



*V*iolence
& Injury



VIOLENCE & INJURY

Articles in the *Violence & Injury* Category

1. Alcohol, Drugs and Violence Between Intimate Partners
2. Alcohol, Interpersonal Violence and Mexican American Women
3. Alcohol Consumption and Intimate Partner Violence
4. Marriage, Alcohol and Violence
5. Alcohol's Double Threat: A Greater Chance of Crashing and More Severe Injuries
6. Alcoholics May Be More Injury Prone Than Illicit Drug Users
7. Drinking and Drugging Can Be Painful



A LCOHOL, DRUGS AND VIOLENCE BETWEEN INTIMATE PARTNERS

- *Intimate partner violence (IPV) refers to verbal, psychological and/or physical violence between two members of an intimately involved couple.*
- *A study has found that female and male alcohol-related problems, as well as female drug use, are associated with an increased risk of moderate and severe male IPV (where the man is the perpetrator).*
- *Living in high unemployment neighborhoods also increases risk for severe male IPV.*

As a disturbing sign of the times, perhaps, or because of a search for clarity, the term “domestic violence” no longer means – as it was first coined 30 years ago – husband-to-wife violence. The term now encompasses all types of violence in the home, including spousal violence, elder abuse and parent-to-child violence. Intimate Partner Violence (IPV) has become the subset of domestic violence that refers specifically to the verbal, psychological and physical violence between two members of an intimately involved couple, married or unmarried.

While research indicates that female IPV (where the woman is the perpetrator) occurs as often or even more often than male IPV (where the man is the perpetrator), women are more likely than men to sustain injuries and need medical care as a result of IPV. A study in the April issue of *Alcoholism: Clinical and Experimental Research (ACER)* examines associations among male and female alcohol problems, drug use and risk of IPV in a general household population sample.

“Our key findings were that female and male alcohol-related problems and female drug use, were associated with an increased risk of moderate and severe male IPV,” said Carol B. Cunradi, epidemiologist, associate research scientist at the Pacific Institute for Research and Evaluation and lead author of the study. “In addition, couples living in high unemployment neighborhoods are at increased risk for severe IPV compared to couples living in low unemployment neighborhoods, even after statistical adjustment for other factors.”

“Not surprisingly,” added Roland S. Moore, a research anthropologist at the Pacific Institute for Research and Evaluation, “men and women who had been victims of childhood violence were more likely to be involved in severe male-to-female partner violence. In contrast, and similar to those couples who lived in neighborhoods with low unemployment, White and Hispanic couples were also less likely to engage in male-to-female IPV.”

Researchers examined a multiethnic sample of 1,615 married or cohabiting couples from the 1995 National Study of Couples, a cross-sectional study of alcohol and IPV that was part of the ninth National Alcohol Survey. The sample included 555 White couples, 527 Hispanic couples, 358 Black couples and 173 couples of “mixed” ethnicity. Participants were asked about sociodemographic and psychosocial variables, as well as alcohol problems, drug use and IPV during the 12 months prior to the interview. In addition, neighborhood unemployment data were collected for each couple from the 1990 census.

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LCOHOL, DRUGS AND VIOLENCE BETWEEN INTIMATE PARTNERS

Alcohol-related problems and, to a lesser degree, drug use were associated with an increased risk of male IPV. This does not necessarily mean that high levels of alcohol consumption will cause more IPV, however. In fact, alcohol-related problems (such as withdrawal or negative social consequences) rather than heavy alcohol use might prove more relevant.

“Alcohol-related problems indicate a loss of control over drinking that mirrors loss of control in other aspects of life,” said Moore. “Such loss of control in relationships can lead to more unstable situations in which intimate partner violence is more likely.” In other words, lack of restraint regarding alcohol may be part of a larger problem that includes aggressive or violent interpersonal exchanges, which can collectively lead to discord and/or fighting.

“The neighborhood unemployment association,” said Cunradi, “is part of a growing body of literature examining the association between neighborhood factors or characteristics and various health outcomes or behaviors. We don’t know why characteristics of the neighborhood are associated with greater risk for severe male IPV. One can certainly speculate on the emotional/psychological sequelae of residing in a high unemployment neighborhood. Given that men are still expected to be the household breadwinners, living in such a neighborhood may be associated with feelings of depression, powerlessness and stress. These factors may provide a toxic atmosphere for the resolution of conflict between the couple.”

