

SPECIAL POPULATIONS OF WOMEN & FAMILIES

Cultural Competency/Ethnicity/Race

Amaro, H., M. J. Larson, et al. (2005). "Racial/ethnic differences in social vulnerability among women with co-occurring mental health and substance abuse disorders: Implications for treatment services." Journal of Community Psychology **33**(4): 495-511.

Little attention has been given to racial/ethnic differences in studies of co-occurring disorders among women. In this article, we present findings from analyses conducted on the influence of racial/ethnic differences on the demographic and clinical profiles of 2,534 women in the Substance Abuse and Mental Health Services Administration-sponsored Women, Co-Occurring Disorders and Violence Study. Black anti Hispanic women demonstrated more disadvantaged economic and social life conditions than White women. After controlling for socioeconomic differences, Hispanic women experienced more criminal justice involvement than others did, and both Black and Hispanic women were more likely to be exposed to community violence although they did not demonstrate more severe clinical symptoms than White women. In the design and delivery of services racial/ethnic differences should be considered, and research questions regarding underlying explanatory factors raised. (c) 2005 Wiley Periodicals, Inc.

Nishimura, S. T., E. S. Hishinuma, et al. (2005). "Ethnicity and adolescent substance use." 239-58, 2005 Aug.

This study focuses on diverse ethnic differences among adolescent substance use, utilizing selected items from the Substance Abuse Subtle Screening Inventory-Adolescent version (SASSI-A). Data were gathered from a large-scale, cross-sequential study of adolescents during the 1993-1996 school years. Exploratory analyses were conducted for 3,711 students on the basis of their responses to a self-administered survey. Results indicated significant ethnic and gender differences for specific SASSI-A items and factor scores, with Hawaiian, "Other," and Caucasian students reporting higher scores than Japanese students and greater scores for female than male students. These findings suggest the need to develop culturally sensitive substance use prevention and treatment strategies that should also take gender differences into consideration for adolescents in Hawai'i. (c) 2005 APA

Seng, J. S., L. P. Kohn-Wood, et al. "Exploring Racial Disparity in Posttraumatic Stress Disorder Diagnosis: Implications for Care of African American Women." Journal of Obstetric, Gynecologic, and Neonatal Nursing : **JOGNN** **34**(4): 521.

Objective: To explore factors contributing to disparities in posttraumatic stress disorder (PTSD) diagnosis between African Americans and White Americans, while controlling for gender and class by using a data set limited to poor women. Design: A cross-sectional epidemiological secondary analysis. Setting: Michigan Medicaid fee-for-service claims data from 1994 through 1997. Sample: A total of 20,298 African American and White American adolescents and adult women, including 2,996 with PTSD diagnosis. Main outcome measures: Victimization, PTSD diagnosis, psychiatric and somatic comorbidities, and PTSD treatment. Results: African American women were under-represented in the group diagnosed with PTSD (12% versus 31% in the comparison group), despite having equal rates of hospitalization for rape and battering. They were less likely to be diagnosed with comorbidities associated with complex PTSD, such as dissociative disorder (OR = 0.259, $p < .001$) or borderline personality disorder (OR = 0.178, $p < .001$), but were equally likely to be diagnosed with conduct disorder, schizophrenia, or substance abuse. African American women were 40% less likely to have continuous insurance coverage. Conclusions: Patient, provider, and system

factors appear to interact to create disparities in PTSD diagnosis and treatment. Attention to case finding and provider or system bias may help reduce disparities.

Wintersteen, M. B., J. L. Mensinger, et al. (2005). "Do Gender and Racial Differences Between Patient and Therapist Affect Therapeutic Alliance and Treatment Retention in Adolescents?" Professional Psychology : Research and Practice **36**(4): 400.

Parents, referral sources, and even therapists wonder whether the gender and racial match between therapists and patients contributes to poorer alliances and treatment dropout. Six hundred adolescent substance abusers and their therapists from a large randomized clinical trial were grouped according to matches and mismatches on both gender and race, and alliance ratings were collected from both patients and therapists. Results revealed that gender-matched dyads reported higher alliances and were more likely to complete treatment. Racial matching predicted greater retention but not patient-rated alliance. However, therapists in mismatched dyads rated significantly lower alliances. Results suggest that, although multicultural training remains critical, training emphasis should also be placed on understanding how gender and racial differences affect therapeutic processes.

Women and Substance Abuse – Other Special Populations

LBGT/Sexual Orientation

Case, P., S. B. Austin, et al. (2004). "Sexual orientation, health risk factors, and physical functioning in the Nurses' Health Study II." Journal of Womens Health **13**(9): 1033-1047.

Objectives: To examine associations between sexual orientation and breast cancer risk factors, cardiovascular disease (CVD) risk factors, mental health status, and health-related functioning. Methods: We compared participants in the Nurses' Health Study 11 (NHSII) reporting a lesbian or bisexual orientation with those reporting a heterosexual orientation, with heterosexuals serving as the reference group for all comparisons. Prevalence of health behaviors and conditions was adjusted for differences in the distribution of age, ancestry, and region of residence by standardizing to the distribution of the overall cohort. Multivariate prevalence ratios were calculated to compare lesbians and bisexuals with heterosexuals using binomial regression with the log link function. Means of health conditions were measured using continuous scales standardized to the distribution of the overall cohort. Differences in means comparing lesbians and bisexuals with heterosexuals were tested by multivariate linear regression. All comparisons were adjusted for age, ancestry, and region of residence. Results: Based on information from 90,823 women aged 32-51 in 1995, those reporting a sexual orientation of lesbian (n = 694) had a higher prevalence of risk factors for breast cancer, including nulliparity and high daily alcohol intake, compared with heterosexual women. Lesbians also had a higher prevalence of several risk factors for CVD, including higher body mass index (BMI) and elevated prevalence of current smoking. Lesbians were more likely to report depression and the use of antidepressants. Key results for health risk factors were similar for lesbians and bisexual women (n = 317). Conclusions: Lesbian and bisexual women were found to have a higher prevalence of several important risk factors for breast cancer, CVD, and poor mental health and functioning outcomes. Most of these risk factors are modifiable, and appropriate interventions could play an important role in improving the health status of lesbian and bisexual women.

Drabble, L., L. T. Midanik, et al. (2005). "Reports of alcohol consumption and alcohol-related problems among homosexual, bisexual and heterosexual respondents: Results from the 2000 National Alcohol Survey." Journal of Studies on Alcohol **66**(1): 111-120.

OBJECTIVE: Few population-based studies have explored differences in alcohol consumption by sexual orientation. This study examined the prevalence of abstinence, drinking, heavier drinking, alcohol-related problems, alcohol dependence and help-seeking among homosexual and bisexual women and men compared with heterosexuals. **METHOD:** Data are from the 2000 National Alcohol Survey, a national population-based survey of adults (N = 7,612), a Random Digit Dialing telephone survey of all 50 states of the United States and Washington, DC. Four categories of sexual orientation were created using questions on both sexual orientation self-identification and behavior: homosexual identified, bisexual identified, heterosexual identified with same sex partners and exclusively heterosexual. Five alcohol measures (past year) were used in the analyses: (1) mean number of drinks, (2) days consuming five or more drinks on a single occasion, (3) drunkenness, (4) negative social consequences (2 or more) and (5) Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition, alcohol dependence. A lifetime measure of help-seeking for an alcohol problem was also analyzed. **RESULTS:** Few significant differences were found among men by sexual orientation. By contrast, both lesbians and bisexual women had lower abstinence rates and significantly greater odds of reporting alcohol-related social consequences, alcohol dependence and past help-seeking for an alcohol problem. **CONCLUSIONS:** These findings suggest that alcohol dependence and alcohol-related consequences differ by sexual orientation, particularly among women. These findings also emphasize the need for the inclusion of sexual-orientation items in population-based surveys so that prevalence rates within these subgroups can be effectively monitored.

Johnson, T. P. and T. L. Hughes (2005). "Reliability and concurrent validity of the CAGE screening questions: A comparison of lesbians and heterosexual women." Substance Use & Misuse **40**(5): 657-669. [see abstract under **Screening/Assessment**]

Although lesbians are believed to be at heightened risk for alcohol abuse and alcohol dependency, the reliability and validity of currently available screening measures have yet to be explored in this population group. In this paper, we report the psychometric properties of the CAGE in a diverse sample of 63 lesbians and comparisons with a control group of 57 heterosexual women. Data were collected in Chicago during 1997-1998 using face-to-face interviews. Findings suggest that the CAGE has good reliability and concurrent validity among lesbians. One CAGE item, concerned with drinking in the morning, however, was found to be only weakly associated with the other items among lesbians. Although this pilot study is limited by the nonprobability sample, we conclude that evaluating the appropriateness of other alcohol and drug abuse measures in high-risk populations, such as lesbians, should be a research priority.

Nemoto, T., D. Operario, et al. (2005). "Promoting health for transgender women: Transgender resources and neighborhood space (TRANS) program in San Francisco." American Journal of Public Health **95**(3): 382-384.

Transgender women are at high risk for HIV, substance abuse, and mental health problems. We describe a health promotion intervention program tailored to transgender women in San Francisco. The program creates a safe space for providing transgender-sensitive education about HIV risk reduction, substance abuse prevention, and general health promotion. Transgender health educators conduct workshops and make referrals to appropriate substance abuse treatment programs and other services in the community. Evaluation findings indicate that this community-tailored intervention may be an effective way to reach transgender women and reduce sexual risk behaviors, depression, and perceived barriers to substance abuse treatment.

Operario, D. and T. Nemoto (2005). "Sexual Risk Behavior and Substance Use Among A Sample Of Asian Pacific Islander Transgendered Women." AIDS Education and Prevention **17**(5): 430.

We examined the prevalence and correlates of HIV-related sexual risk and substance use behaviors among Asian Pacific Islander (API) male-to-female (MTF) transgendered individuals, referred to here as API transgendered women. As part of a larger study on HIV risk among transgendered women of color (Nemoto, Operario, Keatley, Han, & Soma, 2004), a sample of 110 API transgendered women in San Francisco completed individual interviews, of which 13% reported being HIV-positive. In the past 30 days, one fifth of the sample engaged in unprotected receptive anal intercourse (URAI) with any male partner, nearly one half had sex while under the influence of substances, and over half used illicit drugs. In multivariate models, URAI was associated with commercial sex work (odds ratio [OR] = 4.23, 95% confidence interval [CI] = 1.10, 16.25) and previous attempted suicide (OR = 5.83, 95% CI = 1.02, 33.44). Sex under the influence of substances was associated with commercial sex work (OR = 3.35, 95% CI = 1.11, 10.13) and having a college degree (OR = 5.32, 95% CI = 1.34, 21.18). Illicit drug use was associated with commercial sex work (OR = 7.15, 95% = 2.26, 22.63). Findings suggest that API MTF transgendered women are on the front line of HIV risk for the API community, and provide insight into factors within this group that might contribute to unsafe sex and substance use.

Trocki, K. F., L. Drabble, et al. (2005). "Use of heavier drinking contexts among heterosexuals, homosexuals and bisexuals: Results from a national household probability survey." Journal of Studies on Alcohol **66**(1): 105-110.

OBJECTIVE: Extensive use of specific social contexts (bars and parties, for instance) by homosexuals and bisexuals is thought to be a factor in the higher rates of drinking among these groups. However, much of the empirical evidence behind these assumptions has been based on studies with methodological or sampling shortcomings. This article examines the epidemiological patterns of alcohol contexts in relation to sexual identity, using a large, national, probability population survey. **METHOD:** We used the 2000 National Alcohol Survey for these analyses. The prevalence of spending leisure time in each of two social contexts (bars and parties) that are associated with heavier drinking is examined by sexual orientation (heterosexual, homosexual, bisexual and self-identified heterosexuals with same sex partners). In addition, we compare levels of drinking within these contexts by sexual orientation within these groups. **RESULTS:** Exclusively heterosexual women spent less time in these two contexts relative to all other groups of women. Gay men spent considerably more time in bars compared with the other groups of men. Heterosexual women who reported same sex partners drink more at bars, and bisexual women drink more alcohol at both bars and parties than exclusively heterosexual women. For men, there were no significant differences for average consumption in any of these contexts. Entry of background and demographic variables into logistic regression analyses did little to modify these associations. **CONCLUSIONS:** There is empirical evidence that some groups of homosexual and bisexual women and men spend more time than heterosexual individuals in heavier drinking contexts. The frequency of being in these two social contexts does not appear to be associated with heavier drinking within these contexts for men, but it may be related to heavier drinking in those places among some groups of women.

