RECOVERY:

AN ANNOTATED BIBLIOGRAPHY

Prepared by:

Cynthia Bott, LCSW Lynn Warner, PhD

School of Social Welfare¹
University at Albany, SUNY

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¹ Both authors are affiliated with the School of Social Welfare. Cynthia Bott is a doctoral student, email bottcynthia@yahoo.com; Lynn Warner is Associate Professor, email lwarner@uamail.albany.edu

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OVERVIEW and HIGHLIGHTS

OVERVIEW

Search Strategy

As a first step, Medline and PubMed were searched using the terms "recovery" or "remission" combined with "addiction" or "drug" or "alcohol" or "substance use," and the search was limited to studies published in the last 10 years. Given that recovery occurs over time, preference for review was given to longitudinal studies. From that yield, we iteratively reviewed the bibliographies of articles to locate potentially relevant research studies published earlier. A total of 76 studies published in peer-reviewed journals were reviewed for the annotated bibliography.

Organization of Document and Focus of Review

Summaries of each study are presented in this document. As the Table of Contents shows, studies are organized into categories based on whether they were quantitative, qualitative, meta-analyses or review articles. Within the quantitative studies category, we further organized based on the study design (longitudinal or cross-sectional) and the nature of the sample (i.e., treatment, community, or both).

To facilitate comparison across studies, the following information is presented for each article:

- Purpose
- Data source/method including whether the study focused on alcohol, other drugs or both;
 general demographic information for the sample
- Measures including diagnostic schemes used and any definitions of recovery, remission or abstinence.
- Main Results results that speak to patterns and rates of addiction and recovery, and factors associated with different recovery patterns, are highlighted

To enhance the utility of the document, a complete alphabetical reference list is provided after the annotated bibliography. Additionally, we provide a cross-reference list of articles at the end of the document to flag studies by substance (e.g.., alcohol, heroin, methamphetamine) or by sample characteristics (e.g., female, Native American).

HIGHLIGHTS

The summary tables below underscore that most of the studies focus on alcohol, suggesting a need for studies of populations for whom other drugs are the primary drug of abuse.

Number of Studies by Study Design and Primary Substance of Abuse										
Type of study →	Longitudinal			Cross sectional			Qualitative			
	Type of Substance			Type of Substance			Type of Substance			
Population ↓	Drug	Alcohol	Both	Drug	Alcohol	Both	Drug	Alcohol	Both	
Treatment	6	10	6	2	1	3	1	1	1	
Community		9	2	2	10	2			2	
Treatment/Community		2				1			2	

Note: Table does not capture meta-analyses or review articles.

<u>Definitions and measures are not consistent across studies.</u>

Few studies provide a definition of recovery ...

The experience (a process and sustained status) through which individuals, families, and communities impacted by severe alcohol and other drug (AOD) problems utilize internal and external resources to voluntarily resolve these problems, heal the wounds inflicted by AOD-related problems, actively manage their continued vulnerability to such problems, and develop a healthy, productive and meaningful life (White, 2007)

Paradoxical nature of recovery - one is perpetually in recovery but never fully recovered (Vigilant, 2005)

Studies rely on various measures of "Recovery"

Not meeting DSM-IV criteria of alcohol dependence within the last 12 months (Bischof et al., 2003; Bischof et al., 2007)

Not meeting AUD diagnosis criteria for three years (McAweeney et al., 2005)

Negative urine and hair drug screens (Flynn et al., 2003)

Three or more years of abstinence (Blomqvist, 2002)

No more than moderate substance use (Laudet, 2007)

Being a low risk drinker or abstainer (Dawson et al., 2005)

And various measures of "Abstinence" ...

No alcohol consumption in prior month (Weisner et al., 2003), prior six months (Moos & Moos, 2004; Booth et al., 2001), prior 12 months (Greenfield et al., 2002; Laudet et al., 2007)

Less than one drink a month for a year (Vaillant, 2003); three ounces of alcohol or less per day and no alcohol related problems (Moos & Moos, 2003); less than a drink a month for 12 consecutive months or remaining totally abstinent for 24 months except for a single drinking bout of less than 7 days (Vaillant & Milofsky, 1982)

And various measures of "Remission" ...