Both Cunradi and Moore said that although this study finds an association between IPV and substance use or abuse, it does not clarify which comes first. “A person engaging in heavy drinking or other forms of intoxication certainly increases their odds of being victimized,” said Moore. “And ‘self-medication’ through heavy alcohol or drug use may be a response to the traumatic experience of being victimized. The direction of causality in some of the associations discussed in this paper could be better established with longitudinal studies.”

Cunradi said this was next. “Although the National Study of Couples was originally conceived as a cross-sectional study, additional funds were obtained to re-interview the participating couples during the year 2000. The data obtained from those interviews are currently being analyzed and may provide insight into which factors may be causally related to IPV.”

“IPV is a difficult topic to study because it usually takes place behind closed doors,” said Moore. “The association between alcohol and other drug use and IPV is common knowledge, but there are relatively few studies examining the links between them in a sophisticated way. Detailed analyses of intimate partner violence and substance use are relatively rare.”

Article is based on the following published research:

Cunradi, C.B.,
Caetano, R., Schafer, J.
(April 2002).
Alcohol-related
problems, drug use, and
male intimate partner
violence severity among
U.S. couples.
*Alcoholism: Clinical
and Experimental
Research*,
26(4), 493.





ALCOHOL, INTERPERSONAL VIOLENCE AND MEXICAN AMERICAN WOMEN

- *The development and consequences of alcohol abuse or dependence (ADA) differ for men and women.*
- *Women who report sexual abuse or assault during their childhood or life history are particularly vulnerable to later ADA.*
- *Elements of ADA may also differ by culture.*
- *Mexican American women who report assault by someone other than a partner are more likely than those not assaulted to develop ADA.*

A study in the October issue of *Alcoholism: Clinical and Experimental Research (ACER)* is the first to examine alcohol abuse or dependence (ADA) among Mexican American women who report physical or sexual assault. “In this study, women reporting interpersonal violence are much more likely to meet the criteria for ADA than women reporting no violence,” said E. Anne Lown, a post-doctoral fellow and associate research scientist at the Alcohol Research Group, as well as the lead author of the study. “Abuse by a partner was not associated with ADA when we controlled for pertinent factors. Abuse by someone other than a partner, however, was strongly linked to ADA in Mexican American women.” This latter category might have included childhood sexual or physical assault, ex-partner battering, stranger mugging or date rape.

“What is especially interesting about this study,” said Tom Greenfield, center director at the Alcohol Research Group, “is the strong relationship between alcohol abuse disorders and physical or sexual assault ‘ever’ in the person’s life, which has not been reported previously among Mexican American women. This relationship was strong enough that it remained even after controlling for other factors influencing both ADA and assault, such as parental drinking problems. This study suggests that for many Mexican American women, victimization in the past may be part of the clinical picture in the present. It also leaves open the possibility that alcohol abuse disorders may make such assaults more likely.”

Research on ADA and violence against women has examined three groups: women who report child abuse, a lifetime history of sexual assault, and/or intimate partner violence (also known as domestic violence). Numerous studies have shown that sexual abuse during childhood is linked to the later development of ADA. Two factors in particular, the earlier the age of sexual abuse and abuse severity (if it involved intercourse), are strongly associated with the later development of ADA. Physical abuse during childhood, however, has not generally been found to be associated with alcoholism. Three community studies of ADA and sexual assault ‘reported ever’ during a woman’s life all showed that assault preceded the alcoholism. Furthermore, one study showed that women with ADA had a 2.77 greater chance of reporting a later sexual or physical assault, which means that alcoholism may also place a woman at increased risk of assault.