Female Veterans

Epler, A. J., D. R. Kivlahan, et al. (2005). "A brief readiness to change drinking algorithm: concurrent validity in female VA primary care patients." Addict Behav **30**(2): 389-95.

Brief primary care interventions for alcohol use should be tailored to patients' readiness to change; however, validated measures of readiness to change are too lengthy to be practical in most primary care settings. We compared a readiness to change drinking algorithm (RTC Algorithm) based on three standardized questions to a validated 12-item readiness to change questionnaire (Rollnick RTCQ) in 85 hazardous drinking female

Veterans Affairs (VA) patients. Results from comparisons of mean Rollnick RTCQ scale scores across RTC Algorithm categories suggest good concurrent validity. Regular assessment using the RTC Algorithm questions may help primary care providers tailor alcohol-related discussions with hazardous drinking patients.

Kaur, S. and L. A. Bastian (2005). "Screening for Substance Abuse in Primary Care Among Women Veterans." Journal of Clinical Outcomes Management **12**(7): 359.

Objective: To review the importance of screening for tobacco, alcohol, recreational drug, and prescription drug abuse in women veterans. Methods: A review of the literature was conducted by searching the MEDLINE database (1966-2004) using the keywords "women," "veterans," "tobacco," "alcohol," and "substance abuse." A search of national guidelines was also performed using the National Guideline Clearinghouse Web site. Results: The prevalence of substance abuse of all types is higher in women veterans than in civilian women. Women veterans are frequently underdiagnosed for substance abuse problems. Those that are referred for treatment are less likely to complete treatment than male veterans. Because of the complicated nature of substance abuse in women veterans (ie, high rates of associated medical, psychological, and social problems), substance abuse treatment programs for this population need to be more comprehensive. The U.S. Preventive Services Task Force has established guidelines for screening and counseling for tobacco and alcohol abuse in all adults. Women veterans should also be screened for abuse of prescription and recreational drugs. Conclusion: Primary care providers should screen women veterans for tobacco, alcohol, recreational drug, and prescription drug abuse. By understanding the complexities of substance abuse in women veterans, providers can help ensure that this population will be more successfully diagnosed and treated.

Homelessness

Milby, J. B., J. E. Schumacher, et al. "To House or Not to House: The Effects of Providing Housing to Homeless Substance Abusers in Treatment." American Journal of Public Health **95**(7): 1259-65.

OBJECTIVES: Housing typically is not provided to homeless persons during drug abuse treatment. We examined how treatment outcomes were affected under 3 different housing provision conditions. METHODS: We studied 196 cocaine-dependent participants who received day treatment and no housing (NH), housing contingent on drug abstinence (ACH), or housing not contingent on abstinence (NACH). Drug use was monitored with urine testing. RESULTS: The ACH group had a higher prevalence of drug abstinence than the NACH group (after control for treatment attendance), which in turn had a higher prevalence than the NH group. All 3 groups showed significant improvement in maintaining employment and housing. CONCLUSIONS: The results of this and previous trials indicate that providing abstinence-contingent housing to homeless substance abusers in treatment is an efficacious, effective, and practical intervention. Programs to provide such housing should be considered in policy initiatives.

Nyamathi, A., D. Longshore, et al. (2004). "Motivation to stop substance use and psychological and environmental characteristics of homeless women." Addictive Behaviors **29**(9): 1839-1843.

Characteristics associated with wanting to permanently quit their alcohol, cocaine or heroine use were examined in 748 homeless women. Only a third of Latinas wanted to stop using alcohol; they were also at relatively high risk for continued heroine use. Recognition that their substance use was an extremely serious problem was a consistent predictor of wanting to quit substance use. Other important predictors of desiring to quit two substances included not hanging out with other drug users, lifetime hospitalization for drug use and recent substance use treatment. Findings from this study may be helpful for selecting relative good candidates for the limited number of

substance abuse treatment slots available for homeless women and providing supplementary assistance to those already in treatment.

American Indian/Native American

Chong, J. and D. Lopez (2005). "Social networks, support, and psychosocial functioning among American Indian women in treatment." *American Indian and Alaska Native Mental Health Research* **12**(1): 62-85.

The relationship of social networks and social support to the psychosocial functioning (self-efficacy, self-esteem, anxiety, depression, and hostility) of 159 American Indian women undergoing residential substance abuse treatment at Native American Connections was assessed. Social support and active participation by clients' families during treatment were found to be significantly related to improved psychosocial functioning. No relationship was found between positive social networks and psychosocial improvement. Interventions for substance abuse should aim to include family and friends in clients' treatment.

Leonardson, G. R., E. Kemper, et al. (2005). "Validity and reliability of the Audit and CAGE-aid in northern plains American Indians." *Psychological Reports* **97**(1): 161-166.

According to the Indian Health Service, substance abuse and Type 2 diabetes are serious problems among Native Americans. To assess substance use in a medical setting, valid screening tests are needed so the Alcohol Use Disorders Identification Test (AUDIT), a simple brief screen for excessive drinking, and the CAGE-adapted to Include Drugs (CAGE-AID) for identifying primary care patients with alcohol and drug disorders were given 50 Northern Plains American Indians with diabetes. Both are short, easy to administer, have good sensitivity and specificity, and can be easily incorporated into a medical history protocol or intake procedure. Reliability coefficients were above .90 and appeared to have sufficient concurrent and divergent validity indicated by moderate correlations with the General Well-being Schedule ($r_s = -.39$ and $-.36$), the Family-Adaptation, Partnership, Growth, Affection, & Resolve ($r = -.47$ and $-.36$), and the Beck Depression Inventory-II ($r = .36$ and $.29$).

Saylors, K. and N. Daliparthi (2005). "Native women, violence, substance abuse and HIV risk." *Journal of Psychoactive Drugs* **37**(3): 273-280.

Violence has become a critical public health issue in the United States. It has had a particularly devastating impact on the health and well being of Native American women and children. The relationship between aggression and substance use is an intrinsic one: Native women often bear the brunt of violence in drinking situations, which places them and their children at extremely high risk for physical and sexual abuse. In urban environments, many Native American women find themselves in adult relationships that mirror the abuse they experienced and witnessed as children or adolescents. Not only does violence often occur while substances are being used, but conversely, substance use is a frequent consequence of sexual abuse. Clearly, the mental health repercussions of physical or sexual abuse are often severe. Trauma is associated not only with psychological distress, but also with risky behavior and social role impairment. Traumatized women engaging in substance abuse and unsafe sex are at high risk for contracting HIV/AIDS. This article explores the intersection of substance abuse, sexual and physical abuse, and increased HIV risk among urban Native American women in the San Francisco Bay Area.

Latinas

Boiko, P., W. Katon, et al. (2005). "An audiotaped mental health evaluation tool for Hispanic immigrants with a range of literacy levels." *J Immigr Health* 7(1): 33-6.

Debilitating mental illness is treatable if found. There is no validated self-administered mental illness evaluation tool for immigrant Hispanic farm workers with variable literacy levels. This study tested sensitivity and specificity of an audiotaped survey developed for low literacy levels compared with standard interview instruments. Subjects from 11 migrant camps completed a self-administered audiotaped survey in Spanish to diagnose major depression, substance abuse, panic and generalized anxiety, and domestic violence. Primary care clinics assisted in finding camps and provided follow-up treatment. For 154 men and 156 women, the audio tool was most sensitive for major depression and specific for anxiety disorder, alcohol abuse, and domestic violence. Seventy percent of those diagnosed with major depression received appropriate treatment. This study validated an inexpensive, self-administered audio tool to evaluate the mental health of immigrant Hispanic farm workers with a wide range of literacy levels.

Chambers, CD, Hughes, S., Meltzer, S.B., Wahlgren, D., Kassem, N., Larson, S., Riley, E., & Hovell, M. F. (November 2005). Alcohol consumption among low-income pregnant latinas. *Alcoholism: Clinical & Experimental Research*. 29(11):2022-2028.

BACKGROUND:: Due to changing cultural norms, Latinas of childbearing age residing in the U.S. may be at increasing risk of drinking harmful levels of alcohol during pregnancy, and may also be unaware of the risks for Fetal Alcohol Spectrum Disorders associated with this behavior. We assessed the prevalence of alcohol consumption in a sample of low-income pregnant Latinas and examined risk factors for alcohol use in the periconceptual period. **METHODS::** As part of a larger intervention trial, a cross-sectional in-home interview study was conducted among a sample of 100 pregnant low-income Latinas receiving services from the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) in San Diego County, California. **RESULTS::** Fifty-seven percent of respondents indicated they were either life-time abstainers or had not consumed any alcohol in the periconceptual period. Forty-three percent reported some alcohol use in the three months prior to recognition of the current pregnancy, and 20% reported at least one binge episode of four or more standard drinks during that time frame. Five percent reported drinking seven or more drinks per week, and 8% continued drinking alcohol after recognition of pregnancy. Significant predictors of any alcohol use in the periconceptual period included English language/higher level of acculturation, younger maternal age, lower parity, higher level of education, younger age at first drink, and having ever smoked. Women who were aware of alcohol warning messages and /or had more knowledge of the Fetal Alcohol Syndrome (FAS) were significantly more likely to have consumed alcohol in the periconceptual period. Frequency of periconceptual use of alcohol did not differ between women who planned or did not plan the pregnancy. **CONCLUSION::** The prevalence and pattern of early pregnancy alcohol consumption in this sample of Latinas is similar to patterns noted in other race/ethnic groups in the U.S. Level of knowledge about FAS and awareness of warning messages was not protective for early pregnancy alcohol consumption, suggesting that specific knowledge was insufficient to prevent exposure or that other factors reinforce maintenance of alcohol consumption in early pregnancy. Selective interventions in low-income Latinas are warranted, and should be focused on women of reproductive age who are binge or frequent drinkers and who are at risk of becoming pregnant.

Adolescents/Young Adults/Older Adults

Adolescents

Austin, A. M., M. J. Macgowan, et al. (2005). "Effective family-based interventions for adolescents with substance use problems: A systematic review." Research on Social Work Practice **15**(2): 67-83.

Objective: This article is a systematic review identifying effective family-based interventions for adolescent substance use problems. Method: A substantive review of each intervention is conducted using guidelines for effective treatment for substance use problems. Additionally, a methodological review of each study is done using criteria for empirically validated treatments. Results: Treatment components of five interventions-Brief Strategic Family Therapy; (BSFT), Family Behavior Therapy, Functional Family Therapy, Multidimensional Family Therapy (MDFT), and Multisystemic Treatment-were consistent with a majority of guidelines for effective treatment. Notable exceptions include no aftercare and poor treatment retention. MDFT and BSFT met criteria of probably efficacious treatment, whereas the other interventions represented promising treatments. Moreover MDFT demonstrated clinically significant changes in substance use and large effect sizes at posttreatment and follow-up. Conclusion: To increase provision of effective adolescent substance abuse treatment, social workers should use these research findings to guide implementation.

Bobo, W. V., S. C. Miller, et al. (2005). "The Abuse Liability of Dextromethorphan Among Adolescents: A Review." Journal of Child & Adolescent Substance Abuse **14**(4): 55. **[abstract doesn't specifically mention gender differences, but may be an issue to watch]**

Dextromethorphan (DM) is a popular over-the-counter antitussive medication. Although adverse effects from appropriate use are rare, a specific toxidrome with significant psychomimetic effects occurs with ingestions in excess of those recommended. Both DM and its active metabolite, dextrorphan (DOR), share pharmacologic and neurobehavioral properties similar to opiates and phencyclidine (PCP). As such, cases of recreational DM abuse and, rarely, dependence have been reported, and some data suggest that such abuse is on the rise. DM may be considered by substance abusers, especially adolescents, to be a dissociative agent devoid of financial concerns, legal limitations, negative stigma, problems with access or adverse health consequences. However, DM's popularity among adolescent substance abusers is generally not matched by adequate health care provider awareness, pharmacological understanding or epidemiological characterization. In this review, we summarize the current understanding of DM's addiction medicine based.

Bailey, J. A. and L. A. McCloskey (2005). "Pathways to adolescent substance use among sexually abused girls." J Abnorm Child Psychol **33**(1): 39-53.