Abstinence from illicit drug use and either abstinence from or non-problem use of alcohol; in addition, those who did not have alcohol use disorders allowed some use of alcohol as long as it was not associated with any substance abuse problem (Ritsher et al., 2002)

Abstinence from alcohol or light moderate drinking in each of the past six months, no drinking problems in the last six months, and no intoxication or consumption of more than two ounces of alcohol on drinking days in the past month (Moos & Moos, 2007)

Anyone who had not been hospitalized for alcoholism and had not missed work because of alcoholism in the prior two years, consumed less than five ounces of alcohol per drinking day in the past month, had consumed less than three ounces of alcohol per day on average in the last month and had no problems associated with drinking (Finney & Moos, 1991)

Met alcohol use disorder at baseline but recovered in at least two consecutive later time points (Buu et al., 2007)

No current diagnosis (Cunningham, 2000); no drug use in the last year (Cunningham, 1999)

<u>Given the range of measures and study designs, it is not surprising that reported rates and patterns of recovery, remission and abstinence vary widely.</u>

Recovery and remission rates range ...

17% in recovery; treatment sample (Scott et al., 2005)

33.2% in recovery; treatment sample (Flynn et al., 2003)

46% in recovery; courts and community sample (McAweeney et al., 2005); 46% remitted; information and referral program sample (Moos & Moos, 2003)

66.2% did not use drugs between baseline and follow up period; 78.9% considered self in recovery; community sample (Laudet, 2007)

Abstinence rates and duration of abstinent periods range....

12.1% maintained abstinence for 6 months; community sample (Booth et al., 2001)

21.5% sustained abstinence continuously throughout the one year treatment period; treatment sample (Laudet et al., 2007)

By the 7th year of follow up, 36% of those with one to twelve months abstinence sustained it; 66% of those with one to three years sustained abstinence; treatment sample (Dennis et al., 2007)

54% reported abstinence for one year; treatment sample (Finney & Moos, 1991)

57% of treatment sample but only 12% of untreated sample abstinent after one year; treatment sample (Weisner et al., 2003)

62.6% reported abstinence during follow up period; treatment sample (Hser et al., 1999) At six months, 72.6% reported abstinence from any substance use; treatment sample (Black et al., 2004)

The phenomenon of "Natural Recovery" has received special attention.....

Because recovery trajectories do not typically include formal drug treatment.

Vast majority of prior drug users have never come in contact with any drug treatment services (Cunningham, 1999)

77.5% in national U.S. survey and 77.7% in Ontario survey resolved alcohol problems without formal treatment or help (Sobell et al., 1996)

Natural Recovery defined as...

Seriously ceasing drug use on one's own with sustained effort for at least two weeks continuous time without help from a formal program (Hser 2007) [used term self treatment]

Meeting DSM-IV criteria for sustained full remission without the formal utilization of formal self help at baseline (Bischof et al., 2007) [used term stable natural remission]

Recovery without treatment defined as self quitters, self change, spontaneous remission, natural remission, natural resolution, spontaneous recovery, untreated remission, spontaneous resolution, natural recovery, autoremission (Sobell et al., 2000)

No inpatient or outpatient treatment, no self help participation, no psychotherapy within two years before and one year after remission (Bischof et al., 2000)

<u>Self-help has an important role in recovery.</u>

Participation in self- help measured by....

Attendance at a mutual help group (12 step, Secular Organizations for Sobriety, Self Management and Recovery Training, Women for Sobriety (Atkins Jr. & Hawdon, 2007); attendance at NA or AA meetings (Flynn et al., 2003); either attending 12-step meetings or reporting affiliation with 12-step group (Laudet & White, 2008)

Researchers are inconsistent in their classification of self- help as treatment.

Self help counted as treatment (Cohen et al., 2007; Cunningham, 2000, 2005; Dawson et al., 2005; McAweeney et al., 2005; Sobell et al., 1996)

Attendance at more than two self help groups defined as treatment (Rumpf et al., 2006) Self help not counted as treatment (Weisner et al., 2003)

Self-help participants compared to those who did not use self-help...