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LCOHOL, INTERPERSONAL VIOLENCE AND MEXICAN AMERICAN WOMEN

“An outstanding weakness in previous epidemiological and biomedical research has been the use of unrepresentative samples that do not reflect today’s population composition,” said William A. Vega, professor of psychiatry at Robert Wood Johnson Medical School, co-author of the paper and principal investigator. “Although medical and mental health research has been done on Hispanics as a whole, groups of Hispanics differ greatly from one another. Mexican Americans constitute two-thirds of all U.S. Hispanics. They are, therefore, a substantial fraction of the largest ethnic minority group in the United States. Mexican Americans are generally infrequent users of health and mental health services and Mexican American men are often occasional heavy drinkers.”

Both Lown and Greenfield noted that assimilation into U.S. society tends to increase the frequency of alcohol consumption among both men and women in this ethnic group. Prevalence rates of ADA also increase in later generations, added Greenfield, after “the immigrant generation,” which has higher levels of abstention than subsequent generations.

“We critically need to understand more about how sexual and physical abuse increase the risk of alcohol problems, or are themselves made more likely if the woman abuses alcohol. This is important both for treatment and prevention of alcohol as well as other mental health problems. In addition, there is some evidence that a number of these findings are not unique to Mexican American women. Some of the results may be relevant to all cultural groups where there are numerous risk factors such as poverty, environmental stresses, discrimination, treatment barriers and other health disparities,” said Greenfield.

Greenfield noted, however, that questions remain about the temporal sequence of alcohol and violence. “Causal sequencing still needs to be teased out,” he said. “This will not be easy since prospective studies going back to childhood are rare and difficult to accomplish both for ethical and practical reasons, but we will need to begin with retrospective studies that document the sequence of events so histories can be reconstructed.”

These findings highlight the importance of screening for physical and sexual assault in settings that treat alcohol disorders, said Lown, as well as screening for alcohol disorders among women seeking services for previous or current violence. She continued, “The assaulted Mexican American women in this study, who are more likely than not to have alcohol disorders, would likely be barred from shelter, putting them and their children at risk for further battering or less safe housing alternatives.”

Article is based on the following published research:

Lown, E.A.,
& Vega, W.A.
(October 2001).
Alcohol abuse or
dependence among
Mexican American
women who report
violence.
*Alcoholism: Clinical
and Experimental
Research*,
25(10), 1479-1486.



A LCOHOL CONSUMPTION AND INTIMATE PARTNER VIOLENCE

- *Members of a couple perceive and remember domestic disputes in different ways.*
- *Days of heavy drinking by male partners have an increased probability of physical aggression.*
- *Black and Hispanic couples are at a higher risk for intimate partner violence (IPV) than White couples.*
- *Male-perpetrated violence decreases significantly following individual treatment.*

These findings, presented at a symposium during the joint June 2002 Research Society on Alcoholism/International Society for Biomedical Research on Alcoholism meeting in San Francisco, can be found in the February issue of *Alcoholism: Clinical and Experimental Research (ACER)*.

“The association between domestic violence and drinking has been recognized for quite some time,” said Raul Caetano, professor of epidemiology and assistant dean at the University of Texas School of Public Health and corresponding author for the *ACER* manuscript. “Many of those who are involved in IPV are drinking during the event or have been diagnosed as alcoholic. However, there is still discussion about the nature of the link between alcohol and violence. Some think, for example, it is due to the disinhibiting effect of alcohol, which triggers a disinhibition of aggressive tendencies, leading then to aggression and domestic violence. Some think that the link between alcohol and violence is due to their association with a third factor such as a personality disorder.”

Understanding the association or link between alcohol and IPV, said Caetano, is fundamental to providing effective prevention and treatment interventions. The symposium also focused on improving research methods and exploring treatment options. Some of the key findings were:

- Alcohol researchers have thus far neglected to focus on agreement between couples who report partner violence and alcohol-related partner violence. New evidence shows that this agreement is low, due to differences in both memory and perception of the dispute. In order to obtain valid data, researchers must develop precise and standardized methods of data collection.
- For couples in which male partners have a fairly recent history of perpetrating partner violence, drinking – particularly heavy drinking – by male partners is a highly significant risk factor for the recurrence of physical aggression. There is an eight times higher probability of domestic violence occurring on days of heavy drinking compared to days when drinking was not heavy.
- Analysis of national data shows that prevalence, incidence and stability of IPV are higher among African Americans and Hispanics than Whites. “We need to recognize that IPV is another example of health disparities between whites and ethnic minorities,” said Caetano.

