Prevention, Intervention & Treatment

PREVENTION, INTERVENTION & TREATMENT

Articles in the *Prevention, Intervention & Treatment* Category

1. Alcohol and Drug Treatment Among HMO Patients
2. Examining the Effects of Managed Care on Alcohol and Other Drug Treatment
3. Doctor, Counselor, Cost-Cutter
4. Finding Sobriety and Saving Money Through Spirituality
5. Comparing Screening Instruments for Alcohol Dependence and Abuse
6. Brief Mail- and Computer-Generated Interventions Work Best for Problem Drinking Among Young People
7. Educational Attainment May Predict Drinking Outcomes Following Alcohol Treatment
8. Alcohol and Smoking: Why They Go Together
9. Nicotine Patch Treatment Works for Smokers with Long-Term Sobriety
10. Alcohol, Friends and Courtship

ALCOHOL AND DRUG TREATMENT AMONG HMO PATIENTS

- *Many alcohol and drug treatment programs have merged since the early 1990s.*
- *Yet a study has found that alcohol-only and alcohol-and-other-drug dependent clients appear to have different treatment needs and risk factors for developing problems.*
- *Those with an alcohol-and-other-drug dependency were more likely to be younger, male, less educated, African American and have greater psychiatric and family/social problems.*
- *Those with an alcohol-only dependency were much more likely to be older, female, Caucasian and college educated than those individuals with a combined dependency.*

Until approximately a decade ago, alcohol and drug treatment programs in the United States were separate. Each type of program had its own patients, policies and methods of treatment. Yet many individuals who were dependent on alcohol also used, and were often dependent on, other drugs. This might explain why numerous alcohol and drug treatment programs were merged in the early 1990s. The effectiveness of these combined treatment programs, however, remains unclear. A study in the December issue of *Alcoholism: Clinical and Experimental Research (ACER)* is one of the first to attempt to understand how the needs and problems of alcohol and drug patients may differ even though they are now usually treated in the same program.

Researchers interviewed more than 700 people seeking treatment in a program operated by their health maintenance organization (HMO). Clients were divided into two samples: those who were dependent only on alcohol (491 or 69%) and those who were dependent on both alcohol and other drugs (217 or 31%). The objectives were to identify treatment needs as well as risk factors for developing substance abuse-related problems among the two client types.

"The two groups of clients in this HMO treatment population can be distinguished by demographic characteristics," explained Tammy Tam, a scientist with the Alcohol Research Group and lead author of the study. "Those with combined alcohol-and-drug dependence were more likely to be younger, male, less educated and African American." Conversely, said Keith Humphreys, assistant professor of psychiatry at Stanford University School of Medicine, those who had problems with alcohol only "were much more likely to be older, to be women, to be Caucasian and to be college educated than were those individuals who had problems with both alcohol and drugs."

"In terms of substance use and initiation of use," said Tam, "those with a combined dependence were more likely to initiate use of a substance at an earlier age, start with multiple substance use, and initiate heavy drinking before the age of 18. They also tended to have more severe psychiatric and family/social problems and fewer social resources."

A major finding of this study," she added, "is that many of the differences between the two groups of clients were related to the younger age of the combined dependence group. It suggests that there may be generational differences in treatment needs for different age cohorts

continued ~

ALCOHOL AND DRUG TREATMENT AMONG HMO PATIENTS

that the merged alcohol-and-drug treatment programs fail to address." It also suggests that, as this generation ages, treatment programs will have an increasing number of clients with multiple alcohol and drug dependencies.

Further commenting on the study, Humphreys noted that its findings also speak to the cliché of who a drug user may be. "This study shows that contrary to the stereotype of who the typical middle-class substance abuser is," he said, " ... it is not just poor people who get into serious trouble with substances like cocaine and heroin. Even among middle-class people who have HMO coverage, just like the average American, many people with alcohol problems are using 'hard' drugs like cocaine and heroin, and these people have different needs for treatment than do people who are 'just' alcoholics."

Tam pointed out that most of the research on treatment populations has been conducted on "public populations" (those without private insurance), and populations where substances other than alcohol were the focus. "This is a managed care population," she said, "most of whom are insured through their own or a family member's employer. It gives us the opportunity to see how, even in such a population, treatment needs and the development of problems can differ among those there to be treated. However, the homogeneity of the population and the managed care setting of the study ... does mean that the results cannot necessarily be generalized to different kinds of treatment populations."

"Another important finding," said Humphreys, "is that race really seems to shape the substances that people use. We have known for a long time that when Caucasians get into trouble with substances, it is usually alcohol, and when African Americans get into trouble with substances, it is usually drugs. This pattern is usually attributed to social class differences. This study shows that this explanation is probably not true because almost everyone in the sample was a middle-class person. So, a substance abuser's race seems to change their substance of choice beyond what can be explained by social class."

"Yet another important finding," added Humphreys, "is that men are more likely than women to have problems with both alcohol and drugs. This may explain why women, on average, have better treatment outcomes, because they are often only struggling with one kind of substance instead of multiple kinds."

Humphreys hopes that people who operate HMOs read this study because it will give them some important guidance on what services should be covered in their benefit packages.

Article is based on the following published research:

Tam, T.W., Weisner, C., & Mertens, J. (December 2000). Demographic characteristics, life context, and patterns of substance use among alcohol-dependent treatment clients in an HMO. *Alcoholism: Clinical and Experimental Research, 24*(12), 1803-1810.