This study examined the link between childhood sexual abuse and adolescent substance use among girls, and evaluated depressive self-concept and behavioral under-control (BUC) as pathways to substance use for sexually abused girls. Participants (n = 150) were drawn from a longitudinal study of the impact of domestic violence on the lives of women and children. Structural equation modeling revealed that girls' childhood sexual abuse was associated prospectively with their later substance use. This relationship persisted when age, co-occurring forms of child abuse (physical, exposure to domestic violence), childhood depression and aggression, family income, maternal substance use, and parenting practices were controlled. Behavioral under-control mediated the relationship between childhood sexual abuse and later substance use, but depressive self-concept did not. Implications, limitations, and directions for future research are discussed.

Boyer, E. W., M. Shannon, et al. (2005). "The Internet and psychoactive substance use among innovative drug users." Pediatrics **115**(2): 302-5. **[limited sample, but interesting issue]**

OBJECTIVE: The Internet contains an extraordinary amount of information on the recreational use of psychoactive substances. We investigated the effect of the Internet on the drug-use knowledge, attitudes, and behaviors of adolescents. **METHODS:** Cross-sectional survey of adolescents being managed for substance abuse. **RESULTS:** Of 12 patients (9 male, 3 female) who had used the Internet to learn about psychoactive substances, 100% reported that Internet-based information had affected the ways in which they had used psychoactive substances. Of the 12 respondents, 8 described adopting behaviors intended to minimize the risks associated with psychoactive substance use. Respondents also reported changes in the use of a wide variety of illicit substances as well as over-the-counter and prescription pharmaceuticals. Examiners assessed whether quotations demonstrated that respondents' knowledge, attitudes, and behaviors toward psychoactive substance use were affected by Internet information. Despite the subjective nature of the research question, there was a highly significant agreement between coders. **CONCLUSIONS:** Web-based data on psychoactive substances seem to influence a broad range of drug-use behaviors in adolescents. Information on the ways that the Internet is being used by this vulnerable population should be considered in the design of Web sites to prevent the initiation and use of psychoactive substances.

Buddie, A. M. and M. Testa "Rates and Predictors of Sexual Aggression Among Students and Nonstudents." Journal of Interpersonal Violence **20**(6): 713.

The authors compared rates and predictors of sexual aggression for women attending college with those of women from the same population who were not attending college. Because it has been suggested that less parental monitoring at college may be associated with risky behaviors that contribute to sexual aggression, they also compared rates and predictors of sexual aggression for those living with parents versus not living with parents. The results showed that women living away from parents reported significantly higher rates of sexual aggression than women living with parents, regardless of student status. Logistic regression analyses showed that for student and nonstudent women, heavy episodic drinking and number of sex partners predicted past-year rape and/or attempted rape. The current results do not provide evidence that college is a uniquely risky environment for experiencing sexual aggression. Rather, the behaviors in which young women engage are associated with sexual aggression during this time period.

Caldwell, L. C., A. D. Schweinsburg, et al. (2005). "Gender and adolescent alcohol use disorders on bold (blood oxygen level dependent) response to spatial working memory." Alcohol and Alcoholism **40**(3): 194-200.

Aims: To determine how alcohol use differentially affects brain functioning in male and female adolescents. **Methods:** Adolescents with alcohol use disorders (AUDs; 7 female, 11 male) and control adolescents without AUDs (9 female, 12 male), aged 14-17 years, performed spatial working memory and vigilance tasks during functional magnetic resonance imaging. **Results:** Gender, AUD and their interaction were significantly associated with brain activation patterns to the tasks. There were interactions in the superior frontal, superior temporal, cingulate and fusiform regions, in which female and male adolescents with AUDs showed a different brain response from each other and control subjects. Female adolescents with AUDs showed a greater departure from normal activation patterns than male adolescents with AUD. **Conclusions:** Adolescent alcohol involvement may affect male and female brains differently, and adolescent females may be somewhat more vulnerable to adverse alcohol effects. With continued drinking, these adolescents may be at an increased risk for behavioural deficits.

Cavanaugh, D. A. (2005). "Substance abuse and mental health services for children and adolescents." Administration and Policy in Mental Health **32**(4): 439-456.

This study examines the initial effects of the Massachusetts Mental Health and Substance Abuse Program on 24-hour care for children and adolescents. Analysis of Medicaid claims shows that under managed care, access to 24-hour services, the number of service users, and admissions increased, while length of stay and expenditures decreased. The decomposition of the savings indicated that although the increase in admissions would have added an additional \$2.7 million to expenditures without managed care, the carve-out saved \$9.1 million in the first year through changes in length of stay, service settings, and price per day. The managed care variable was not significant in the regression models examining rapid readmission.

Chapple, C. L., T. L. Hope, et al. (2005). "The Direct and Indirect Effects of Parental Bonds, Parental Drug Use, and Self-Control on Adolescent Substance Use." Journal of Child & Adolescent Substance Abuse **14**(3): 17.

Research indicates that parenting has important effects on adolescent substance use. However, the indirect effect of parenting on adolescent substance use via self-control is less understood. Gottfredson and Hirschi's General Theory of Crime has been extensively tested by researchers in the field of criminology, but the theory rarely has been used to predict adolescent substance use. Although Gottfredson and Hirschi clearly assume that self-control is predicated on parenting, its mediating effect is rarely assessed. We find direct effects of self-control and maternal marijuana use on substance use and also find that self-control mediates the relationship between other parenting variables and adolescent substance use.

Chuang, Y.-C., S. T. Ennett, et al. "Neighborhood Influences on Adolescent Cigarette and Alcohol Use: Mediating Effects through Parent and Peer Behaviors*." Journal of Health and Social Behavior **46**(2): 187.

The influence of neighborhoods on adolescent behaviors has received increasing research attention. In the present study, we use structural equation models to specify pathways from neighborhoods to adolescent cigarette and alcohol use through parental closeness, parental monitoring, parent substance use, and peer substance use. We use a national sample with 959 adolescents 12 to 14 years of age whose residential addresses were matched with 1990 Census tracts to provide neighborhood characteristics. We found that for adolescent cigarette use low socioeconomic status (SES) neighborhoods were associated with increased parental monitoring, which was further associated with decreased adolescent cigarette use. For adolescent alcohol use, high SES neighborhoods were associated with increased parent drinking, which was further associated with increased adolescent alcohol use. Low SES neighborhoods were associated with increased parental monitoring and increased peer drinking, which were in turn associated with decreased and increased adolescent alcohol use, respectively.

Cook, R. L., T. Chung, et al. (2005). "Alcohol screening in young persons attending a sexually transmitted disease clinic - Comparison of AUDIT, CRAFFT, and CAGE instruments." Journal of General Internal Medicine **20**(1): 1-6.

OBJECTIVE: To compare the ability of 3 brief alcohol screens (Alcohol Use Disorders Identification Test [AUDIT], CRAFFT, and CAGE) to identify adolescents and young adults with a current alcohol use disorder (AUD) and to determine whether there are gender-based or race-based differences in screening performance. **DESIGN,** **PARTICIPANTS AND SETTING:** Cross-sectional study of 358 young persons (55% males; 49% blacks; age range, 15-24 years; mean age, 20.6 years) who were attending an urban clinic for sexually transmitted diseases and reported alcohol use during the past year. Performance of screens did not differ by gender. The AUDIT performed slightly better in whites than blacks, but no race-based differences were observed for the CAGE or CRAFFT. **CONCLUSIONS:** Clinicians should use the AUDIT or CRAFFT, rather than the CAGE, to screen young persons for AUDs. The AUDIT performs best,

but its length may limit its utility in this setting. The CRAFFT is a suitable alternative, with excellent sensitivity and no gender-based or race-based differences.

Craig, R. J. (2005). "Assessing contemporary substance abusers with the MMPI MAC Andrews Alcoholism Scale: a review." Subst Use Misuse **40**(4): 427-50.

We reviewed 71 United States-based MacAndrew Alcoholism Scale (MAC), as revised (MAC-R) studies totaling almost 32,000 Ss, with adolescent and adult substance abusers, from studies published since the last MAC reviews (1989) through 2001. Results suggest that the MAC, and to some extent, the MAC-R, significantly correlates with measures of alcohol and substance abuse in both male and female adolescents and adults, across a diverse spectrum of the use-abuse continuum. Nonclinical groups (100%) scored below the clinical ranges on the MAC/MAC-R, while 79% of adolescent substance abusing groups scored > R 23, indicative of problems with substance abuse. Persons who abused alcohol, drugs, and polydrugs had mean MAC/MAC-R scores > 23, which ranged from 77% to 100% of the cases. The MAC/MAC-R does well in discriminating persons who abuse substances compared to nonclinical, nonabusing groups, but appears to lose diagnostic efficiency with psychiatric patients, and especially with medical patients with seizure disorders. Using R > 25 seems to improve diagnostic accuracy with this population. Meaning of false positives and false negatives were explored and discussed.

Davis, S., F. Piercy, et al. (2004). "Female adolescent smoking: A Delphi study on best prevention practices." Journal of Drug Education **34**(3): 295-311.

The present researchers used a multi-wave Delphi methodology to determine what 14 knowledgeable substance abuse professionals believe are the most appropriate smoking prevention practices for female adolescents. While there was some agreement with the emerging literature, particularly on weight control issues and parental involvement, there was also endorsement of items that appear to be equally salient for both males and females. While the panelists generally acknowledged differential risk factors for females, and the need for prevention programming around these risk factors, more research on gender specific programming is needed before prevention experts are ready to agree on clear and specific practices for adolescent females.

Delva, J., Wallace, JM Jr., O'Malley, PM, Bachman, JG, Johnston, LD & Schulenberg, JE (2005). "The epidemiology of alcohol, marijuana, and cocaine use among Mexican American, Puerto Rican, Cuban American, and other Latin American eighth-grade students in the United States: 1991-2002." Am J Public Health. 2005 Apr; **95**(4):696-702.

OBJECTIVES: We compared trends in and correlates of marijuana use, cocaine use, and heavy alcohol use for adolescents of Mexican American, Puerto Rican, Cuban, and other Latin American heritage in the United States. METHODS: We used/examined data from nationally representative samples of eighth-grade Hispanic students who participated in the Monitoring the Future study during the years 1991-2002 (n=24235). RESULTS: Drug use was significantly higher among boys and adolescents of almost all Hispanic ethnicities who did not live with both parents. In addition, drug use differed considerably according to ethnic group on language first spoken, parental education, urbanicity, and region. CONCLUSIONS: A better understanding of the homogeneity and heterogeneity of drug use patterns within and between Hispanic groups should assist in the development of prevention programs.

Duhig, A. M., D. A. Cavallo, et al. (2005). "Daily patterns of alcohol, cigarette, and marijuana use in adolescent smokers and nonsmokers." Addict Behav **30**(2): 271-83.

Timeline follow back (TLFB) methodology was used to assess the daily use of cigarettes, alcohol, and marijuana in adolescent cigarette smokers and nonsmokers over the prior 30 days. Adolescent smokers reported more frequent daily use of both alcohol

and marijuana than nonsmokers did. Of those smokers and nonsmokers who drank alcohol and used marijuana, smokers reported more frequent daily use of alcohol, but not marijuana. In examining daily use patterns, there were very few instances when adolescent smokers used alcohol but did not smoke cigarettes, and smokers used marijuana alone on more days than alcohol alone. One-fifth of the adolescent smokers used all three substances on the same day in the past month. There were no significant differences in the patterns of alcohol and marijuana use between female and male smokers, regardless of age. Implications for clinical interventions and future research are discussed.

Goldberg-Lillehoj, C. J., R. Spoth, et al. (2005). "Assertiveness Among Young Rural Adolescents: Relationship to Alcohol Use." Journal of Child & Adolescent Substance Abuse **14**(3): 39.

There is evidence of higher prevalence rates for alcohol use among rural adolescents relative to urban adolescents. Strategies aimed at preventing adolescent alcohol use typically include the development of social skills to resist peer pressure; among the social skills frequently targeted is assertiveness. Self-report data were collected from a sample of rural adolescents (N = 470) participating in a longitudinal preventive intervention study. Five hypothesized dimensions of assertiveness were validated with Confirmatory Factor Analysis: Specific Substance Refusal, Individual Rights, Transaction, Justice, and Social Approach. Using gender as a between-subjects factor, plus time and assertiveness as within-subjects factors to predict an alcohol use composite index, repeated measures analyses revealed a number of significant findings. Several assertiveness dimensions were found to have significant effects on the alcohol use index, and significant two-way and three-way interaction effects (gender x time x assertiveness dimension) also were found. Findings support the idea of including multidimensional assertiveness skill development as a component of preventive interventions, particularly for rural adolescents.