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LCOHOL CONSUMPTION AND INTIMATE PARTNER VIOLENCE

- Male-perpetrated IPV appears to decrease following individually-based alcoholism treatment. One study found that the proportion of individuals in an alcoholic sample reporting domestic violence was 56 percent in the year before treatment, four times that of the comparison sample (14%). In the year following treatment, that proportion decreased significantly to 25 percent, but still remained higher than the comparison sample.

“The symposium proceedings have multiple applications,” said Caetano. “Investigators need to be careful about data collection in this area and make sure that they have information from both members of the couple. We can see that techniques for treatment do exist that are effective in reducing domestic violence in alcoholics and perhaps also for other individuals. It is also important to note that this type of violence seems, unfortunately, to affect minorities more than whites, and resources from prevention and treatment should be distributed in accordance with this higher risk.”



**Article is based
on the following
published research:**

Caetano, R.,
Schafer, J.,
Fals-Stewart, W.,
O'Farrell, T.,
Miller, B.
(February 2003).
Intimate partner
violence and drinking:
New research on
methodological issues,
stability and change,
and treatment.
*Alcoholism: Clinical
and Experimental
Research*,
27(2), 292-300.

MARRIAGE, ALCOHOL AND VIOLENCE

- *The exact relationship between alcohol use and marital aggression has been unclear.*
- *A recent study has found that alcohol can contribute to marital violence under certain circumstances.*
- *Alcohol seems to exacerbate marital problems when conflict already exists.*
- *Different drinking patterns by the husband and wife may be an additional source of conflict.*

As part of an ongoing examination of drinking and marital violence among newlywed couples, recent findings from the Buffalo Newlywed Study confirm that excessive alcohol use may indeed be involved in marital aggression. However, as the study notes in the July issue of *Alcoholism: Clinical and Experimental Research (ACER)*, alcohol does not simply lead to marital violence, but alcohol may contribute to marital violence within a certain context, for particular people, in particular kinds of relationships.

“It is not unusual to find that violence that occurs early in marriage is predictive of violence occurring later on in marriage,” said Brian Quigley, research associate at the Research Institute on Addictions at the State University of New York at Buffalo. “What this study has found is that certain patterns of alcohol use by couples during the first year of marriage, plus marital conflict, are predictive of violence later in marriage. More specifically, when husbands tend to be heavy drinkers and wives tend to be light drinkers during the first year of marriage, these couples seem more likely to experience husband-to-wife violence in the second and third years of marriage.”

According to the National Coalition Against Domestic Violence, 33 percent of American women experience domestic violence. (The term “domestic” is used to refer to a relationship composed of partners, whereas “marital” refers to a husband-and-wife couple.) Domestic violence can be physical, sexual and/or psychological in nature. In all cultures, the perpetrators are most commonly the men of the family; women are most commonly the victims of violence. Rural and urban women of all religious, ethnic, economic and educational backgrounds, of varying ages, physical abilities and lifestyles can be affected by domestic violence.

Debate continues regarding the exact relationship between alcohol use and domestic violence. Some people believe that alcohol causes domestic violence; others believe that alcohol use may be a reaction to, or a form of coping with, discord or violence that already exists in the relationship. Quigley’s study supports the view that alcohol can lead to marital violence, albeit not simply across the board, but under particular circumstances.

“Alcohol is not simply used as a way of coping with violence that already exists,” Quigley noted. “Alcohol use does play some role in the development of marital violence, but patterns of alcohol use are an important part of that role. In addition, although alcohol use is definitely a risk

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MARRIAGE, ALCOHOL AND VIOLENCE

factor for marital violence, we need to keep in mind that not all marital violence that occurs involves alcohol; maybe 50 percent of it is sober violence.”

“There is a common public perception,” concurred Julie Schumacher, a doctoral candidate in clinical psychology at the State University of New York at Stony Brook, “that alcohol is a direct cause of marital violence. Eliminating domestic violence isn’t as simple as getting rid of alcohol, which the common public myth about alcohol and violence might lead you to believe. This study shows that marital violence is related to alcohol use in conjunction with other factors such as personality, certain demographics and conflict in the relationship.”