EXAMINING THE EFFECTS OF MANAGED CARE ON ALCOHOL AND OTHER DRUG TREATMENT

- *Different types of managed care organizations as well as contracting arrangements will affect accessing alcohol and other drug (AOD) treatment.*
- *AOD treatment seeking, entry and completion are three successive but distinct stages of success.*
- *Introducing managed care to the Massachusetts Medicaid population reduced AOD treatment costs without arbitrarily cutting services or restricting access for disadvantaged groups.*
- *The American Society of Addiction Medicine's Patient Placement Criteria appears to successfully match alcoholism patients to their appropriate level of care.*

The term "managed care" continues to evoke strong opinions from patients, health-care providers, employers and insurers. Many managed care organizations (MCOs) tend to provide some degree of mental health and alcohol and other drug (AOD) treatment as part of behavioral health services. Rigorous research on AOD treatment under managed care, however, is lacking. A manuscript in the March issue of *Alcoholism: Clinical and Experimental Research (ACER)* gathers four different study perspectives on managed care influences on AOD treatment.

"Managed care companies seem to be more accepting of mental health treatment than of AOD treatment," noted Stephen Magura, deputy executive director of National Development and Research Institutes (NDRI) and lead author of the manuscript. "This is largely because of the continuing development of effective medications for mental disorders that can be prescribed through the regular medical care system. AOD treatment, however, is not at this time primarily based on medications, with the rare exception such as methadone treatment for opiate addiction. AOD treatment has a greater burden of proof because it is more difficult to demonstrate the effectiveness of the more multifaceted behavioral therapies upon which the field continues to depend."

"For many clients," added Alexandre Laudet, a principal investigator at NDRI, "substance abuse disorders are chronic, relapsing conditions that cannot be 'resolved' by a short-term treatment episode. In order to address this, service providers and researchers are increasingly seeking to identify effective – and cost effective – modalities for substance abuse problems. As a result, it can be said that the advent of managed care has contributed greatly to emphasizing evidence-based clinical practices."

Indemnity insurance coverage was the prevalent form of health care in the United States 25 years ago. Today more than half of all Americans with health insurance are enrolled in some kind of managed care plan. The predominant forms of MCOs are health maintenance organizations (HMOs), point-of-service (POS) plans and preferred provider organizations (PPOs). HMOs are the oldest form of MCOs; members are offered a range of health benefits for a set monthly fee, and primary-care doctors act as care coordinators. Some HMOs offer a POS plan,

continued ~

EXAMINING THE EFFECTS OF MANAGED CARE ON ALCOHOL AND OTHER DRUG TREATMENT

which is an indemnity-type option that allows members to refer themselves outside of the plan for a negotiated fee. A PPO is a form of MCO that is closest in nature to indemnity coverage; members have more flexibility for self-referral but also tend to have more copayments for doctors and/or prescriptions.

One of the studies (Horgan, et al.) in the Magura manuscript found that, outside of inpatient and residential care, PPOs were less likely than HMOs and POS plans to require prior authorization for AOD treatment. "This finding implies that requirements for prior authorization can set up a barrier to receiving timely treatment," said Magura. "In addition, when patients and providers do not exactly follow the sometimes involved prior-authorization procedures, reimbursement may be denied. In my opinion, if MCOs establish clear and specific guidelines for covered services, prior authorization for the great majority of AOD patients and treatments should not be necessary."

A second study (Mertens, et al.) found that analysis of AOD treatment access and utilization needs to distinguish among treatment seeking, entry and completion as there are both similarities and differences among the three steps.

"Distinguishing among these three successive stages is important because many treatment seekers do not return to the agency after intake and admission," said Laudet, "and many clients who begin treatment, drop out before completing the planned duration of services. As stated by the authors in their study, one in four clients did not return for services; that is, they sought services but never entered treatment. In addition, retention/completion rates vary across treatment modalities, ranging from as low as 35 percent to more than 60 percent. Yet research evidence from AOD treatment populations across modalities indicates that longer retention in treatment is associated with significantly more positive outcomes as measured by subsequent substance use as well as measures of social functioning such as psychological functioning, employment and involvement in criminal activities. Therefore, when assessing penetration and effectiveness, it is important to distinguish among these three concepts."

"It may be necessary for 'the system' to reach out more to people with AOD problems," said Magura, "and for employers especially to 'legitimate' and encourage treatment seeking, partly by making it clear treatment seekers won't lose their jobs. Treatment programs should also be held accountable not only for the number of patients they admit, but also for the number that stay long enough to get some real therapeutic benefit."

Article is based on the following published research:

Magura, S., Horgan, C.M., Mertens, J.R., & Shepard, D.S. (March 2002). Effects of managed care on alcohol and other drug (AOD) treatment. *Alcoholism: Clinical and Experimental Research, 26*(3), 416-422.

DOCTOR, COUNSELOR, COST-CUTTER

- *Primary-care doctors do not typically talk to their patients about problem drinking.*
- *A new study tests the effectiveness of doctor-initiated advice generated by a routine visit.*
- *Advised patients show a significant decrease in alcohol use, accidents and health-care utilization.*
- *Benefit-cost analysis estimates a $43,000 reduction in future health-care costs for every $10,000 invested in early intervention.*

People who drink above what could be considered a healthy level – that is, more than two to three drinks per day – are at risk for a number of health and safety problems. Excessive alcohol use has been implicated as a cause of liver disease, stroke, cancer, infant neurodevelopmental disorders and hospital admissions in older adults. A study in the January issue of *Alcoholism: Clinical and Experimental Research (ACER)* takes a method also used for smoking cessation – physician intervention – and applies it to problem drinking.

"I was interested in finding out if what I did as a physician made a difference with my patients," said Michael F. Fleming, director of the Family Medicine Research Program at the University of Wisconsin-Madison and lead author of the study. "What happens when I talk to my patients for a few minutes about their drinking? Do they decrease their alcohol use? Do they have fewer health problems? Are they hospitalized less often? Do they get into fewer accidents?"