Had higher abstinence rates (Humphreys & Moos, 2007; Kelly, et al., 2006; Moos & Moos, 2004), lower rates of alcohol consumption (Kelly, et al., 2006; Staines et al., 2003), fewer alcohol-related problems (McKellar et al., 2003), fewer relapses (Vaillant, 2003)

Were more likely to be in recovery (Laudet & White, 2008; Vaillant, 2003), maintain abstinence (Laudet, 2007) and remission (Moos & Moos, 2003, 2007; Ritsher, 2002)

Had fewer inpatient days and outpatient visits (Humphreys & Moos, 2007)

Had better social functioning (Moos & Moos, 2004) and higher self-efficacy (Moos & Moos, 2003)

Self- help as part of the continuum of care.

Self-help tended to be treatment of last resort for binge drinkers and those with more symptoms (Vaillant & Milofsky, 1982)

Of all respondents who said they had used some type of treatment or help, the predominant resource was AA (Sobell et al., 1996)

12-step attendance during treatment significantly associated with continued self-help attendance after treatment (Laudet et al., 2007)

Although receipt of formal treatment is not common, it is associated with recovery and remission.

Those with substance use disorders who had longer periods of continuing care were more likely to be remitted at year five (Ritsher, 2002)

Individuals who obtained longer duration of treatment more likely to be remitted at all four follow up periods (Moos & Moos, 2007)

Recovery more likely with more intervening treatment experiences (McAweeney et al., 2005) Individuals in recovery at year five were more likely to have remained in DATOS treatment beyond recommended critical retention thresholds (Flynn et al., 2003)

Proportion of past year abstainers was three times as high among those who had received treatment as among those who did not (Dawson et al., 2005)

Recovery patterns are often characterized by long periods without any change in drinking patterns.

Stable recovery more likely after five years rather than one or two years; alcohol abuse could persist for decades without remission, death, or progression to dependence (Vaillant, 2003)

A typical recovery pattern might consist of continued drinking, accompanied by symptoms of alcohol use disorder that persist for 5 to 10 years before resolving into asymptomatic risk drinking and ultimately low risk drinking or abstinence (Dawson et al., 2005)

62% had stable drinking patterns over nine years (i.e., they were either stable in their remission or in their substance dependence) (McAweeney et al., 2005)

Recovery, remission, and abstinence are LESS likely when...

The substance abuse profile includes both alcohol and other drugs (Hser et al., 2007) and greater symptom severity (Dawson et al., 2005; Scott et al., 2005)

Substance use first occurred at relatively young ages (DeWitt et al., 1997; Hser et al., 2007)

The clinical profile includes co-occurring psychiatric symptoms or disorder (Ritsher et al., 2002; Weisner, 2003)

There is history of sexual abuse (Greenfield, 2002) or negative life events (Finney & Moos, 1991) Partners use drugs (McAweeney et al., 2005; Tuten & Jones, 2003)

Family and social environments are stressed (Buu et al., 2007; Finney & Moos, 1991)

Recovery, remission, and abstinence are MORE likely when...

Substance use initiated at a later age (Hser et al., 2007)

There are lower levels of psychological problems (Hser, 2007),

Greater levels of baseline recovery capital (Laudet & White, 2008)

More non-substance users in the social network, including partners (Atkins & Lawdon, 2007; Hser et al., 2007; McAweeney et al., 2005; Weisner, 2003)

Higher self-efficacy and approach coping (Moos & Moos, 2007)

There are substantial changes in lifestyle behaviors (leisure/recreation, social/family, coping/spiritual) (LePage & Garcia-Rea, 2008)

Recovery, abstinence associated with other positive outcomes.

As duration of abstinence increased days of illegal activity for money and incarceration decreased; family income increased with significant reductions in families living below poverty line; increased social support, spiritual support, self efficacy to resist relapse (Dennis et al., 2007)

Compared to persons not in recovery, those in recovery reported fewer depression symptoms and better emotional well being and general health (Hser, 2007); mental health problems peaked between one and three years of abstinence, followed by decreases (Dennis et al., 2007)

Areas identified for future study.