The major finding of Quigley’s study was that alcohol seems to exacerbate problems when conflict already exists, and different patterns of drinking by the husband and wife may be an additional source of conflict. Quigley is not entirely sure why the most marital violence occurred when the husband was a heavy drinker and the wife was a light drinker, but he suspects that “discrepant drinking patterns may lead to disagreements about the drinking itself, about things associated with drinking like hangovers and legal difficulties, or perhaps the different drinking styles are indicative of two different types of personalities. He added, “other studies by co-author Kenneth Leonard have found that when husbands and wives have similar drinking patterns, there is higher intimacy and marital satisfaction than when they have discrepant drinking patterns.”

Schumacher agreed with Quigley’s assertion that different factors may predict violence at different times in a couple’s relationship. “When you’re trying to initially predict whether or not a couple may become aggressive,” she explained, “it’s really important to look at the characteristics of the people involved, including personality factors like hostility and demographics like employment status. But later, once a couple has become aggressive, it becomes more important to look at their relationship and the conflict that’s going on, because that will predict the continuation of the aggression more than personality or demographics.”

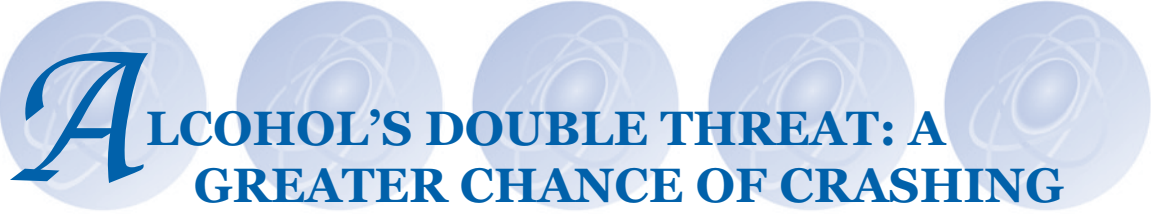
The study also found that verbal aggression that occurred during the first year of marriage seemed to develop into physically aggressive behavior during later years. Quigley said both findings can be useful for professionals who work with couples.

“Couples who have not experienced violence,” he said, “but are in marriages in which there are discrepant drinking patterns and high levels of verbal conflict have the potential to experience violence in later years. Counseling professionals need to be attuned to this potential for violence and be ready to intervene.”



Article is based on the following published research:

Quigley, B.M.,
& Leonard, K.E.
(July 2000).
Alcohol and the
continuation of early
marital aggression.
*Alcoholism: Clinical
and Experimental
Research*,
24(7), 1003-1010.



ALCOHOL'S DOUBLE THREAT: A GREATER CHANCE OF CRASHING AND MORE SEVERE INJURIES

- *Alcohol is known to be a causal factor in motor vehicle crashes (MVCs).*
- *New research has found that alcohol can also affect outcome after an MVC injury occurs.*
- *Alcohol's potentiating effect on injury occurs at both low and high levels of crash severity as well as both low and high levels of alcohol.*

Alcohol clearly impairs judgment and performance during the operation of a motor vehicle, as evidenced by the number of injured patients treated in emergency departments (EDs). A study in the April issue of *Alcoholism: Clinical and Experimental Research (ACER)* has found that the relationship between alcohol and motor vehicle crash (MVC) injury is even more insidious – alcohol can actually exacerbate injury.

“We wanted to know, ‘what is the impact of alcohol on injury severity if a crash occurs?’” said Ronald F. Maio, director of the Injury Research Center at the University of Michigan and one of the primary authors of the study. “It concerned us that many physicians and researchers – while acknowledging the effects of alcohol on the chance of an MVC occurring – were nonetheless uninformed or misinformed, about the effects of alcohol on injury severity once the crash has occurred. In fact, many clinicians have said that alcohol has a ‘protective effect,’ which may lead lay people to mistakenly think that there is a ‘good side’ to drinking and driving.”