During a routine visit to the doctor, Wisconsin patients (ages 18 - 65) were given a questionnaire to establish at-risk alcohol behaviors. Of the 774 who screened positive, 382 were assigned to a control group and 392 received an intervention program called Project TrEAT (Trial for Early Alcohol Treatment), a protocol originally developed in England that was modified by Fleming and his co-authors. Project TrEAT consists of two 15-minute face-to-face physician conversations, followed by two five-minute nurse phone calls. Project components include a review of 'acceptable' drinking, patient-specific alcohol effects, a worksheet on drinking cues, cards to record drinking habits and a drinking agreement. Forty-eight months later, researchers examined the success and performed a benefit-cost analysis of the project.

"If physicians spend five to 10 minutes talking to their patients about alcohol use," said Fleming, "15 to 20 percent of their patients will significantly decrease their alcohol use, health care utilization, risk of accidents and overall health care costs. Physicians who spend a few minutes talking to their patients about their alcohol problems can make a difference. I would like to see physicians regularly ask all of their patients with mental health, medical and family problems how much they drink; especially if they are going to prescribe medication because many medications interact directly with alcohol."

"Research on the impact of physician advice about alcohol use," said Jeffrey H. Samet, associate professor of medicine and public health at Boston University, "has built upon the knowledge base that problem drinking is common among patients going to see their regu-

continued ~

DOCTOR, COUNSELOR, COST-CUTTER

lar physician, that identification of these drinkers can be accomplished by a few key brief questions, and that physicians do not as yet regularly incorporate national recommendations for screening and brief intervention for alcohol problems."

Samet added that most physicians likely ask new patients about alcohol use but, even so, only a minority of physicians use the best tools available to carry out this task. "Formal screening tests generally require less than one minute to administer," he said. Furthermore, he added, offering advice to problem drinkers is not routinely provided.

"Reasons as to why these medical activities have not as yet been fully embraced," said Samet, "include physicians' lack of confidence in alcohol history taking, lack of familiarity with expert guidelines, concern that patients will object and the typical lack of reimbursement for this physician activity. Changing physician behavior is not an easy task, but not an impossible one either. The time has come for health systems to prioritize implementation of screening for alcohol problems in the primary care setting and delivering brief interventions to those that can benefit. This will require broad training of physicians, particularly those in primary care specialties, in order to ask about and address patients' alcohol problems. This training should occur in medical schools, residency-training programs and in clinical practice. Finally, physician reimbursement for this work must occur."

Costs of physician reimbursement could be offset by projected savings in future systemic costs. The study estimates a $43,000 reduction in future health-care costs for every $10,000 invested in early intervention. "These benefits could still be appreciated four years after the intervention," noted Samet. "This is an impressive cost savings from a societal perspective. Furthermore, this kind of cost savings for a medical intervention is very uncommon in medicine."

"We know there are 30 to 40 million Americans who drink too much," added Fleming, "with 100,000 of these Americans dying each year because of their drinking. There is also the effect these persons have on their families, their co-workers and on innocent persons killed on our streets and highways. If physicians would conduct brief intervention with these individuals, we could expect a significant reduction in alcohol-related harm in the United States."

Article is based on the following published research:

Fleming, M.F., Mundt, M.P., French, M.T., Manwell, L.B., Stauffacher, E.A., & Barry, K.L. (January 2002). Brief physician advice for problem drinkers: Long-term efficacy and benefit-cost analysis. *Alcoholism: Clinical and Experimental Research, 26*(1), 36-43.

FINDING SOBRIETY AND SAVING MONEY THROUGH SPIRITUALITY

- *Skepticism abounds regarding the role of "faith-based" groups in achieving and maintaining sobriety.*
- *Yet treatment programs – both spiritual and cognitive-behavioral in approach – have the same inpatient costs and clinical outcomes.*
- *One study found that spiritually-oriented programs have lower post-discharge costs and a higher rate of abstinence.*
- *Fellowship provided by faith-based groups may be the key.*

Addiction treatment, like many other aspects of health care, does not entail a standard, paint-by-numbers approach. There exists a wide spectrum of treatment options. On one end lies the medical approach, such as cognitive-behavioral treatment. On the opposite end are "faith-based" initiatives such as Alcoholics Anonymous (AA) and Narcotics Anonymous (NA). A study in the May issue of *Alcoholism: Clinical and Experimental Research (ACER)* evaluates the post-discharge health-care utilization and associated costs of these two very different types of approaches.

Inpatient treatment costs and clinical outcomes are approximately the same notwithstanding which of the two approaches is chosen, said Keith Humphreys, assistant professor of psychiatry at Stanford University School of Medicine and the study's lead author. "We found that the staffing levels, three-to-four week lengths of stay and costs were fairly similar regardless of the specific nature of the two types of treatment we examined," he said. Clinical outcomes – defined as whether or not the patients stopped using drugs and alcohol, stopped having addiction-related problems such as conflicts at work and/or with their families, and/or enjoyed good mental health (such as the absence of depression, worries, nervousness, emotional upset) – were likewise comparable.

The focus of Humphreys' study, however, was on the care provided in the year after discharge from inpatient treatment, when costs are very different. "Patients with serious drug and alcohol problems who are treated in programs based on the approaches of spiritually-oriented self-help organizations like AA," he said, "are more likely to abstain from drugs and alcohol after treatment and also have much lower health-care costs than do patients treated in programs that do not emphasize AA-style principles." The study showed that the faith-based approach lowers post-treatment costs by about two-thirds, or about $5,000 per year per patient.

AA, founded in 1935 by Bill W. (AA members use first names only), requires its members to follow 12 steps of behavior that are based on 12 spiritual principles. Twelve-step oriented treatment programs strongly encourage patients to attend self-help groups after treatment is completed. As a result, these individuals tend to rely on their AA and NA groups for support and much less on professional counseling services after they leave the hospital. Cognitive-behavioral treatment, on the other hand, uses more professional and scientific

continued ~

FINDING SOBRIETY AND SAVING MONEY THROUGH SPIRITUALITY

activities such as cognitive skills training and cognitive-behavioral psychotherapy to teach people how to contend with situations that may tempt them to drink, cope with negative moods that may lead to drinking, etc. Once treatment is completed, these patients tend to rely more on professional services for support.

