. E. (1995a). College campus violence: The nature of the problem and its frequency. *Educational Psychology Review*, 7(1), 93-103.
- Pezza, P. E., & Bellotti, A. (1995b). College campus violence: Origins, Impacts, and Responses. *Educational Psychology Review*, 7(1), 105-123.
- U.S. Department of Justice, National Institute of Justice (1995). *Criminal trends in the United States*. Washington, DC: Government Printing Office.
- Volkwein, J. F., Szelest, B. P., Lizotte, A. J. (1995). The relationship of campus crime to campus and student characteristics. *Research in Higher Education*, 36(6), 647-671.
- Wechsler, H., & Isaac, N. (1992). Binge drinkers at Massachusetts Colleges: Prevalence, drinking style, time trends and associated problems. *Journal of the American Medical Association*, 267(21), 2929-2931.