Kamon, J., A. Budney, et al. "A Contingency Management Intervention for Adolescent Marijuana Abuse and Conduct Problems." Journal of the American Academy of Child and Adolescent Psychiatry **44**(6): 513. **[small sample and doesn't mention girls specifically, but good given prevalence of marijuana use among teen girls]**

Objective: To describe an innovative treatment for adolescent marijuana abuse and provide initial information about its feasibility, acceptability, and potential efficacy. Method: Provided an intervention composed of (1) a clinic-administered, abstinence-based incentive program; (2) parent-directed contingency management targeting substance use and conduct problems; (3) a clinic-administered incentive program for parent participation; and (4) individual cognitive-behavioral therapy for adolescents. Data are presented for 19 adolescents, age 15-18 years. Measures of substance use, psychopathology, and parenting were collected before and after the 14-week treatment. Substance use measures were also collected 1 month post-treatment. Substance use was monitored by twice-weekly urine and breath testing. An intent-to-treat model was used. Results: Adolescents and parents attended an average of 10.3 and 10.6 of 14 sessions, respectively. Substance use, externalizing behaviors, and negative parenting behaviors decreased by treatment end. Urine testing indicated that abstinence increased from 37% at intake to 74% at treatment end (z value = 2.28, p = .02) and that 53% of adolescents were abstinent 30 days post-treatment. Conclusions: Preliminary data provide support for the feasibility and acceptability of a family-based, contingency management model to treat adolescent substance use and conduct problems. Controlled efficacy studies with larger samples are needed.

Maag, J. W. and D. M. Irvin (2005). "Alcohol use and depression among African-American and Caucasian adolescents." Adolescence **40**(157): 87-101.

The purpose of this study was to determine differences in reported alcohol use and depressive symptomatology among a sample of 524 African-American and Caucasian adolescents. Of specific interest was determining if ethnicity, gender, and age predicted severity of scores obtained on the Reynolds Adolescent Depression Scale (RADS) and Adolescent Drinking Index (ADI). Extreme groups were formed using upper (> 75%) and lower (< 25%) quartiles. Three other groups were formed using each instrument's normatively derived cutoff scores: depressed only (RADS > 7.7), heavy drinking (ADI > 16) and mixed (RADS > 7.7, ADI > 16). Several results were obtained. First, Caucasians obtained significantly higher scores on the ADI than African-Americans, although no differences were obtained for the RADS. Females scored higher on the RADS but lower on the ADI than males. In terms of extreme scores, females were less likely to belong to the severe depression group, while older adolescents in general and African-Americans in particular had a greater probability of belonging to the heavy-drinking group. Finally, using RADS and ADI cutoff scores, females were less likely than males to belong to the depression-only group as were African-Americans. Older adolescents, in general, and African-Americans in particular had a greater probability of belonging to the mixed group than did their counterparts.

Nieri, T., S. Kulis, et al. (2005). "Body image, acculturation, and substance abuse among boys and girls in the southwest." American Journal of Drug and Alcohol Abuse **31**(4): 617-639.

This study explored body image as measured by perceptions of weight and appearance and its impact on adolescent drug use among predominately Mexican American middle school students in the southwest. Outcomes analyzed included lifetime and recent alcohol, cigarette, and marijuana use and antidrug norms. Disliking one's looks was more of a risk factor for boys, whereas negative weight perceptions were more of a risk factor for girls. Relative to more acculturated (English-dominant) Latinos (N = 903), non-Latino Whites (N = 121), and other non-Latino youth (N = 107), less acculturated (Spanish-dominant) Latino youth (N = 212) reported the poorest body image. However, more acculturated Latino youth with poor body image had the greatest risk of substance use. More acculturated Latino boys who disliked their looks reported relatively greater amounts of recent alcohol use, and those who rated their bodies as too thin reported higher lifetime cigarette use, a greater amount and frequency of recent cigarette use, and weaker antidrug norms. More acculturated Latina girls who thought they were too fat reported a greater amount and frequency of recent cigarette use. These findings suggest that low levels of acculturation may protect some Latino youth with poor body image from coping via substance use. In addition, they suggest that poor body image among some Latinos may result less from adoption of American thinness ideals but rather from attitudes and behaviors that devalue the characteristics of Latino appearance.

Repetto, P. B., C. H. Caldwell, et al. (2005). "A longitudinal study of the relationship between depressive symptoms and cigarette use among African American adolescents." Health Psychology **24**(2): 209-219.

The relationship between depressive symptoms and cigarette use was examined in a sample of 623 African Americans during adolescence and transition to adulthood by using hierarchical linear modeling. Participants in the study were interviewed across 6 occasions over 8 years. Results indicate that depressive symptoms tend to decrease over time, whereas cigarette use tends to increase for both female and male adolescents. The results also suggest that depressive symptoms predict later cigarette use. Male adolescents who reported more depressive symptoms were more likely than female adolescents to use cigarettes as a way to cope with their mood. These results suggest that depressive symptoms may be important to consider when developing smoking cessation interventions for African American youth.

Rosenberg, H. J., M. K. Jankowski, et al. (2005). "Single and Multiple Suicide Attempts and

Associated Health Risk Factors in New Hampshire Adolescents." Suicide & Life - Threatening Behavior **35**(5): 547. **[doesn't mention gender differences, but still may be useful]**

In this study we examined self-reported suicide attempts and their relationship to other health risk factors in a community sample of 16,644 adolescents. Fifteen percent endorsed suicide attempts (10% single; 5% multiple attempts). We hypothesized that multiple attempters would show higher prevalence of comorbid health risks than single or non-attempters. The three groups showed significant differences in ten health risk domains, on factors such as depressed mood, sexual assault, weight problems, and drug and alcohol use (ORs: 3.26-13.57). Repeated suicide attempts appear to be related to increased vulnerability and likelihood of harm in multiple domains of health risk.

Rosenblum, A., S. Magura, et al. (2005). "Substance use among young adolescents in HIV-affected families: Resiliency, peer deviance, and family functioning." Substance Use & Misuse **40**(5): 581-603.

This study examines the association of risk and protective factors with substance use among 77 early adolescents (11-15 years old) with an HIV-infected parent who were interviewed in 2000-2001 in the South Bronx, a HIV high-prevalence area of New York City. The subjects were 49% female, 53% African American, and 30% Hispanic; mean age was 13 years old. A face-to-face interview was used to administer a battery of instruments representing community, family, peer and resiliency factors. Forty percent reported ever using tobacco, alcohol or drugs; 71% were aware of their parent's HIV seropositivity. An age-adjusted path analytic model was constructed which showed : 1) family functioning predicted resiliency (a composite measure of psychological adjustment and personal competencies); 2) positive community factors and resiliency predicted less affiliation with deviant peers; and 3) poorer family functioning and affiliation with deviant peers predicted substance use. These results underscore the need for interventions that address social influence factors among vulnerable early adolescents with HIV-positive parents.

Sher, L. and G. Zalsman (2005). "Alcohol and adolescent suicide." 197-203, 2005 Jul-Sep. Adolescent suicide is a major public health problem. In this review, the authors discuss different aspects of the relation between alcohol abuse and suicidal behavior in adolescents, including epidemiology, role of family history, comorbidity, gender differences, neurobiology, treatment, and prevention. In the general population, about 2,000 adolescents in the United States die by suicide each year. Suicide continually ranks as the second or third leading cause of death of persons between the ages of 15 and 34 years old. The suicide rate in young people has more than doubled during the period from 1956 to 1993. This increasing suicide rate has been blamed on the increase of adolescent alcohol abuse. Availability of alcohol and guns at home may contribute to suicide risk in adolescents. Comorbid psychopathology, which is common among adolescent alcohol abusers, substantially increases risk for suicide completions and attempts. Depressed adolescents may use alcohol to self-medicate depressive symptoms. Alcohol abuse and suicidal behavior in adolescents and in adults has been found to have biochemical, genetic, and psychological correlates. Ideally, treatment of adolescents who receive a diagnosis of an alcohol use disorder and co-occurring suicidality should follow an integrated protocol that addresses both conditions. Future studies of psychological and neurobiological mechanisms of suicidality in adolescents with alcohol and/or substance abuse are merited.

Van den Bree, M. B. and W. B. Pickworth (2005). "Risk factors predicting changes in marijuana involvement in teenagers." Arch Gen Psychiatry **62**(3): 311-9. **[doesn't discuss gender differences in abstract, but probably important given girls' use of marijuana]**

BACKGROUND: Marijuana use during adolescence has various adverse psychological and health outcomes. It is poorly understood whether the same risk factors influence different stages in the development of marijuana involvement. **OBJECTIVE:** To establish which risk factors best explain different stages of marijuana involvement. **DESIGN:** Data were collected at 2 points using computer-assisted personal interview (wave 1 and wave 2 were separated by 1 year). Twenty-one well-established risk factors of adolescent substance use/abuse were used to predict 5 stages of marijuana involvement: (1) initiation of experimental use, (2) initiation of regular use, (3) progression to regular use, (4) failure to discontinue experimental use, and (5) failure to discontinue regular use. Data were analyzed using logistic regression analysis. **PARTICIPANTS:** Middle school and high school students (N = 13 718, aged 11-21 years) participating in the National Longitudinal Study of Adolescent Health (Add Health). **RESULTS:** Three risk factors (own and peer involvement with substances, delinquency, and school problems) were the strongest predictors of all stages. Their combined presence greatly increased risk of initiation of experimental (odds ratio, 20) and regular (odds ratio, 87) marijuana use over the next year. Personality, family, religious, and pastime factors exerted stage-specific, sex-specific, and age-specific influences. **CONCLUSIONS:** Assessment of substance, school, and delinquency factors is important in identifying individuals at high risk for continued involvement with marijuana. Prevention and/or intervention efforts should focus on these areas of risk.

Wiemann, C. M., V. I. Rickert, et al. (2005). "Are pregnant adolescents stigmatized by pregnancy?" J Adolesc Health **36**(4): 352 e1-8.

PURPOSE: To identify prevalence and correlates, including substance use and exposure to violence, of feeling stigmatized by being pregnant as an adolescent. **METHODS:** A total of 925 low-income African-American, Mexican-American, and Caucasian pregnant adolescents aged ≤ 18 years were interviewed on the postpartum ward of a university hospital within 48 hours of delivery. Correlates of stigma were identified among self-reported behaviors such as substance use, exposure to violence, family support and criticism, as well as reproductive and sociodemographic characteristics. **RESULTS:** Two out of five adolescents (39.1%) reported feeling stigmatized by their pregnancy. As compared with their nonstigmatized peers, stigmatized adolescents were more likely to report having seriously considered abortion, being afraid to tell parents about pregnancy, feeling that parents/teachers thought pregnancy a mistake, and feeling abandoned by the fathers of their babies. Stepwise logistic regression revealed the following correlates independently associated with feeling stigmatized: white race/ethnicity, not being legally/common-law married or engaged to the baby's father, feelings of social isolation, aspirations to complete college, experiencing verbal abuse or being fearful of being hurt by other teenagers, and experiencing family criticism. In contrast, greater self-esteem and having dropped out of school before conception were protective of reporting feelings of stigma. **CONCLUSIONS:** Significant proportions of pregnant adolescents feel stigmatized by pregnancy and are at increased risk of social isolation and abuse. These young women may need special attention during and after pregnancy to develop concrete strategies to care for themselves and their children to complete their education and avoid becoming clinically depressed.

Young Adults/College-Age

Chiauzzi, E., T. C. Green, et al. (2005). "My student body: A high-risk drinking prevention Web site for college students." Journal of American College Health **53**(6): 263-274.

The authors investigated the efficacy of an interactive Web site, MyStudentBody.com: Alcohol (MSB:Alcohol) that offers a brief, tailored intervention to help heavy drinking college students reduce their alcohol use. They conducted a randomized, controlled

clinical trial to compare the intervention with an alcohol education Web site at baseline, postintervention, and 3-month follow-up. Students were assessed on various drinking measures and their readiness to change their drinking habits. The intervention was especially effective for women and persistent binge drinkers. Compared with women who used the control Web site, women who used the intervention significantly reduced their peak and total consumption during special occasions and also reported significantly fewer negative consequences related to drinking. In addition, persistent heavy binge drinkers in the experimental group experienced a more rapid decrease in average consumption and peak consumption compared with those in the control group. The authors judged MSB:Alcohol a useful intervention for reaching important subgroups of college binge drinkers.