AA and self-help

Effects of 12 step attendance over multiple years on drug dependent persons (Laudet et al., 2007)

Does AA provide specialized benefits in lowering long-term alcohol problems when compared with other self help groups or outpatient after care programs; does AA affiliation provide the same benefits that any good therapeutic treatment would provide; does meeting attendance alone predict the same outcomes and to the same extent as does degree of engagement in 12 step practices; future research should focus on how clinicians facilitate patients participation in AA (McKellar et al., 2003)

Specify the characteristics of individuals who are most likely to benefit from AA and the optimal duration and frequency of AA for individuals who vary in the severity of their disorder and level of community resources (Moos & Moos, 2004)

Role of partners in recovery

Investigating the nature of the relationship between alcoholic men and their partners in maintaining recovery (McAweeney et al., 2005)

Partner studies should attempt to include direct interview of the partners, more closely examine partner incarceration and economic support, women with female partners (Tuten & Jones, 2002)

Longitudinal studies that do a better job of minimizing loss to follow up.

Lost cases in fup more likely to have psychiatric comorbidity and be unmarried – some evidence suggests worse outcomes for these groups and lost to fup limits generalizability (Kelly et al., 2006)

Studies of representative samples of special populations (women, people of color, seniors)

Investigate less favorable outcomes for racial/ethnic minorities; empirically examine whether the nature and timing of turning points and social capital are factors in sustaining drug use trajectories and if they can be manipulated to change drug use trajectories and curtail addiction career (Hser et al., 2007)

How to conceptualize, foster, and assess recovery among "special populations" (dual diagnosis, multiple dependencies, substance dependent persons receiving pharmacotherapy) (Laudet, 2007)

Further examine the relationship between social capital and recovery in different subgroups (Granfield & Cloud, 2001)

Understand how cultural differences, broadly speaking, influence the development and remission of alcohol problems (Venner & Feldstein, 2006)

Longitudinal Design Studies

STUDIES BASED ON TREATMENT SAMPLES

An eight-year perspective on the relationship between the duration of abstinence and other aspects of recovery, Michael L. Dennis, Mark A. Foss & Christy K. Scott (2007), Evaluation Review, 31 (6), 585-612.

PURPOSE: Asks the following questions:

- o How do health, mental health, and coping vary by duration of abstinence?
- How do illegal activity, incarceration, employment, and family income vary by duration of abstinence?
- How do housing, clean and sober friends, recovery environment, self efficacy to resist relapse, and social and spiritual support vary by duration of abstinence?
- How does the likelihood of sustaining abstinence another year vary by the duration of abstinence?

DATA SOURCE/METHOD: **Alcohol and drugs.** 8 year fup.² Adults originally recruited from network of 22 substance abuse treatment programs. This analysis focuses on n = 501 who were abstinent at least a month. Residents of Chicago or homeless. Men and women. 18 year of age and older. Predominantly African American and majority female.

MEASURES: Addiction Severity Index, Global Appraisal of Individual Needs, Perceived Family and Social Support Scales, Coping Response Inventory. Urine tests. Study does not indicate how abstinence was measured [one month/urinalysis?].

- ✓ Mental health problems peaked between 1 and 3 years of abstinence, followed by decreases
- ✓ As duration of abstinence increased:
 - o days of illegal activity for money and illegal income decreased significantly
 - incarceration decreased
 - o family income increased
- ✓ After three years of abstinence significant reductions in percentage of families living below the poverty line
- ✓ At year 7:
 - o 36% of people with 1 to 12 months of abstinence sustained it
 - o 66% of those with 1 to 3 years of abstinence sustained it
- ✓ At year 8, duration of abstinence associated with:
 - o decreased environmental risks
 - o increased social support
 - o spiritual support
 - self-efficacy to resist relapse

² FUP=follow up period; dx=diagnosis

- ✓ Of 506 participants at year 8:
 - o 47% were abstinent for one to twelve months
 - o 25% were abstinent for one to three years
 - o 13% were abstinent for three to five years
 - o 15% were abstinent five or more years

Trajectories of heroin addiction, Yih-Ing Hser, David Huang, Chih-Ping Chou, & M. Douglas Anglin (2007), Evaluation Review, 31(6), 548-563.

PURPOSE: Asks the following questions:

- o Are there subgroups with distinctive life course heroin use trajectories?
- o What are the correlates of the different trajectories?
- o What are the subsequent outcomes?