“Both acute and chronic alcohol abuse have a number of adverse effects on the body that could conceivably increase the severity of an MVC injury,” said Carl A. Soderstrom, associate director of the Medical Advisory Board and Driver Safety Research at the Maryland Motor Vehicle Administration. “These include, but are not limited to, effects on the body’s blood clotting system that could result in an increased potential for bleeding; a decreased tolerance for low blood pressure or shock, which in the case of injury, is usually from bleeding; an increase in dangerous heart beats and rhythms from impacts to the chest, such as striking the steering column or impacts from air bags; and an increase in the amount of injury to particular organs, such as the brain or spinal cord.”

Soderstrom added that this study further distinguished itself from previous research by taking into account the severity of each victim’s crash. “This was ascertained by factoring in the amount of vehicle deformation in each crash,” he said. “It is not only important to know that a car crashed into a tree, but how hard that car crashed into a tree.”

In this study, researchers collected data for 1,362 motor-vehicle-crash victims, 18 years of age or older, who were treated and released, admitted to a hospital or died following the accident. All of the victims were transported from the crash scene to one of two EDs within six hours of the crash. Data were collected for 29 months at the university hospital, and for 15 months at the community hospital.

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A ALCOHOL'S DOUBLE THREAT: A GREATER CHANCE OF CRASHING AND MORE SEVERE INJURIES

Using regression analysis, study authors found that the best predictors of injury severity were vehicle crush, safety belt use, interaction between vehicle crush and safety belt use and age. Alcohol use further predicted injury, increasing the victims' score on the Injury Severity Scale by about 30 percent, all else being equal. In short, alcohol increases injury, although the effects of various alcohol levels are less clear.

"Clinical implications pertain to triage, patient evaluation and intervention," said Maio. "Because patients who have been drinking are at greater risk for injury from a given set of injury mechanism conditions than patients who have not been drinking, triage decisions and evaluation may need to be modified based on the presence or absence of alcohol." In other words, previous consumption could very well have an effect on appropriate treatment and, possibly, recovery.

"Implications for injury prevention are substantial," said Maio. "All motor vehicle occupants who have been drinking are at increased risk for injury. Alcohol's potentiating effect on injury occurs at low levels of crash severity as well as high, and at low levels of alcohol as well as high, suggesting that these findings may be relevant to other injury mechanisms, such as falls or assaults, which usually involve lower levels of kinetic energy. The findings further underscore the importance of clinicians taking an active role in preventing alcohol use where there is risk of injury. In addition, because excess injury from alcohol occurs even at alcohol levels below a blood alcohol concentration of 0.10 percent, previous analyses of alcohol-related injury costs may have underestimated the true cost of alcohol in MVCs."

Maio said there are two "take-home messages" from this study. "Having a designated driver is not completely adequate in protecting you from the harm that alcohol can do if you are involved in a crash," he said. "Furthermore, even if your alcohol level is well below the legal limit and you are driving, you are still increasing your chances of a serious injury if you are involved in a crash."



**Article is based
on the following
published research:**

Waller, P.F., Hill, E.M.,
Maio, R.F., Blow, F.C.
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Alcohol effects on
motor vehicle crash
injury.

*Alcoholism: Clinical
and Experimental
Research,*
27(4), 695-704



ALCOHOLICS MAY BE MORE INJURY PRONE THAN ILLICIT DRUG USERS

- *Considerable research has linked alcohol and drug use to both major and minor trauma.*
- *Most studies have used emergency department admissions data to establish this relationship.*
- *A new study looks at patients entering detoxification for alcohol and other drug dependence.*
- *People with alcohol problems seem more injury prone than people who use illicit drugs.*

Numerous publications have documented the association between alcohol and drug use – particularly alcohol use – and motor vehicle crashes, pedestrian and bicycle injuries, falls, burns, drownings, suicides, assaults, domestic violence and even murder. Most studies have examined the association between alcohol consumption and injury using hospital emergency department admissions data. A study in the February issue of *Alcoholism: Clinical and Experimental Research (ACER)* reconsiders the issue in a different clinical setting, among patients entering detoxification for alcohol and other drug dependence. The findings indicate that injury is a serious problem for a substantial proportion of patients undergoing detoxification, particularly those with alcohol dependence.