Duncan, G. J., J. Boisjoly, et al. "Peer Effects in Drug Use and Sex Among College Students." Journal of Abnormal Child Psychology **33**(3): 375.

Past research suggests that congregating delinquent youth increases their likelihood of problem behavior. We test for analogous peer effects in the drug use and sexual behavior of male (n = 279) and female (n = 435) college students, using data on the characteristics of first-year roommates to whom they were randomly assigned. We find that males who reported binge drinking in high school drink much more in college if assigned a roommate who also binge drank in high school than if assigned a nonbinge-drinking roommate. No such multiplier effect is observed for females, nor are multiplier effects observed for marijuana use or sexual behavior for either males or females. Students who did not engage in these behaviors in high school do not appear to be affected by their roommate's high school behavior.

Engels, R., A. A. Vermulst, et al. (2005). "Long-term effects of family functioning and child characteristics on problem drinking in young adulthood." European Addiction Research **11**(1): 32-37.

Several studies have shown that disturbances in the parent-child relationship in childhood are related to patterns of alcohol abuse in adolescence and young adulthood. Recently some researchers, however, argue that whether poor parenting is detrimental depends on specific child characteristics. Hence, instead of examining overall effects of parenting, it might be more appropriate to search for specific child-environment effects that lead to problematic drinking patterns. In this paper, we investigate the interplay between child characteristics (lack of self-control and aggression) and parenting on problematic alcohol use in young adulthood. Data were used from a longitudinal study that followed 301 children and their parents for a period of 10 years. Both parents and their children were interviewed on parenting practices and child characteristics when the child was a young adolescent (mean age of 12 years at time 1) and extensive information on problematic alcohol use was gathered when the participants were young adults (mean age was 22 at time 3). Findings showed strong effects of childhood aggression (men only) and poor family functioning on enhanced levels of problem drinking in young adulthood. Further, the combination of high levels of aggression and low levels of family functioning were related to problem drinking in men, whereas the combination of low parental control and low levels of affection expression were related to problem drinking in women.

Greenbaum, P. E., F. K. Del Boca, et al. (2005). "Variation in the drinking trajectories of freshmen college students." Journal of Consulting and Clinical Psychology **73**(2): 229-238

F. K. Del Boca, J. Darkes, P. E. Greenbaum, and M. S. Goldman (2004) examined temporal variations in drinking during the freshmen college year and the relationship of several risk factors to these variations. Here, using the same data, the authors investigate whether a single growth curve adequately characterizes the variability in individual drinking trajectories. Latent growth mixture modeling identified 5 drinking

trajectory classes: light-stable, light-stable plus high holiday, medium-increasing, high decreasing, and heavy-stable. In multivariate predictor analyses, gender (i.e., more women) and lower alcohol expectancies distinguished the light-stable class from other trajectories; only expectancies differentiated the high-decreasing from the heavy-stable and medium-increasing classes. These findings allow for improved identification of individuals at risk for developing problematic trajectories and for development of interventions tailored to specific drinker classes.

Hall, K. M., M. M. Irwin, et al. (2005). "Illicit use of prescribed stimulant medication among college students." J Am Coll Health **53**(4): 167-74.

The authors investigated illicit use of stimulant medications at a midwestern university. They used a questionnaire to (a) examine the extent to which university students illicitly used stimulant medications prescribed for attention-deficit hyperactivity disorder; (b) determine why college students abused such drugs; and (c) identify the factors that predicted illicit use of prescribed stimulant medication. Findings revealed that 17% of 179 surveyed men and 11% of 202 women reported illicit use of prescribed stimulant medication. Forty-four percent of surveyed students stated that they knew students who used stimulant medication illicitly for both academic and recreational reasons. Students reported they experienced time pressures associated with college life and that stimulants were said to increase alertness and energy. Regression analysis revealed that the factor that predicted men's use was knowing where to get easily acquired stimulant medication, whereas the main predictor for women was whether another student had offered the prescribed stimulants.

Herman, A. I., K. M. Kaiss, et al. (2005). "Serotonin transporter promoter polymorphism and monoamine oxidase type a VNTR allelic variants together influence alcohol binge drinking risk in young women." American Journal of Medical Genetics Part B-Neuropsychiatric Genetics **133B**(1): 74-78.

The short allelic variant of the serotonin transporter protein promoter polymorphism (5HTTLPR) appears to influence binge drinking in college students. Both monoamine oxidase type A (MAOA) and the serotonin transporter protein are involved in the processing of serotonin, and allelic variants are both associated with differences in the efficiency of expression. We hypothesized that a significant gene x gene interaction would further stratify the risk of binge drinking in this population. Participants were college students (n = 412) who completed the College Alcohol Study, used to measure binge drinking behaviors. Genomic DNA was extracted from saliva for PCR based genotyping. The risk function for binge drinking was modeled using logistic regression, with final model fit $P < 0.0005$. This model was valid only for Caucasian females (n = 223), but the power to detect sex and ethnic effects was small. Young Caucasian women carrying higher expression MAOA VNTR alleles homozygous for the short allelic variant of the 5HTTLPR demonstrated the highest rate of binge drinking by self-report, odds ratio (genotype odds: population odds) and 95% confidence intervals, 3.11 (1.14-18.10). Individuals carrying higher expression MAOA VNTR alleles carrying at least one long 5HTTLPR allelic variant had the lowest risk of binge drinking 0.46 (0.28-0.71). These results support the hypothesis that binge drinking behavior in young adulthood may be influenced by neurobiological differences in serotonergic function conferred by functional polymorphisms in genes involved in serotonin processing.

Kashdan, T. B., C. J. Vetter, et al. (2005). "Substance use in young adults: associations with personality and gender." Addict Behav **30**(2): 259-69.

We examined relationships among personality (i.e., negative affectivity and conscientiousness), and use of licit and illicit substances in a sample of 421 college-aged social drinkers (52.7% women, 47.3% men). Results indicated significant relationships between personality and substance use as well as gender differences.

Negative affectivity was related to greater illicit substance use, but not alcohol use or smoking. Conscientiousness was related to less alcohol use and smoking, which fully mediated relationships between conscientiousness and with less use of marijuana and other illicit substances. For women, conscientiousness was associated with less alcohol and smoking, compared to men. For men, alcohol use and smoking were more likely to lead to marijuana use, compared to women. Our findings support differential pathways from personality to substance use, and gender appears to be an important moderating factor.

Lewis, M. A. and C. e. Neighbors, SSCI (2004). "Gender-specific misperceptions of college student drinking norms." Psychology of Addictive Behaviors **18**(4): 334-339.

This study evaluated perceptions of same-sex and opposite-sex gender-specific versus gender-nonspecific drinking norms among college students (115 men, 111 women). This research is consistent with previous findings that college students overestimate the quantity and frequency of drinking among their gender-nonspecific peers and demonstrates that both men and women overestimate the quantity and frequency of the drinking of their same-sex peers. The findings suggest that perceived same-sex norms are more strongly associated with problematic drinking than are gender-nonspecific norms and that perceived same-sex drinking norms are stronger predictors of alcohol consumption for women than for men. Results suggest that interventions incorporating normative feedback should be framed differently for women than for men.

Larimer, M. E., J. R. Kilmer, et al. "College Student Drug Prevention: A Review Of Individually-Oriented Prevention Strategies." Journal of Drug Issues **35**(2): 431. **[not gender specific but useful given prevalence among this age group of females]**

The current paper highlights the college years as a risk period for development, continuation, and escalation of illicit substance use and substance use disorders and reviews the literature related to the prevention and treatment of these disorders in college populations. Despite widespread implementation of college drug prevention programs, a review of the literature reveals few controlled trials targeting this population. However, alcohol prevention has been extensively studied, and many efficacious interventions for college drinking share theoretical and methodological underpinnings with interventions shown to be efficacious in drug prevention and treatment with other populations (i.e., school-based prevention, adolescent and adult drug treatment). These interventions could be adapted to target drug prevention on college campuses. Barriers to implementation and evaluation of these interventions on campus are discussed, and suggestions are made for future research and programmatic directions.

McCabe, S. E., T. L. Hughes, et al. (2005). "Assessment of Difference in Dimensions of Sexual Orientation: Implications for Substance Use Research in a College-Age Population." Journal of Studies on Alcohol **66**(5): 620.

Objective: The present research examines the associations between three distinct dimensions of sexual orientation and substance use in a random sample of undergraduate students. Method: A Web based survey was administered to students attending a large, midwestern research university in the spring of 2003. The sample consisted of 9 161 undergraduate students: 56% female, 68% white, 13% Asian, 6% black, 4% Hispanic and 9% other racial categories. Using multivariate logistic regression analyses, several measures of alcohol and other drug use were compared across three dimensions of sexual orientation: sexual identity, sexual attraction and sexual behavior. Results: All three dimensions of sexual orientation were associated with substance use, including heavy episodic drinking, cigarette smoking and illicit drug use. Consistent with results of several other recent studies, "nonheterosexual" identity, attraction or behavior was associated with a more pronounced and consistent risk of substance use in women than in men. Conclusions: Study findings suggest substantial variability in substance use

across the three dimensions of sexual orientation and reinforce the importance of stratifying by gender and using multiple measures to assess sexual orientation. Study results have implications for future research and for interventions aimed at reducing substance use among college students.

McCabe, S. E., J. E. Schulenberg, et al. (2005). "Selection and socialization effects of fraternities and sororities on US college student substance use: a multi-cohort national longitudinal study." *Addiction* **100**(4): 512-524.

AIMS: To examine how membership in fraternities and sororities relates to the prevalence and patterns of substance use in a national sample of full-time US college students. **DESIGN:** Nationally representative probability samples of US high school seniors (modal age 18 years) were followed longitudinally across two follow-up waves during college (modal ages 19/20 and 21/22). **SETTING:** Data were collected via self-administered questionnaires from US high school seniors and college students. **PARTICIPANTS:** The longitudinal sample consisted of 10 cohorts (senior years of 1988-97) made up of 5883 full-time undergraduate students, of whom 58% were women and 17% were active members of fraternities or sororities. **FINDINGS:** Active members of fraternities and sororities had higher levels of heavy episodic drinking, annual marijuana use and current cigarette smoking than non-members at all three waves. Although members of fraternities reported higher levels than non-members of annual illicit drug use other than marijuana, no such differences existed between sorority members and non-members. Heavy episodic drinking and annual marijuana use increased significantly with age among members of fraternities or sororities relative to non-members, but there were no such differential changes for current cigarette use or annual illicit drug use other than marijuana. **CONCLUSIONS:** The present study provides strong evidence that higher rates of substance use among US college students who join fraternities and sororities predate their college attendance, and that membership in a fraternity or sorority is associated with considerably greater than average increases in heavy episodic drinking and annual marijuana use during college. These findings have important implications for prevention and intervention efforts aimed toward college students, especially members of fraternities and sororities.

McCabe, S. E., C. J. Teter, et al. (2005). "Illicit use of prescription pain medication among college students." *Drug Alcohol Depend* **77**(1): 37-47.

This study identifies the prevalence, correlates, and sources associated with the illicit use of prescription pain medication among undergraduate college students. A cross-sectional, web-based survey was self-administered by a large random sample of 9,161 undergraduate students attending a large Midwestern university in the United States. Although undergraduate women were more likely to be prescribed pain medication, men were more likely to be approached to divert their prescription pain medication and report illicit use of prescription pain medication. Multivariate analyses indicated past year illicit use of prescription pain medication was higher among undergraduate students who were: previously prescribed pain medication, living in a house or apartment, and earning lower grade point averages. The majority of students obtained prescription pain medication for illicit use from peers and the second leading source was family members. There were several gender differences in the risk factors and sources of illicit use of prescription pain medication. Based on qualitative data, illicit use included recreational use for the purposes of intoxication and self-medication for pain episodes. Illicit users, who obtained prescription pain medication from peers, reported significantly higher rates of other substance use while those who obtained prescription medications from family members did not. These findings suggest that the illicit use of prescription pain medications may represent a problem among undergraduate students and effective prevention efforts are needed that account for gender differences.