"There has always been debate about AA," noted Lee Ann Kaskutas, a research scientist with the Alcohol Research Group at Berkeley. "Medical people have been suspicious more often than not, because they feel AA is unproven, and also because AA has a 'god component' that doesn't make it seem very scientific. Members of AA, people who have become sober there, are at the other end of the spectrum. They are total believers, and they can be heard saying 'there is no easier, softer way' than AA."

Yet despite skepticism by the medical establishment, said Kaskutas, studies such as this one show that treatment methods that emphasize AA methods do not result in high rates of hospitalization or psychiatric visits after treatment. In fact, she said, another of the study's key findings is that patients in programs with a 12-step orientation had a higher rate of abstinence, in addition to much lower health-care costs, following treatment completion.

"You might not think it would have that effect," she said, "because of the non-medical and non-psychiatric flavor of 12-step methods. Dr. Humphreys suggests one thing that may contribute to this effect: during treatment people make connections with each other and get advice from one another. So later, if they feel sick or worried and talk to someone they met in treatment about this, they will likely send that person back to the same type of program where they met. When people who were in cognitive treatment need help, they immediately think of going to the doctor. People [who were] in 12-step treatment immediately think of going to a meeting. Whether or not he is right about [the effects of fellowship] is an area for future research. His study has set up a lot of important questions to pursue next."

"We as a society are fortunate to have a developed system of self-help organizations that do not cost the taxpayer or the health-care system a dime," said Humphreys. "Organizations like AA not only reduce human misery, they also take a big burden off of our increasingly resource-strapped health-care system. Hence, it is important for health care professionals to learn about these organizations and develop connections with them."

Article is based on the following published research:

Humphreys, K., & Moos, R. (May 2001). Can encouraging substance abuse patients to participate in self-help groups reduce demand for health care? A quasi-experimental study. *Alcoholism: Clinical and Experimental Research, 25*(5), 711-716.

COMPARING SCREENING INSTRUMENTS FOR ALCOHOL DEPENDENCE AND ABUSE

- *The usefulness of many screening instruments for alcohol use disorders may be limited to certain populations.*
- *New research compares the performance of two short screening instruments, RAPS4 and CAGE, against established criteria for alcohol dependence and abuse.*
- *RAPS4 outperformed CAGE among the population examined.*
- *When quantity-frequency (QF) questions were added, the RAPS4-QF performed even better for alcohol abuse.*

Despite the challenges of living in an excessively busy world, clinicians do not have the luxury of "cutting corners" where their patients are concerned. If they do, their patients' health may be compromised. An overt illness may be treated while underlying alcohol problems avoid diagnosis. The distinctions between alcohol abuse and alcohol dependence may be overlooked. Without intervention, problem drinking may develop into dependence. In an effort to identify for clinicians an effective and short screening instrument for alcohol use disorders, a study in the November issue of *Alcoholism: Clinical and Experimental Research (ACER)* compares the performance of two short screening instruments.

The Rapid Alcohol Problems Screen (RAPS) is a five-item instrument, derived from other screens, that is designed to maximize sensitivity while maintaining good specificity. The RAPS4, a further refinement of the RAPS, asks if an individual felt guilt after their drinking (**R**emorse), could not remember things said or done after drinking (**A**mnesia), failed to do what was normally expected after drinking (**P**erform), or had a morning drink (**S**tarter). The CAGE questionnaire is a short screening instrument commonly used in the clinical setting that asks if an individual has thought about **C**utting down on their drinking, become **A**nnoyed by criticism of their drinking, felt **G**uilty about their drinking, or had a morning drink as an '**E**ye opener.' The study compares performance of the RAPS4 and CAGE against the *World Health Organization's (WHO) International Classification of Disease (ICD-10)* and the *Diagnostic and Statistical Manual of Mental Disorders – Fourth Edition (DSM-IV)* criteria.

"Numerous screening instruments exist for alcohol use disorders," explained Cheryl J. Cherpitel, a senior scientist with the Alcohol Research Group and author of the study. "Their usefulness may be limited to certain populations, however, and for identifying alcohol dependence rather than harmful drinking. Most brief screening instruments, for example, have been developed and tested in White male populations. Conversely, little research has been done on how well these instruments work for women or among ethnic minorities in the U.S. Since the RAPS4 was developed from a number of instruments tested in hospital emergency rooms, and performed better in that population – for the total population and by gender and ethnicity – than any of the instruments from which it was developed, it seemed important to test its performance in clinical populations as well as in the general population. The RAPS4 was compared to CAGE in this study because CAGE is the shortest and most widely used brief screening instrument by clinicians."

continued ~

COMPARING SCREENING INSTRUMENTS FOR ALCOHOL DEPENDENCE AND ABUSE

Researchers analyzed data from the Alcohol Research Group's 2000 National Alcohol Survey, which were gathered from 7,612 interviews with individuals from the U.S. general population, aged 18 years and older in 50 states and the District of Columbia.

In general, the RAPS4 outperformed CAGE among the population examined. When two quantity-frequency (QF) questions (drinking five or more drinks on an occasion and drinking as often as once a month) were added to the RAPS4, the RAPS4-QF performed significantly better for alcohol abuse, and outperformed CAGE across all gender, ethnic and service-utilization groups. The RAPS4-QF also appeared to be most sensitive for alcohol abuse among both males and females reporting emergency-room (ER) use. Both Cherpitel and Robert Woolard, chair of Brown Medical School's Section of Emergency Medicine, noted the importance of distinguishing between "alcohol dependence" and "alcohol abuse."