“Our hypothesis was simply that when it comes to substance abuse, the consequences vary for each substance and for the group of users,” explained Jeffrey H. Samet, associate professor of medicine and public health at Boston University and the study’s senior author. “What the substance is may be an important factor in the outcomes of the user. In particular, in the case of injury, we hypothesized that alcohol use is more of a risk factor for injury than illicit drug use. Furthermore, we hypothesized that this was the case amongst the most severely affected substance abusers, those receiving care in a detoxification unit.”

The authors recruited 470 patients (360 males, 110 females) from a Boston detoxification unit. Study participants were divided into three groups: those considered alcohol dependent; those considered alcohol and drug dependent and those considered drug dependent. Reported drug choices were cocaine, heroin or other (mainly sedatives and marijuana). Participants were interviewed at baseline (during detoxification), and then at six months, 12 months, 18 months and 24 months following detoxification. Self-reported episodes of injury were defined as: a gunshot wound, a stab wound, accidents or falls requiring medical attention, fractures or dislocation of bones or joints, an injury from a road traffic accident such as a car or motorcycle, or a head injury.

“One key finding is that among the health-related complications of alcohol and drug abuse,” noted Samet, “serious injury is common. We found that 24 percent of the 470 subjects reported at least one instance of injury during the six-month period prior to detoxification. The other key finding is that problems with alcohol, more so than illicit drugs, are associated with injury.”

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Samet added that researchers had originally thought that a significant proportion of those entering detoxification were doing so because recent serious injury had helped them realize they might have a substance abuse problem. “And this is probably true,” he said. “But then we found that at the follow-up interviews during the next two years, the prevalence of injury in the previous six months was still nearly one out of five.”

“It is very interesting that this increased risk for serious injury persisted for two years after detoxification,” said Gail D’Onofrio, associate professor in the Section of Emergency Medicine at Yale University School of Medicine, “even when patients were not drinking. The fact that even in recovery, alcohol-dependent patients still continue to be at risk for injury, may be a result – as the authors hypothesize – of chronic nerve and muscle damage that occurs with dependence creating unsteady gaits, problems with coordination and poor sensation. The idea that they are ‘risk takers’ with impulsive behavior, or may have depressive symptoms which may influence injury, needs to be further investigated.”

Samet said that the continuing high incidence of injury did not necessarily mean that the alcoholics had relapsed and were once again drinking alcohol. In fact, he said, “the follow-up high prevalence of injury came as a bit of a surprise. Our hypothesis that injury at follow up would be significantly associated with ongoing alcohol consumption was not shown to be a strong association. We conjectured that perhaps a personality trait of the alcohol dependent person accounted for the injury prevalence to an extent even greater than consumption itself. Although this issue will require further study, another issue has become abundantly clear. These individuals comprise a prime opportunity to focus on injury prevention within the confines of, or directly linked to, substance abuse treatment programs.”

“The identification of the detoxification center as place to offer prevention is a unique contribution to the field,” said D’Onofrio. “This may include educating patients about the risks of injury as well as including assessments of their living conditions to prevent falls and subsequent fractures and dislocations. Identifying patients with depressive symptoms and impulsive behaviors may also be beneficial, so that additional counseling sessions be provided. Future studies should look at different prevention strategies offered in detoxification programs for their ability to decrease injury rates.”



Article is based on the following published research:

Rees, V.W.,
Horton, N.J.,
Hingson, R.W.,
Saitz, R., & Samet, J.H.
(February 2002).
Injury among
detoxification
patients: Alcohol
users’ greater risk.
*Alcoholism: Clinical
and Experimental
Research*,
26(2), 212-217.

DRINKING AND DRUGGING CAN BE PAINFUL

- *People are more likely to sustain injuries if they use alcohol and/or other drugs.*
- *People clinically identified as substance abusers have an elevated risk of injury.*
- *People who abuse both alcohol and other drugs have the highest risk of injury.*
- *Substance abusing women over the age of 50 have an especially elevated risk for injury.*

The association among alcohol and other drug use and injury is well documented. Alcohol alone is known to be a factor in 60 to 70 percent of homicides, 40 percent of suicides, 40 to 50 percent of fatal motor vehicle crashes, 60 percent of fatal burn injuries, 60 percent of drownings and 40 percent of fatal falls. Additional studies have also confirmed an association between alcohol and nonfatal injuries. Yet only recently has research – such as a study in the January issue of *Alcoholism: Clinical and Experimental Research (ACER)* – examined the injury risk among individuals clinically diagnosed with substance abuse problems.