Miller, B. A., C. D. Furr-Holden, et al. "Emerging Adults' Substance Use And Risky Behaviors In Club Settings." Journal of Drug Issues **35**(2): 357. **[doesn't mention gender specifically]**

This article explores the prevalence of drug and alcohol use and related risks by attendees at electronic music dance events (EMDEs) in club settings. From six events located on the East and West Coasts, anonymous data were collected via self-report questionnaires, drug bioassays, and alcohol breath tests prior to entry (N = 240) and upon exit from the venues (N = 219). EMDEs were locations for identifying young adults who were aged 18 to 25 (70%), not college students (54%), and at risk for substance use. Nearly half of the sample (45%) were positive for drug use, and 60% were positive for alcohol use at entrance. Slightly more than one third (38%) were positive for drug use, and 59% were positive for alcohol use at exit. Only a small percentage of the sample converted from no use to drug use on premises (5.4%). Future investigations need to explore targeted substance use prevention strategies within this context.

Murphy, J. G., M. E. McDevitt-Murphy, et al. (2005). "Drink and be merry? Gender, life satisfaction, and alcohol consumption among college students." Psychology of Addictive Behaviors **19**(2): 184-191.

This study examined the impact of alcohol use and alcohol-related problems on several domains of life satisfaction (LS) in a sample of 353 college students. Alcohol use was associated with lower general satisfaction and anticipated future satisfaction among women. Female abstainers reported higher general and anticipated future satisfaction than did female heavy drinkers. Female students' alcohol use was unrelated to their academic, family, dating, or social satisfaction. Drinking among men showed a positive, curvilinear relation to social satisfaction but was unrelated to other domains of LS. Alcohol-related problems were associated with decreased LS among both men and women. These findings suggest that alcohol use by young adults is associated with both positive and negative outcomes that may be gender specific.

O'Connor, R. M. and C. R. Colder (2005). "Predicting alcohol patterns in first-year college students through motivational systems and reasons for drinking." Psychology of Addictive Behaviors **19**(1): 10-20.

In the present study, a typological approach was used to identify patterns of alcohol use in a sample of 533 college freshmen students (<21 years old; 342 women; 191 men), on the basis of quantity and frequency of consumption, and alcohol-related problems. Personality (sensitivity to reward, SR; sensitivity to punishment, SP) and reasons for drinking were examined as correlates of drinking patterns through a mediational model. Analyses were done separately by gender. Latent profile analyses suggested 5 drinking patterns for both genders, including 3 problematic groups. SR was only associated with the problematic drinking patterns, and enhancement, coping, and social reasons for drinking mediated this relationship. These findings demonstrate the utility of latent profile analysis for identifying a drinking typology and for integrating personality and drinking motives to distinguish drinking patterns.

Park, C. L. and C. Grant (2005). "Determinants of positive and negative consequences of alcohol consumption in college students: alcohol use, gender, and psychological characteristics." Addictive Behaviors **30**(4): 755-765.

To examine the influence of alcohol consumption, gender, and psychological risk and protective factors on college students' experiences of negative and positive consequences, the present study of 181 students assessed frequency and quantity of alcohol consumption, negative and positive consequences of alcohol use, positive alcohol expectancies, constructive thinking, and positive and negative affect. Results indicated that men and women differed in their experience of some consequences and that while alcohol consumption was generally more strongly related to consequences for women than for men, it was unrelated to most consequences. Further, when controlling

for alcohol consumption, positive alcohol expectancies and negative affect were positively related to experiencing positive and negative consequences while constructive thinking was related to fewer positive and fewer negative consequences. Results indicate that consequences are much more strongly related to psychological risk and protective factors than to alcohol consumption. The article concludes with a discussion of implications for intervention efforts.

Slutske, W. S. (2005). "Alcohol use disorders among US college students and their non-college-attending peers." Archives of General Psychiatry **62**(3): 321-327.

Background: Heavy/binge drinking among college students has become a major public health problem. There is consistent evidence suggesting that young adults in college are drinking more than their non-college-attending peers, but it is still not clear whether they are more likely to suffer from clinically significant alcohol use disorders. Objective: To compare the prevalence of alcohol use disorders and alcohol use disorder symptoms in college-attending young adults with their non-college-attending peers within the same study in a large and representative US national sample. Design: Cross-sectional survey. Setting: Civilian, noninstitutionalized US population. Participants: Young adults (n=6352) from the 2001 National Household Survey on Drug Abuse (19-21 years of age, 51% female, 66% white, 14% African American, 14% Hispanic). Main Outcome Measures: Lifetime, past-year, and past-month drinking, past-year and past-month weekly drinking, past-month weekly binge drinking, past-month daily drinking, typical quantity consumed in the past month, and past-year DSM-IV alcohol dependence and abuse diagnoses. Results: Eighteen percent of US college students (24% of men, 13% of women) suffered from clinically significant alcohol-related problems in the past year, compared with 15% of their non-college-attending peers (22% of men, 9% of women; overall odds ratio = 1.32). The association between past-year alcohol use disorder and college attendance was stronger among women (odds ratio = 1.70) than men (odds ratio = 1.14). College students were more likely to receive a diagnosis of DSM-IV alcohol abuse than their peers not attending college; despite the fact that those in college were drinking more, they were not more likely to receive a diagnosis of DSM-IV alcohol dependence. Conclusions: College students suffer from some clinically significant consequences of their heavy/binge drinking, but they do not appear to be at greater risk than their non-college-attending peers for the more pervasive syndrome of problems that is characteristic of alcohol dependence.

White, H. R., E. W. Labouvie, et al. (2005). "Changes in substance use during the transition to adulthood: a comparison of college students and their noncollege age peers." Journal of Drug Issues **35**(2): 281-305. **[sample includes both men and women, but doesn't mention gender diffs]**

This study examines transitions in alcohol, cigarette, and marijuana use and alcohol- and marijuana-related problems from late adolescence through young adulthood. Men and women who attend college are compared to their peers who do not to determine if the situational/socialization effects of college are unique during this developmental period. Prospective data from a community sample were collected at ages 18, 21, and 30 years. ANOVAs revealed that 18 year olds who transition out of high school, regardless of college status, reported higher levels of substance use than their peers who were still in high school. In addition, nonstudents compared to college students reported higher levels of cigarette and marijuana use in adolescence, emerging adulthood, and young adulthood and higher levels, of alcohol- and marijuana-related problems in adolescence and young adulthood. Latent growth curve analyses revealed that college status was related to lower levels of alcohol and marijuana problems at age 18, greater increases from ages 18 to 21, and greater decreases from ages 21 to 30 even after controlling for level and growth in use. Overall, the findings suggest that nonstudents may be a more important target group than college students for drug use

prevention efforts during emerging adulthood.

Wiers, R. W., J. v. d. Luitgaarden, et al. "Challenging implicit and explicit alcohol-related cognitions in young heavy drinkers." Addiction **100**(6): 806.

Aims To test whether an expectancy challenge (EC) changes implicit and explicit alcohol-related cognitions and binge drinking in young heavy drinkers. This is important for theoretical and practical reasons: the EC presents a critical test for the hypothesized mediational role of alcohol cognitions and the EC has been presented as a promising intervention to counter alcohol problems in heavy drinking youth. **Setting, participants and intervention** Ninety-two heavy drinking college and university students (half women) were assigned randomly to the EC or control condition (a sham alcohol experiment in the same bar-laboratory). **Measurements** Explicit alcohol cognitions and alcohol use were assessed with paper-and-pencil measures. Alcohol use was assessed prior to the experiment and during a 1-month follow-up. Implicit alcohol-related cognitions were assessed with two versions of the Implicit Association Test (IAT), adapted to assess implicit valence and arousal associations with alcohol. **Findings and conclusions** The EC resulted in decreased explicit positive arousal expectancies in men and women alike. There was some evidence for a differential reduction in implicit arousal associations, but findings depended on the version of the IAT and on the scoring-algorithm used. In men (but not in women) there was a short-lived differential reduction in prospective alcohol use (significant in week 3 of the follow-up), and this reduction was partially mediated by the decrease in explicit positive arousal expectancies. These findings suggest that an EC successfully changes explicit alcohol cognitions and that this may have short-lived beneficial effects in heavy drinking young men.

Wu, L. T. and C. Ringwalt (2005). "Use of substance abuse services by young uninsured American adults." Psychiatric Services **56**(8): 946-953.

Objectives: This study examined the prevalence and correlates of substance abuse service use among uninsured young adults aged 18 to 34 years (N = 24,282). **Methods:** Data were drawn from the 1999 National Household Survey on Drug Abuse. Logistic regression was used to identify correlates of substance abuse service use among persons who met DSM-IV criteria for dependence. **Results:** Among uninsured young adults (N = 5,067), 66 percent lacked any health care coverage for at least one year. In this uninsured group, 72 percent were past-year users of alcohol or drugs (N = 2,335). Among past-year alcohol users (N = 2,273), 12 percent met criteria for alcohol dependence; among past-year drug users (N = 864), 21 percent met dependence criteria. Eighty-seven percent of the uninsured young adults with alcohol or drug dependence did not receive any substance abuse treatment services in the previous year. In the uninsured substance-dependent group, women, blacks, and Hispanics were less likely than men and whites to use substance abuse services. Among those with substance dependence, uninsured persons were more likely than privately insured persons to receive substance abuse services from the self-help or human service (nonmedical) sector. **Conclusions:** Racial, ethnic, and gender disparities in the use of substance abuse services are notable among young adults who lack health insurance.

Young, A. M., M. Morales, et al. (2005). "Drinking like a guy: Frequent binge drinking among undergraduate women." Substance Use & Misuse **40**(2): 241-267.

The purpose of this exploratory study was to examine why there has been an increase in frequent binge drinking among the most recent generation of female undergraduate students. Specifically, we examined whether female undergraduate women associated being able to "drink like a guy" (e.g., drink large amounts of alcohol, drinking competitively) with gender equality. Focus groups were conducted in March of 2003 with 42 female undergraduate women who consumed alcohol. Participants were recruited from respondents of a random sample survey of undergraduate students attending a

large, public university and reflected the demographic characteristics of this population: traditional-age college students (i.e., attending college between 18 and 22 years of age), who were primarily white from middle or upper middle class families and living on or near the college campus. Focus groups were based on drinking trajectories during college (Stable High, Stable Low, Decreasers, Increasers) and sorority status. While women of all drinking levels reported feeling pressure to drink "heavily" because of the favorable impression they could make on their male peers, primarily women who were frequent binge drinkers throughout college felt that "drinking like a guy" described their own drinking behaviors. While women reported that being able to "drink like a guy" provided them with a sense of equality with their male peers, analysis of the transcripts suggests that "drinking like a guy" had less to do with gender equality and more to do with emphasizing women's (hetero)sexuality. Findings are discussed in terms of how "heavy alcohol consumption" affords college women positive attention from their male peers, but likely increases their vulnerability to sexual assault and alcohol use related health problems.

Zamboanga, B. L., J. L. Bean, et al. (2005). "Subjective evaluations of alcohol expectancies and their relevance to drinking game involvement in female college students." Journal of Adolescent Health **37**(1): 77-80.

Purpose: The purpose of this study was to test whether subjective evaluations of alcohol expectancies mediate the association between perceived drinking expectancies and participation in drinking games (DGs). Participation in DGs facilitates heavy drinking; therefore, we also examined the association between DG participation and alcohol-related problems. Methods: This cross-sectional study included 187 female athletes from an all-women's college in the Northeastern United States. Respondents completed self-report questionnaires in small groups who reported on their alcohol use, drinking expectancies, and number of DGs played with their teammates during the semester. Results: A mediation effect emerged for subjective evaluation of liquid courage expectancy but not for increased sociability and cognitive/behavioral impairment expectancies. Although perceived expectancies of cognitive/behavioral impairment were associated negatively with DG participation, positive subjective evaluations of this expectancy were related positively with DG participation. Finally, participation in DG was associated positively with alcohol-related problems. Conclusions: Findings are consistent with notions of social learning and utility theories and sheds light on the link between alcohol expectancies and participation in DGs among female student athletes. Results also highlight the health risks associated with DG involvement. Intervention programs aimed at decreasing the prevalence of DG participation might consider addressing students' perceptions about the desirability of liquid courage expectancies.

Older Adults

Arndt, S., T. D. Gunter, et al. (2005). "Older admissions to substance abuse treatment in 2001." Am J Geriatr Psychiatry **13**(5): 385-92.