"Given the findings reported in this article," said Cherpitel, "and previous findings from ER studies, I think the RAPS4 and RAPS4-QF hold a great deal of promise for use in brief screening for alcohol dependence and harmful drinking, respectively, for both men and women and across ethnic groups in both clinical populations – ERs, primary care clinics, other clinical settings – and in the general or non-clinical population. For the average [person, this] means that a few questions can help the doctor or nurse determine who may have a drinking problem which could be helped."

"Busy clinicians need reliable and short screening tests," concurred Woolard. "[But] the greatest utility of Dr. Cherpitel's work will be the more universal adoption of alcohol screening by clinicians using questionnaires such as RAPS4-QF. Hopefully universal screening in general health surveys, primary care offices and emergency departments will become the norm." Woolard added that he hoped to see future testing of RAPS4-QF by clinicians, and a progression from screening to treatment. "Although it seems obvious and trivial," he said, "demonstrating the impact of the clinical introduction of RAPS4-QF when used by working clinicians would help translate Dr. Cherpitel's valuable research findings into practice."

Cherpitel will in fact be analyzing the performance of the RAPS4 and RAPS4-QF in ER samples obtained from 12 countries associated with the WHO Multi-Site Collaborative Study of Alcohol and Injury. She calls this "a wonderful opportunity to test the sensitivity and specificity of the instrument from a cross-cultural perspective, [with] implications for its use in other cultures and other countries where resources have not been available for such instrument development."

Article is based on the following published research:

Cherpitel, C.J. (November 2002). Screening for alcohol problems in the U.S. general population: Comparison of the CAGE, RAPS4 and RAPS4-QF by gender, ethnicity, and services utilization. *Alcoholism: Clinical and Experimental Research, 26*(11), 1686-1691.

BRIEF MAIL- AND COMPUTER-GENERATED INTERVENTIONS WORK BEST FOR PROBLEM DRINKING AMONG YOUNG PEOPLE

- *Brief mail- and computer-generated interventions work best for problem drinking among young people.*
- *In-person brief interventions are best directed toward those who engage in hazardous drinking and/or abuse of alcohol rather than those who are alcohol dependent.*
- *A five-minute in-person intervention has proven to be as effective as longer interventions.*

Health professionals who are concerned about hazardous drinking among young people can take heart: research indicates that brief intervention methods relying on mail or computers are both appealing and effective among this hard-to-reach population. Findings were presented during a symposium given at the joint 2002 Research Society on Alcoholism/International Society for Biomedical Research on Alcoholism meeting in San Francisco. Symposium proceedings are published in the February issue of *Alcoholism: Clinical and Experimental Research (ACER)*.

"The purpose of this research is first and foremost to determine whether brief intervention is effective in reducing hazardous drinking among young people, and secondly, to figure out the specific conditions which make it effective: setting, duration and method of presentation," said Kypros Kypri, research fellow at the University of Otago in New Zealand and corresponding author for the symposium proceedings. "In contrast with brief intervention research in older populations, which has been going on for about 20 years, there have been relatively few studies of brief intervention with young people, those aged 15 to 24 years."

Symposium presentations addressed what is known about the efficacy of brief interventions in the general population, a review of college student drinking in four countries, a review and commentary on brief motivational interventions with college students and the preliminary results of a large trial of a brief intervention for college students. Some of the key points were:

- In-person brief interventions are best directed toward those who engage in hazardous drinking and/or abuse of alcohol rather than those who are alcohol dependent.

"The vast majority of hazardous drinkers do not develop chronic alcohol dependence," explained Kypri, "but instead experience transient or intermittent periods of problem drinking. Studies show that the majority of hazardous drinkers ... can benefit from a brief intervention designed to reduce hazardous drinking. Individuals with clear signs of alcohol dependence, on the other hand, may warrant interventions of greater duration, sometimes including pharmacotherapy. Nonetheless, brief interventions ... are a way of identifying individuals who are possibly alcohol dependent, and referring them for treatment."

continued ~

BRIEF MAIL- AND-GENERATED INTERVENTIONS WORK BEST FOR PROBLEM DRINKING AMONG YOUNG PEOPLE

- A five-minute in-person intervention has proven to be as effective as longer interventions.

"It is generally impracticable for a health practitioner to deliver a one-hour intervention to a young person whose drinking is risky," said Kypri. "Ten to 15 minutes of assessment and advice in the waiting room, however, may be quite deliverable to a large proportion of individuals with hazardous-drinking habits."

- Among college students, hazardous drinkers respond well to electronic assessment and feedback about their alcohol consumption, as opposed to a discussion about their drinking with a doctor or other health professional.

"Our research suggests that young people who are not seeking treatment for an alcohol problem would be disinclined to discuss their drinking with a health practitioner through fear of being judged," said Kypri. "Young people are nonetheless curious about how risky their drinking is and how it compares with that of their peers. Computerized approaches capitalize on this curiosity while reducing the potential that young people will be put off by the prospect of having to discuss their drinking and its consequences with a health practitioner."

Kypri added that Web-based approaches can also address what he called the "tyranny of distance" experienced by people in remote areas. "If designed well, Web-based intervention can mimic some aspects of the clinical interview, in particular, the assessment, presentation of feedback and encouragement to make healthier choices," he noted. "This is an area where more research is needed, but it shows great promise."

- The use of "motivational feedback" among college students is most effective when private – for example, mailed to the individual – and could reach even more students if disseminated through electronic means.

" Motivational feedback is information which draws the individual's attention to their risk status in a non-threatening and non-judgmental fashion," explained Kypri.

In addition, added Kypri, although much of the presented research focused on college students, there is a need to develop and evaluate interventions for non-students.