“We know that people often have alcohol on board when they get injured,” explained Ted R. Miller, a principal research scientist at Pacific Institute for Research and Evaluation and lead author of the study. “Very little is known about the injury risk associated with drug abuse, or whether alcohol and drug abusers have higher injury risks than those who abuse only drugs. If substance abusers have excess injury risks, physicians need to know that so they can reduce this health threat.”

Miller and his co-authors examined medical claims data from a database for 1.5 million people with health care coverage provided by 70 large corporations. Specifically, they analyzed the injury-claims histories during a three-year period of people who were treated for an alcohol- or drug-related diagnosis.

“We included all medically treated non-work injuries except alcohol and drug poisonings,” said Miller. “This included falls, car crash injuries, assaults, suicide attempts, near-drownings, suffocations, poisonings that were not substance abuse related, injury deaths in the hospital, among many others. We excluded medical misadventures that resulted in injury. We also excluded injuries treated at the same time that someone was admitted to the hospital primarily for substance abuse treatment because some of those injuries might not have been treated without the substance abuse treatment. This latter decision considerably lowered our injury counts for substance abusers, making them conservative.”

Despite the conservatism of their injury findings, the researchers found a notable difference in the risk of injury between those who abused alcohol and other drugs and those who did not. Those individuals clinically identified as substance abusers had an elevated risk of injury. Alcohol-and-drug abusers had the highest risk of injury (58%), followed by drug-only abusers (49%), alcohol-only abusers (46%), and those who did not abuse any drugs (38%). Compared to those without a diagnosed substance abuse problem, said Miller, alcohol abusers were twice as likely,

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RINKING AND DRUGGING CAN BE PAINFUL

drug abusers were three times as likely, and alcohol-and-drug abusers were almost four times as likely to be hospitalized for an injury during the three years examined.

“This study provides important evidence regarding the extent of substance abuse disorders and injuries in a population of people who are employed and receive insurance coverage through their employers,” said Linda C. Degutis, assistant professor of surgery and public health at Yale University. Each year, she added, substance abuse costs businesses at least \$10 billion in absenteeism, injuries, medical liability and health care costs.

“Investment in treatment is an effective strategy to reduce these costs,” said Degutis. “Research shows that following substance abuse treatment absenteeism, disability days and disciplinary actions all decrease by more than 50 percent. ... However, in order for treatment to occur, the problems must first be identified.”

Both Miller and Degutis noted that health care practitioners – particularly family physicians and trauma personnel – have an invaluable role in detecting, intervening on the behalf of, and referring substance abusing patients to the appropriate care. Miller said that family physicians have an especially important role in helping older, female substance abusers.

“Among working-age adults who are not substance abusers,” said Miller, “women are much less likely to be injured than men. Among substance abusers, that’s not true. Indeed, by age 50, we found that substance abusers are significantly more likely to get injured if they are women. This finding is alarming, because substance abusing women are not typically targeted for intervention. Usually it’s the men who get attention for substance abuse problems and are pushed into treatment. More physicians, especially family physicians, need to identify female abusers, assess their treatment needs, and see that those needs are met.”

Degutis added that, in the context of discussing substance abuse disorders, a more fundamental issue must first be addressed. “Addiction is a brain disease,” she said. “Too often, addiction is treated as a moral issue, or a ‘defect’ in someone’s personality or behavior or judgement. There are many things that can place someone at risk for developing an addiction, and we now know that it can have a genetic basis. It is a chronic disease, just like heart disease, diabetes and other diseases. Unfortunately, there is still a great deal of stigma related to addiction and substance abuse. ... We should not be reluctant to discuss these issues, and should bring them out into the open, just as we have done with diseases such as breast cancer, prostate cancer and heart disease.”

**Article is based
on the following
published research:**

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