OBJECTIVE: The number of older people with substance abuse problems is expected to increase over the next decade. Given the expected growth in the number of elderly clients needing substance abuse treatment, the authors provide a description of admissions of patients age 55 years and over to facilities receiving some public funds. METHODS: The Treatment Episode Data Set (TEDS), a public-use data-set, contained information on 58,073 admissions to substance treatment (age 55+) and 1,043,910 admissions age 30-54 years. RESULTS: Older admissions listed only one substance-daily use of alcohol. Admission record notations indicated that these admissions were more frequently associated with income, insurance, and marriage or divorce than younger admissions. As in younger admissions, criminal justice was a major source of referral to treatment. Older patients' admissions records indicated fewer previous

treatment experiences. Older male and female admissions were similar in many regards, but differed in their treatment history. The current treatment admission was more often the first for female admissions. Older female admissions were likely to be more educated than their male counterparts, with a later age at onset. **CONCLUSIONS:** Older admissions to substance abuse treatment differed in important ways from younger adult admissions. The older admissions tended to come from a more stable environment (income, insurance, marriage). Despite their very high frequency and amount of drinking, few of these admissions were referred to treatment by healthcare workers.

Brennan, P. L. (2005). "Functioning and health service use among elderly nursing home residents with alcohol use disorders - Findings from the National Nursing Home Survey." American Journal of Geriatric Psychiatry **13**(6): 475-483.

Objective: The author asked whether older nursing home residents with alcohol use disorders differ from demographically-matched residents without alcohol use disorders on functioning, admission characteristics, and health services use. **Method:** National Nursing Home Survey data were used to compare nursing home residents with alcohol use disorders (N = 216) with demographically-matched residents without alcohol use disorders (N = 216) on functioning, admission characteristics, and health services use. **Results:** Residents with alcohol use disorders functioned somewhat better than did residents in the demographically-matched sample group, as indicated by performance of basic activities of daily living. However, they were significantly more likely to have lived alone before admission and to have obtained mental health and social services. There was a significant group x gender interaction on length of stay: men with alcohol use disorders had shorter lengths of stay than did men without alcohol use disorders; women with alcohol use disorders had longer lengths of stay than did women without such disorders. **Conclusions:** Having fewer social resources may contribute to elevated admission risk and need for mental health and social services among older nursing home residents who have alcohol use disorders. Duration and severity of alcohol problems may help explain gender differences in length of stay among these residents.

Brennan, P. L., K. K. Schutte, et al. (2005). "Pain and use of alcohol to manage pain: prevalence and 3-year outcomes among older problem and non-problem drinkers." Addiction **100**(6): 777-786.

Aims: Most older adults report having recently experienced pain, and many older adults have late-life drinking problems. However, to our knowledge, the intersection of pain and alcohol misuse by older adults has not been studied. This research focuses on the implications of pain for older individuals who have problems with alcohol. **Design** Longitudinal survey. **Setting, participants and measurement:** Older community-residing adults (n = 401) were classified as problem and non-problem drinkers. At baseline and 3 years later they were asked to provide information about their pain, use of alcohol to manage pain, drinking behavior, chronic health problems and recent serious injury. **Findings** At baseline, older problem drinkers reported more severe pain, more disruption of daily activities due to pain and more frequent use of alcohol to manage pain than did older non-problem drinkers. More pain was associated with more use of alcohol to manage pain; this relationship was stronger among older adults with drinking problems than among those without drinking problems. Among older men, more baseline drinking problems interacted with use of alcohol to manage pain to predict more health problems and serious injury 3 years later. Among older women, more baseline drinking problems interacted with use of alcohol to manage pain to predict more drinking problems 3 years later. **Conclusions:** The results highlight the importance of monitoring the drinking behavior of older patients who present with pain complaints, especially patients who have pre-existing problems with alcohol.

Hill, M., P. Popov, et al. (2005). "Reinstatement of serum pregnanolone isomers and

progesterone during alcohol detoxification therapy in premenopausal women." Alcoholism-Clinical and Experimental Research **29**(6): 1010-1017.

Background: Alcohol abuse is associated with menstrual irregularities related to the inhibition of progesterone secretion involved in regulation of the menstrual cycle. Reduced progesterone metabolites, including pregnanolone isomers (PIs), are efficient neuromodulators. The authors attempted to evaluate whether levels of PIs reflect impairment in progesterone biosynthesis in premenopausal women treated for alcohol addiction and whether alcohol detoxification therapy contributes to the restoration of their reproductive functions and psychosomatic stability by influencing steroid biosynthesis. Methods: Serum allopregnanolone (3 alpha-hydroxy-5 alpha-pregnan-20-one; P3 alpha 5 alpha), pregnanolone (P3 alpha 5 beta), isopregnanolone (P3 beta 5 alpha), epipregnanolone (P3 beta 5 beta), progesterone, pregnanolone sulfate (PregS), pregnanolone, and estradiol were measured in 20 women during therapy (at start, three days, 14 days, one month, and four months) by gas chromatography-mass spectrometry or radioimmunoassay. The results were evaluated by a linear mixed model for longitudinal data, with stage of the treatment and subject as categorical factors, phase of the menstrual cycle as a time-varying covariate, and age of the subject as a covariate and by regression in individual stages of the menstrual cycle. Results: During detoxification treatment, progesterone increased in the luteal phase. P3 alpha 5 alpha, P3 beta 5 alpha, and P3 beta 5 beta rose in both phases of the menstrual cycle. Discussion: Given the similar mechanism in the effects of alcohol and steroids in activating gamma-aminobutyric acid A receptors, the restoration of progesterone and PIs during therapy could be explained by an adaptation to increasing requests for gamma-aminobutyric acid (A)-receptor activating substances owing to the cessation of alcohol intake or by the regeneration of progesterone formation. In conclusion, the reinstatement of progesterone, P3 alpha 5 alpha, and P3 beta 5 beta serum levels demonstrates the favorable effect of detoxification therapy on both reproductive functions and the psychosomatic stability of premenopausal women treated for alcohol addiction.

Kelemen, L. E., T. A. Sellers, et al. (2004). "Association of folate and alcohol with risk of ovarian cancer in a prospective study of postmenopausal women." Cancer Causes & Control **15**(10): 1085-1093.

Studies evaluating the association of ovarian cancer with alcohol intake are inconsistent, and few have evaluated this association in the context of folate consumption. Dietary folate and alcohol intakes and lifestyle and medical information were collected with self-administered questionnaires in 1986 from postmenopausal women aged 55-69 followed prospectively for 15 years for risk of epithelial ovarian cancer in the Iowa Women's Health Study. Among 27,205 eligible women free of baseline cancer, 147 incident epithelial ovarian cancer cases were identified by linkage to a cancer registry. Compared to the lowest quartile of total folate (food plus supplement) intake, the multivariable risk ratios (RR) for increasing quartiles were 1.0 (referent), 1.59, 1.24, 1.73 (95% confidence interval [CI], 0.90-3.33; p for trend, 0.20). Compared to non-drinkers, the RRs for increasing alcohol intake were 1.0 (referent), 0.78 for 0.01-3.9 g/d; 0.75 for 4.0-9.9 g/d and 0.58 for greater than or equal to 10 g/d (95% CI, 0.30-1.11; p for trend, 0.08). Among women with alcohol intake greater than or equal to 4 g/d compared to <4 g/d, the apparent risk reduction was limited to those with total folate intake greater than or equal to 331 mug/d (RR: 0.52; 95% CI, 0.22-1.19; p for interaction, 0.04) although this estimate was based on only seven cases. The association did not change appreciably when we excluded tumors of mucinous histology. These findings suggest that alcohol consumption is inversely related to postmenopausal ovarian cancer, and that the association of folate with ovarian cancer may vary by the amount of alcohol consumed.

Moos, R. H., P. L. Brennan, et al. (2005). "Older adults' health and changes in late-life drinking patterns." Aging Ment Health **9**(1): 49-59.

This study focused on the prospective associations between older adults' health-related

problems and their late-life alcohol consumption and drinking problems. A sample of 1,291 late-middle-aged community residents (55-65 years old at baseline) participated in a survey of health and alcohol consumption, and was followed one year, four years, and 10 years later. Health-related problems increased and alcohol consumption and drinking problems declined over the 10-year interval. Medical conditions, physical symptoms, medication use, and acute health events predicted a higher likelihood of abstinence and less frequent and lower alcohol consumption. However, overall health burden predicted more subsequent drinking problems, even after controlling for alcohol consumption and a history of heavy drinking and increased drinking in response to stressors. Among older adults, increased health problems predict reduced alcohol consumption but more drinking problems. Older adults with several health problems who consume more alcohol are at elevated risk for drinking problems and should be targeted for brief interventions to help them curtail their drinking.

Satre, D. D. and P. A. Arean "Effects of gender, ethnicity, and medical illness on drinking cessation in older primary care patients." Journal of Aging and Health **17**(1): 70.

Objective: This study examined the effects of gender, ethnicity, and medical illness on cessation of alcohol consumption in late life by analyzing characteristics that distinguish current drinkers from former drinkers. Method: Participants were 211 medical patients aged 55 to 91 years, recruited from four urban public sector primary care clinics. Respondents completed the Short Michigan Alcohol Screening Test and provided health and demographic data. A subset (n = 139) reported drinking history. Of these participants, 40% reported cessation of alcohol consumption at least 1 year prior to their participation in the study. Results: Older age, hypertension, and heart problems were associated with drinking cessation among women but not among men. In a logistic regression model, drinking cessation was predicted by being unmarried, being a member of an ethnic minority group, heart problems, and diabetes. Discussion: Physical illnesses may contribute to drinking cessation, especially in older women. Results have implications for alcohol interventions with older adults.

HIV/AIDS

Andersen, M., J. Tinsley, et al. (2005). "HIV health care access issues for women living with HIV, mental illness, and substance abuse." Aids Patient Care and Stds **19**(7): 449-459.

Nurses at the Well-Being Institute, a community-based nursing outreach clinic in Detroit, Michigan, located 75 women living with HIV, mental illness, and substance abuse who were lost to follow-up at their HIV medical clinic as part of a nursing research study. Women who had been scheduled for an appointment in the last 4 months but who had missed that appointment were considered "lost to follow-up" in the HIV clinic. The purpose was to study factors related to health care access in women not participating in regular health care for their HIV infection. Women were randomly assigned to two study groups. Women assigned to "care as usual" study group (n = 37) received no additional services beyond study interviews for 1 year. Women assigned to the "nursing intervention" group (n = 38) were provided with nursing services designed to facilitate their return to and continued connection with their HIV clinic. Findings showed that factors related to the women's vulnerability, such as mental illness and drug use, were more related to their use of expensive health care services such as hospital emergency departments or hospital inpatient admissions than was assignment to either the "nursing intervention" or "care as usual" study groups. Two case studies describing the cost of care for 2 of the multiply diagnosed women in the study is presented. Women differed on whether they had stable housing and were accessing care for their mental illness.

Boyd, M. R., L. Moneyham, et al. (2005). "A peer-based substance abuse intervention for HIV+ rural women: a pilot study." Arch Psychiatr Nurs **19**(1): 10-7.

Alcohol and other drug (AOD) use plays a major role in the acquisition and spread of

HIV, and the majority of women living with HIV are either active or recovering drug users. Forty-six percent of women's cases of HIV infection have been attributed to injection-drug use and 18% to women's heterosexual contacts with injection-drug users. Substance abuse often contributes to noncompliance with HIV treatment. Individuals with multiple diagnoses, such as those with HIV and substance abuse, may not be able to withstand the burden of integrating the different clinical approaches used to treat their substance abuse and other comorbid disorders such as HIV. This article reports the results of an intervention pilot study testing a peer counseling intervention for substance abuse in rural women with HIV. Thirteen women completed the intervention. Although limited by sample size, results suggest that this intervention was effective in helping women to acknowledge problems with their alcohol and drug abuse and to begin taking steps to achieve sobriety.

Ellickson, P. L., R. L. Collins, et al. (2005). "Scope of HIV risk and co-occurring psychosocial health problems among young adults: violence, victimization, and substance use." J Adolesc Health **36**(5): 401-9.