Article is based on the following published research:

Saunders, J.B., Kypri, K., Walters, S.T., Laforge, R.G., & Larimer, M.E. (February 2004). Approaches to brief intervention for hazardous drinking in young people. *Alcoholism: Clinical and Experimental Research, 28*(2), 322-329.

EDUCATIONAL ATTAINMENT MAY PREDICT DRINKING OUTCOMES FOLLOWING ALCOHOL TREATMENT

- *Previous literature has shown that alcohol use may hinder educational achievements.*
- *Conversely, education may serve as a protective factor against the development of alcohol use disorders.*
- *New findings indicate that educational attainment can predict drinking outcomes following alcohol treatment.*

The relationship between educational attainment and alcohol use is bidirectional. For example, alcohol use may hinder educational attainment; whereas education may serve as a protective factor against the development of alcohol use disorders. A study in the August issue of *Alcoholism: Clinical and Experimental Research (ACER)* has found that educational attainment may also be able to predict drinking outcomes following alcohol treatment.

"People have been interested in the association between educational attainment and alcohol disorders because education is a modifiable factor," said Shelly F. Greenfield, assistant professor of psychiatry at Harvard Medical School and medical director of the alcohol and drug abuse ambulatory treatment program at McLean Hospital. "Education is something you might have influence over. Although previous studies have looked at this association, none to our knowledge, have looked at the influence of educational attainment on the outcome of inpatient alcohol treatment."

For this study, researchers consecutively recruited 101 individuals (60 males, 41 females) who were hospitalized for alcohol dependence between 1993 and 1996, and monitored their progress for one year following discharge. Each study participant was interviewed during their hospital stay, and at monthly intervals following discharge. Study authors examined the relationship between the inpatients' educational attainment prior to treatment and their post-discharge drinking outcomes, including time to relapse.

Results indicate than an individual's years of education are able to significantly predict alcohol-treatment outcomes. "Lower levels of educational attainment among patients in alcohol treatment before they entered treatment predicted a poorer outcome in the year following discharge from treatment," said Greenfield. "In particular, lower educational attainment predicted a shorter time until they took their first drink following discharge from inpatient alcohol treatment; it also predicted a shorter time to relapse. Specifically, if someone had high school or less, and they entered this treatment program and received the same treatment as the others, upon discharge they would likely have their first drink and relapse almost three times more quickly than the others. Significantly, this finding was the same for men and women."

continued ~

EDUCATIONAL ATTAINMENT MAY PREDICT DRINKING OUTCOMES FOLLOWING ALCOHOL TREATMENT

Greenfield added that one of the more important components of this study was the "robust" nature of the association found between educational attainment and treatment outcomes. "We controlled for a lot of other variables, characteristics that we thought might have made a difference in our findings: gender, marital status, income levels, other psychiatric illnesses they might have had, severity of the drinking problem, age of onset of the drinking problem, family history and parental income levels. However, despite searching for factors that might affect our results, educational attainment still stood out."

Greenfield said the results raise the question of why this may be. "Part of it might be the type of treatment that people receive for alcohol dependence," she said. "Our study used what is fairly typical of alcohol treatment in the United States, which consists mainly of talking therapies, group therapies and some individual treatment," she said. "It is possible that this particular form of treatment may be less successful in people who have lower levels of education, which may in turn reflect different styles of learning. The verbal form of therapy that is most often used in treatment may too closely resemble a school-like format that may be less successful for these individuals."

Greenfield suggested that future research address issues related to better "matching" patients to various kinds of treatment. "Our results should make people question how individuals with different levels of educational attainment mesh with the treatment program that they're in. The bottom line is trying to make treatment optimal for people who are trying to help themselves with an alcohol problem."

Article is based on the following published research:

Greenfield, S.F., Sugarman, D.E., Muenz, L.R., Patterson, M.D., He, D.Y., Weiss, R.D. (August 2003). The relationship between educational attainment and relapse among alcohol-dependent men and women: A prospective study. *Alcoholism: Clinical and Experimental Research, 27(8),* 1278-1286.

ALCOHOL AND SMOKING: WHY THEY GO TOGETHER

- *Alcoholics, the heaviest of drinkers, are also the heaviest of smokers.*
- *A recent study found that nicotine is especially rewarding for smokers in recovery from alcoholism compared to smokers with no history of alcoholism.*
- *Smokers who are former alcoholics probably require special help to deal with nicotine addiction when they try to stop smoking.*

It's no secret that "smokers drink and drinkers smoke." In fact, the heaviest drinkers are also the heaviest smokers. According to information provided by the National Institute on Alcohol Abuse and Alcoholism, between 80 and 95 percent of alcoholics smoke cigarettes – a rate that is three times higher than among the population as a whole. Approximately 70 percent of alcoholics are heavy smokers (meaning they smoke more than one pack a day), compared with just 10 percent of the general population. A study in the November issue of *Alcoholism: Clinical and Experimental Research (ACER)* closely examines this association to see if smokers with a past history of alcoholism are more nicotine dependent than smokers with no such history.

"There are many theories of why smoking and alcoholism go together," said John R. Hughes, professor of psychiatry at the University of Vermont/Fletcher Allen Healthcare and lead author of the study. "Some studies suggest that the same genes that predispose people to alcoholism also predispose them to smoking. Some have thought there is an 'addictive personality' that becomes addicted to many things, but research suggests this is not so. Another idea is that since smoking stimulates and alcohol relaxes, smokers use alcohol to prevent over-stimulation from smoking and alcoholics use cigarettes to prevent sedation. Yet another idea is that those who become alcoholics are people who use substances for the drugs within them, for example, to get high or to cope with life. This theory would predict that alcoholic smokers use tobacco mostly for the nicotine in it."

Hughes' study examined if smokers with a past history of alcoholism would report more positive effects from nicotine alone (using nicotine gum) and would self-administer nicotine more often and in greater amounts than smokers without this history. What they found was that smokers with a history of alcoholism did not report more positive effects from nicotine itself, but these smokers did more often choose to use pure nicotine, and ingested greater levels of nicotine than smokers without this history. This means that smokers with a history of alcoholism didn't necessarily like nicotine more, but they did seem to find nicotine more rewarding.

"It may seem unusual," explained Hughes, "that we found a difference between the self-administration or rewarding effects of nicotine and the subjective effects or the liking of nicotine. Usually these two go hand in hand, but not always. In fact, many smokers state they can't understand their use of cigarettes because they feel they really don't get much out of it. Sometimes we can like something but not be able to express what it is we like about it. It's like husbands. If you went by their words, many husbands would seem not to be much in love with their wives. But if you went by what they do, they would seem very much in love."

continued ~

ALCOHOL AND SMOKING: WHY THEY GO TOGETHER

Despite the strong association between smoking and alcoholism, and numerous theories concerning that association, relatively few studies have examined the two together. Furthermore, alcoholism treatment professionals have generally not addressed the issue of smoking cessation, largely because of the belief that the added stress of quitting smoking might jeopardize an alcoholic's recovery.

"Research attention has been minor until recently," acknowledged Kenneth A. Perkins, professor of psychiatry at the University of Pittsburgh Medical Center. "Many in the alcohol field did not feel smoking was an important problem for alcoholics, that maintaining sobriety was the critical factor. Most studies in the smoking field would exclude those with current or past alcohol dependence. Furthermore, funding has typically come from different agencies – one for alcohol, another for smoking/nicotine – which allowed studies of alcohol and smoking to fall through the cracks."

Yet, noted Hughes, recent data indicates that smoking actually kills more alcoholics than alcohol does. Indeed, according to the American Cancer Society, smoking is the most preventable cause of death in American society. Nearly one in five deaths in the U.S. results from the use of tobacco; more than 400,000 die from smoking in the U.S. each year.

"What this means," said Hughes, "is that we need to get alcoholics to stop smoking either while stopping their alcohol or soon after. Our study suggests these smokers especially need to use medications that fight nicotine dependence, like the patch, gum, an inhaler or Zyban." (Zyban is the trade name for an antidepressant that is used by some to quit smoking.)

Perkins concurs. "This study shows us that chronic use of alcohol can induce long-term changes in the brain's response to nicotine, making nicotine more rewarding and thus more difficult to quit," he said. "Medications to block these effects or counseling to totally avoid nicotine exposure, may be suggested by these results. Although someone might think that use of nicotine replacement therapy (NRT) would pose a problem for those with past history of alcohol, this is not a reasonable concern. NRT is safe and effective, and someone with alcohol problems should not be concerned about using NRT to quit smoking. In fact," he added, "alcoholics are at least as likely to die from smoking as from alcohol. Treatment for smoking in that population is critical."

Article is based on the following published research:

Hughes, J.R., Rose, G.L., & Callas, P.W. (November 2000). Nicotine is more reinforcing in smokers with a past history of alcoholism than in smokers without this history. *Alcoholism: Clinical and Experimental Research, 24*(10), 1633-1638.

NICOTINE PATCH TREATMENT WORKS FOR SMOKERS WITH LONG-TERM SOBRIETY

- *At least 80 percent of alcoholics smoke.*
- *Smokers with past alcoholism are more nicotine dependent than smokers without a history of alcoholism.*
- *New research has found that nicotine patch treatment works as well for smokers with long-term sobriety as it does for smokers without a history of alcoholism.*
- *Optimal treatment options for smokers with current alcoholism or recent sobriety remain unclear.*

A clear majority of alcoholics smoke. According to the National Institute on Alcohol Abuse and Alcoholism, between 80 and 95 percent of alcoholics smoke cigarettes, which is more than three times higher than among the population as a whole. Research has also shown that smokers with a history of alcoholism are more nicotine dependent than smokers with no such history, and suggests smoking cessation may prompt a relapse to drinking among a small number of smokers with a history of alcoholism. However, findings published in the June issue of *Alcoholism: Clinical and Experimental Research (ACER)* indicate that nicotine replacement therapy (NRT) works as well for smokers with long-term sobriety as it does for smokers without a history of alcoholism.

"This study refutes the common perception that smokers with a history of alcoholism have more difficulty quitting smoking and are likely to relapse back to alcoholism," said John R. Hughes, professor of psychiatry at the University of Vermont and lead author of the study. "Our results suggest smokers with this history need to be encouraged to attempt to stop smoking."

Hughes also said that "for 85 percent of smokers with past alcoholism, quitting smoking is not a problem. Furthermore, as our findings indicate, we found smokers with past but not current alcoholism were able to quit as well and benefited from nicotine patch treatment to the same degree as smokers without this history."

This study was designed to duplicate and build upon a previous study that examined heavy smokers with no history of alcoholism. Researchers examined 115 heavy smokers with a past history of alcoholism (78 males, 37 females); most had been abstinent from alcohol for more than five years. Study participants were recruited through media advertisements, and from outpatient alcohol treatment sites and Alcoholics Anonymous meetings. Past and present alcohol and drug dependence was assessed using *Diagnostic and Statistical Manual of Mental Disorders – Fourth Edition (DSM-IV)* criteria. Participants were randomly assigned to either a 21 mg. nicotine patch (n=61) or a placebo (n=54). Abstinence from smoking, alcohol and other drugs was verified by breath and urine tests.

continued ~

NICOTINE PATCH TREATMENT WORKS FOR SMOKERS WITH LONG-TERM SOBRIETY

"These findings are consistent with other studies of smokers with long-term sobriety," said David Kalman, assistant professor of psychiatry at Boston University School of Medicine. "First, quit rates of smokers with and without a history of alcohol dependence are similar. Second, NRT is neither more nor less effective for smokers with or without a history of alcohol dependence. Note that 'long-term sobriety' is not precisely defined, but most smokers in these studies have at least a year of sobriety and the median length of sobriety is typically around five years. By contrast, other studies have found that smokers with less than a year of alcohol abstinence have greater difficulty quitting."