PURPOSE: This study examines the co-occurrence of sexual risk with violence, victimization, risky substance use, and drug-related problems among young adults. **METHODS:** Data were collected from 3392 young adults drawn from California and Oregon as youth, as part of the RAND adolescent panel study. Logistic regression analyses were used to test differences in psychosocial health problems for participants at high, moderate, and low sexual risk, overall, and by gender. **RESULTS:** Nearly 80% of young adults exhibited some degree of sexual risk. Both moderate (56%) and high (22%) HIV risks were associated with multiple forms of drug use, drug-related problems, violence and victimization. Males and females had similar relative risk profiles, but females reported higher rates of victimization in the form of partner abuse and sexual coercion. Over 80% of those at high sexual risk exhibited psychosocial health problems in at least 2 other areas. **CONCLUSIONS:** Sexual risk-taking is widespread among young adults and typically co-occurs with other psychosocial health problems. Interventions designed for young adults at high sexual risk should take into account their additional psychosocial problems; broad media campaigns may be useful for those at moderate risk.

Goldstein, R. B., M. O. Johnson, et al. (2005). "Psychological distress, substance use, and adjustment among parents living with HIV." Journal of the American Board of Family Practice **18**(5): 362-373.

Background: Being a parent, especially a custodial parent, living with HIV was anticipated to increase psychological distress and challenges to self-care. **Methods:** Mental health symptoms, substance use, and health care utilization were assessed among 3818 HIV-infected adults, including custodial parents, noncustodial parents, and nonparents, in 4 AIDS epicenters. **Results:** Custodial parents demonstrated significantly poorer medication adherence and attendance at medical appointments but were similar to nonparents and noncustodial parents in mental health symptoms and treatment utilization for mental health and substance use problems. Noncustodial parents demonstrated the highest levels of recent substance use and substance abuse treatment. Other markers of risk, such as African American ethnicity, lack of current employment income, and injection drug use moderated many of the apparent psychosocial disadvantages exhibited by parents. **Conclusions:** Interventions specific to the psychosocial stressors facing families living with HIV are needed.

Hall, H. I., L. M. Lee, et al. (2005). "Describing the HIV/AIDS epidemic: using HIV case data in addition to AIDS case reporting." Ann Epidemiol **15**(1): 5-12.

PURPOSE: We examined the demographic and risk characteristics of persons with HIV

using traditional AIDS case reporting and the more recent system that includes HIV diagnoses without AIDS. **METHODS:** Using data from 25 states with HIV reporting of HIV/AIDS cases diagnosed from 1994 through 2001, we calculated percentage distributions, annual diagnosis rates, and estimated annual percent change (EAPC) for persons with HIV (all HIV diagnoses with or without AIDS) and persons with AIDS. **RESULTS:** The age at diagnosis of persons with all stages of HIV tended to be younger than that of the subset of persons with AIDS. Annual diagnosis rates decreased more among AIDS cases (men: EAPC, - 9.76; 95% CI, - 12.00, - 7.45; women: EAPC, - 3.40; 95% CI - 5.72, - 1.02) than for persons with HIV (men: EAPC, - 6.14; 95% CI, - 7.66, - 4.60; women: EAPC, - 2.99; 95% CI, - 4.15, - 1.82), except among women and black non-Hispanics, for whom the difference in the decreases in rates for both disease groups were small. Injection drug use was a more common mode of exposure for women with AIDS than for women with HIV. **CONCLUSIONS:** The epidemiology of HIV differs for certain key population groups from that of AIDS.

Inciardi, J. A., H. L. Surratt, et al. (2005). "The effect of serostatus on HIV risk behaviour change among women sex workers in Miami, Florida." *AIDS Care* **17**: S88.

HIV prevention and risk reduction are especially salient and timely issues for women, particularly among those who are drug-involved or who exchange sex for drugs or money. Studies suggest that HIV-prevention measures can be effective with highly vulnerable women, and have the potential to produce significant reductions in risk behaviours among both HIV-negative and HIV-positive women. Within this context, this paper examines risk behaviours and HIV serostatus among 407 drug-involved women sex workers in Miami, Florida, and investigates the effects of participation in HIV testing, counselling, and a risk-reduction intervention on subsequent behavioural change among this population. Overall, at follow-up, the HIV-positive women were 2.4 times more likely than the HIV-negative women to have entered residential treatment for drug abuse, 2.2 times more likely to have decreased the number of their sex partners, 1.9 times more likely to have decreased the frequency of unprotected sex, 1.9 times more likely to have reduced their levels of alcohol use, and 2.3 times more likely to have decreased their crack use. These data support the importance of HIV testing and risk-reduction programmes for drug-involved women sex workers.

Kuo, W. H., T. E. Wilson, et al. (2004). "Initiation of regular marijuana use among a cohort of women infected with or at risk for HIV in the women's interagency HIV study (WIHS)." *Aids Patient Care and Stds* **18**(12): 702-713.

Our study sought to determine the incidence of weekly marijuana use among HIV-infected and uninfected women, to identify correlates of weekly marijuana use, and to test its association with stage of HIV disease and type of HIV treatment received. A total of 2059 HIV-positive and 569 HIV-negative women from 6 sites were recruited between 1994 and 1995 and followed through 2000. After excluding women who reported weekly marijuana use at baseline, 2050 women were included in the analysis. The incidence rate for initiating marijuana was calculated and survival analysis was performed to determine the correlates of initiating weekly marijuana use. Three hundred and three women initiated weekly marijuana use within 5.5 years of the baseline visit, yielding a cumulative incidence (CI) of 14.8%. There was no significant difference in weekly marijuana use initiation between HIV-infected (CI = 14.5%) and HIV-uninfected women (CI = 16.0%). Younger age and having more sex partners was associated with incident weekly marijuana use among both infected and uninfected women. While undetectable viral load was associated with lower incidence rate ($p < 0.001$, RH = 0.44) and wasting syndrome with higher incidence ($p < 0.01$, relative hazard [RH] = 3.1), CD4 count was not. Compared to receiving no AIDS treatment at all, women who received basic combination antiretroviral therapy had significantly higher incidence of weekly marijuana use ($p < 0.001$, RH = 1.93), while highly active antiretroviral therapy (HAART) receivers

had significantly lower incidence ($p < 0.001$, $RH = 0.24$). In summary, among HIV-infected women, the incidence of weekly marijuana use was associated with only one marker of HIV disease stage and HAART was associated with lower initiation rate of weekly marijuana use.

Miller, S. A., N. Santoro, et al. (2005). "Menopause symptoms in HIV-infected and drug-using women." Menopause **12**(3): 348-356.

OBJECTIVE:: To examine the association of HIV infection, drug use, and psychosocial stressors with type and frequency of menopause symptoms. **DESIGN::** In a cross-sectional study, HIV-infected and HIV-uninfected midlife women underwent standardized interviews on menopause status and symptoms, demographic characteristics, depressive symptoms, negative life events, and substance abuse. Body mass index (BMI), HIV serostatus, and CD4 count were measured. Associations between study variables and menopause symptoms were assessed using generalized estimating equations. **RESULTS::** Of 536 women not on hormone therapy, 48% were black, 42% were Hispanic, 54% were HIV positive, and 30% recently had used illicit drugs. The mean age was 45 +/- 5 years; 48% of the women were identified as premenopausal, and 37% were perimenopausal. Psychological symptoms were most prevalent (89%), followed by arthralgias (63%) and vasomotor symptoms (61%). Perimenopausal women reported significantly more menopause symptoms than premenopausal women (ORadj 1.34, 95% CI, 1.09-1.65). HIV-infected women were more likely to report menopause symptoms than uninfected women (ORadj 1.24, 95% CI, 1.02-1.51). Among HIV-infected women not on highly active antiretroviral therapy, symptoms decreased as the CD4 count declined. Increased menopause symptoms were significantly associated with depressive symptoms (i.e., Center for Epidemiologic Studies Depression scale score > 23, ORadj 1.82, 95% CI, 1.46-2.28), and with experiencing more than three negative life events (ORadj 2.08, 95% CI, 1.54-2.81). Increasing BMI (per kg/m) was also associated with more menopause symptoms (ORadj 1.03, 95% CI, 1.02-1.05). **CONCLUSION::** HIV-infected women reported more menopause symptoms than HIV-uninfected women, but symptoms were less frequent in women with more advanced HIV disease. Depressive symptoms and negative life events were also highly associated with symptoms. Further study of menopause symptoms and HIV-related factors is warranted. Mental health interventions may also have a role in ameliorating menopause symptoms.

Morrison-Beedy, D., M. P. Carey, et al. (2005). "Group-based HIV risk reduction intervention for adolescent girls: Evidence of feasibility and efficacy." Research in Nursing & Health **28**(1): 3-15. The purposes of this pilot study were (a) to assess the feasibility of a community-based, small group HIV risk reduction intervention with adolescent girls, and (b) to obtain preliminary evidence of the efficacy of this theoretically-guided intervention using a controlled design. The feasibility of the intervention was demonstrated by successfully implementing it with 33 sexually-active, single girls. Preliminary evidence of the efficacy of the intervention was obtained using a randomized trial with 62 sexually-active, single girls. Data obtained at a 3-month follow-up assessment showed that girls who received the HIV-related intervention improved their HIV-related knowledge and enhanced their motivation for risk reduction compared to girls who received a control (health promotion) intervention. Effect sizes suggest that the HIV intervention also reduced several risk behaviors (e.g., vaginal sex without a condom, giving oral sex, and alcohol and drug use before sex). Challenges to implementation and suggestions for intervention enhancement are discussed.

Newcomb, M. D. and J. V. Carmona (2004). "Adult trauma and HIV status among Latinas: Effects upon psychological adjustment and substance use." Aids and Behavior **8**(4): 417-428. Latinas have unique cultural factors that can contribute to their health, including recent

immigration, documentation status, and language barriers. Additional stressors and experiencing traumatic events can further compromise their psychological adjustment and substance use. This study tests the differential contribution of adult trauma and other life stressors to psychological adjustment and substance use among Latinas who differ in their HIV status and level of acculturation. Baseline and 1-year follow-up data on a community sample of 113 (79 HIV-positive and 34 HIV-negative) 1 to 50 year old Latinas were examined with path analyses to estimate the influence of acculturation, HIV status, and adult trauma, including intimate partner violence (IPV) and sexual assault, on subsequent changes in psychological adjustment (depression) and substance use 1 year later. Age, education, and relationship status were controlled and further analyses examined the interactive influence of HIV status and acculturation and trauma on the outcomes. Findings indicate that both acculturation and HIV status were related to the outcome variables, but did not influence these over time, emphasizing the developmental stability of these processes. Education was the most prominent variable in protecting these women from HIV, depression, and intimate partner violence (IPV), but placed them at greater risk for illicit drug use. The primary predictors of change in the outcome variables were domestic and sexual trauma were exacerbated by HIV positive status. Implications for future research and culturally relevant prevention and intervention programs are discussed.

Surratt, H.L. (2005). "University of Delaware; Links between substance abuse and HIV infection among women studied." Lab Business Week: 244.

"The paper" by H.L. Surratt and colleagues "focuses on the role of substance abuse and the socially and culturally based gender issues that influence risk and vulnerability to HIV in this setting. Two hundred fifty-four chronically drug-or alcohol-involved men and women were recruited and interviewed using targeted sampling strategies. Crack use was overwhelmingly reported by females when compared to males (84.7% vs. 48.8%).

Wyatt, G. E., J. V. Carmona, et al. (2005). "HIV-Positive Black Women with Histories of Childhood Sexual Abuse: Patterns of Substance Use and Barriers to Health Care." 9-23, 2005 Nov.

A constellation of factors contributes to Black women's health including stressors and traumatic experiences. Their psychological adjustment and substance use can further affect their health status. The purpose of this study was to examine patterns of substance abuse and barriers to health care among HIV-positive Black women with histories of childhood sexual abuse (CSA). Baseline data on a community sample of 75 Black HIV-positive women were analyzed to assess and identify drug use, alcohol use, participation in an alcohol or drug treatment program, and communication skills with providers, all of which may act as barriers to health care. Findings indicate that substance use is a significant health problem, with 83% of the participants having used at least one substance regularly and 28% having engaged in regular injection drug use. Barriers to health care included confidentiality issues, poor financial resources, difficulty getting an appointment, excessive waiting to see a health care provider and obligation to care for others. Contrary to past research, poor communication between the participants and the providers did not seem to be a barrier to health care utilization for these women. Early traumatic experiences, including CSA, regardless of whether incidents involved penetration, may exacerbate the problems faced by HIV-positive Black women. Implications for future research and culturally relevant prevention and intervention programs are discussed.