Kalman added that a practical implication of the study is that "people in long-term recovery who use the nicotine patch in combination with counseling can and do quit smoking, and they are no less successful than smokers without such a history. Future research should focus on identifying effective treatment approaches with smokers in early recovery," he said. "We should also continue to examine the effect, if any, of trying to quit smoking on sobriety, particularly for people in early sobriety. However, consistent with the preponderance of data, I believe that we should be encouraging all smokers in alcohol recovery – including those with less than a year of sobriety – to consider quitting smoking and that we should certainly not be discouraging them to try to quit on the assumption that it will jeopardize their sobriety."

Article is based on the following published research:

Hughes, J.R., Novy, P., Hatsukami, D.K, Jensen, J., & Callas, P.W. (June 2003). Efficacy of nicotine patch in smokers with a history of alcoholism. *Alcoholism: Clinical and Experimental Research*, *27*(6), 946-955.

ALCOHOL, FRIENDS AND COURTSHIP

- *Drinking among adults has traditionally been linked to individual characteristics.*
- *The influence of friends on adult drinking habits may have been underestimated.*
- *The year before marriage is considered a key transitional time of adulthood and drinking behaviors.*
- *The individual's friends as well as the spouse's friends significantly influence drinking during courtship.*

Research on drinking among adolescents usually focuses on two major influences on drinking behavior: peer drinking and alcohol expectancies. Research on drinking among adults has likewise focused on the influence of alcohol expectancies, but tends to assume the predominance of individual characteristics over peer influence. A study in the November issue of *Alcoholism: Clinical and Experimental Research (ACER)* questions the underlying assumption that adults are less influenced by their peers than adolescents when it concerns their drinking behavior.

"Although we legally define adulthood as 18," said Kenneth E. Leonard, senior research scientist at the Research Institute on Addictions, research professor of psychiatry at the State University of New York at Buffalo and lead author of the study, "marriage is often viewed by individuals, friends and family as a turning point, an event that marks the change from adolescence to adulthood. At this point, many aspects of your life begin to change, including how you think about yourself, how friends and family interact with you and how you interact with them. In the midst of all these changes, people often change their drinking behaviors, and it is important to understand who doesn't change and why."

"The year before marriage presents an interesting and important opportunity to test theory," said John S. Baer, research associate professor of psychology at the University of Washington. "We are quite certain that drinking can be influenced by a host of factors, some more biological, some more psychological and some more social. What we are just beginning to work out is how these factors might combine, or not, at different points in time during life to increase or decrease the likelihood of alcohol-related problems."

Research on drinking among adults usually focuses on individual characteristics that may result in excessive drinking, such as whether the person is the child of an alcoholic or has certain personality tendencies. Prior research has rarely considered the possibility that one's friends may be an important influence on drinking, even though this is a well-known, important influence among adolescents. Studies of drinking during courtship have focused largely on alcohol's potential impact on unwanted sexual advances or "date rape." No studies have focused directly on alcohol use and peer influence during the transition to marriage. In an effort to fill this gap, researchers recruited couples at the time of license application for their first marriage. Couples were asked to later complete self-administered questionnaires at home, separately.

continued ~

ALCOHOL, FRIENDS AND COURTSHIP

"The influence of friends and companions on adult drinking just hasn't received nearly as much attention as that same kind of influence on adolescent drinking," noted Richard W. Wilsnack, a professor in the department of neuroscience at the University of North Dakota School of Medicine and Health Sciences. "This is important to recognize because there may be an exaggerated assumption that adult drinkers are independent individuals whose drinking habits come from inside them rather than outside of them. There may also be an exaggerated assumption that adolescents are extremely vulnerable to peer pressure in ways that adults – particularly married and employed adults – are not. So in the end, you have a situation where we may underestimate the importance of personal characteristics for adolescent alcohol use, and may underestimate the important of peer influences on adult alcohol use."

The study's key finding, according to Leonard, was that drinking was related to both individual characteristics and friends' drinking. The most influential individual characteristic involved was the extent to which the participant believed that alcohol had a positive social effect [on their behavior]. The surprising part of the findings, however, was not only the drinking influence of the individual's friends but also the influence of the spouse's friends.

"When partners get married," said Wilsnack, "his friends and her friends become friends of the couple. As with other things in marriage, his and hers become ours. This is one more demonstration of the importance of looking at drinking behavior – at least chronic drinking patterns – as social processes that are affected by characteristics of the individual drinker but cannot be described or understood by looking only at information about individual drinkers. You have got to know with whom they're drinking and where they're drinking. You cannot do much to reduce the risks of problem drinking unless you pay attention to the audience or the co-participants."

Wilsnack added that a large number of "average drinkers" will nonetheless become ill, have accidents, and/or contribute to damaging personal conflicts because of how they've consumed alcohol on particular occasions, in particular settings.

"Statistically," he said, "most of the alcohol-related behaviors that occur in this country, such as 'driving under the influence,' occur among people who have not developed pathological drinking habits. They're just ordinary or moderate drinkers who happen to have drunk inappropriately which has led to problems. It's not an internally compulsive pattern with these people, at least not yet. However, before it becomes a problem, it's very important to look at the social circumstances that led them to drink inappropriately in the first place."

Article is based on the following published research:

Leonard, K.E., & Mudar, P. (November 2000). Alcohol use in the year before marriage: alcohol expectancies and peer drinking as proximal influences on husband and wife alcohol involvement. *Alcoholism: Clinical and Experimental Research, 24*(10), 1666-1679.