DATA SOURCE/METHOD: **Heroin.** 33 year fup. Men admitted to compulsory treatment in California, over 18. n = 471. Majority Hispanic. Mean age at admission 24.9.

MEASURES: Alcohol Dependence Scale (DSM), Hopkins Symptom Checklist. Urinalysis.

RESULTS:

- ✓ Identifies three trajectory groups at year 16:
 - o stable high level users (59% of sample)
 - Slightly higher prevalence of alcohol dependence than other groups
 - o late decelerated group (32% of sample); after ten years of high level use, nonuse starts to increase
 - o early quitters (9%); decreased use within 3 years and stopped using in 7 years
 - More whites and fewer Hispanics in early quitter group
 - Early guitters reported lower levels of psychological problems
 - Initiated heroin and marijuana use at older ages than the other two groups
 - Received less treatment than other two groups
- ✓ Mortality rate differed for the 3 groups:
 - o early quitters 25%
 - o stable high level 38.1%
 - o late decelerated 50.3%
- ✓ Employment at 33 years:
 - o 56% early quitters
 - o 34.9% late decelerated
 - o 29.5% stable high users
- ✓ Mean number of continuous years heroin abstinence:
 - o early guitters 16.5
 - o late decelerated 4.0
 - o stable high level 3.5

Predicting long-term stable recovery from heroin addiction: Findings from a 33-year follow-up study, Yih-Ing (2007), Journal of Addictive Diseases, 26 (1), 51-60.

PURPOSE: Seeks to identify predictors of long term recovery and assess their independent contributions

DATA SOURCE/METHOD: **Heroin**. 33 year fup. n = 242 men who had been admitted to compulsory treatment program in California. Majority Hispanic.

MEASURES: admission and interviews from official records, self efficacy scales, stress coping scale, social support scale, alcohol dependence scale, Center for Epidemiologic Studies Depression Scale, Short- Form Health Survey. Self treatment defined as seriously ceasing drug use on one's own with sustained effort for at least two weeks continuous time without help from a formal program. Urinalysis.

RESULTS:

- ✓ Persons in recovery group (43% of sample) versus persons not in recovery (57%) as of 1985-1986
 - Were more likely to be white
 - Had higher self efficacy, more commitment to maintaining abstinence, and more likely to use positive coping strategies
 - Had lower levels of psychological problems
 - Were less likely to have partners who used drugs and their social networks had greater proportion of non-users
 - o Were less likely to be involved in criminal justice system
- ✓ By 1996-97, 57% of non-recovery group reported participation in methadone maintenance in contrast to 9.7% of recovery group
 - o Recovery group reported lower levels of alcohol dependence and depression symptoms
 - o Recovery group reported significantly better emotional well being and general health
- ✓ Top list of reasons given for maintaining drug abstinence in previous six months
 - Starting new relationships with friends, relatives, children, partner
 - o Receiving support from family, partner, new friends, church
 - Spare time in healthy activities
- ✓ Concept of maturing out of addiction does not apply to many heroin addicts
- ✓ Problems with family and school in earlier life no longer predicted recovery in later life periods
- ✓ Non-recovery group demonstrated attempts at treatment suggests they were not without motivation to change

Encouraging post treatment self-help group involvement to reduce demand for continuing care services: Two-year clinical and utilization outcomes, Keith Humphreys & Rudolf H. Moos (2007), Alcoholism: Clinical and Experimental Research, 31 (1), 64-68.

PURPOSE: Asks if cost and outcome differences between those who participate in 12 step programs hold up over time

DATA SOURCE/METHOD: **Drugs and alcohol**. 2 year fup. n = 1,774 veterans. Males. Half 12 step programs and half into cognitive behavioral (CB) programs

MEASURES: Brief Symptom Index.

- √ 12 step participants vs. CB participants:
 - o higher abstinence rates at year two (49.5% vs. 37% respectively)
 - o higher rates of self help involvement as indicated by attendance (36% and 23.6% respectively) and working with a sponsor(24.7% vs. 13.6% respectively)

- had fewer inpatient days and outpatient visits, translates to 30% lower average cost per patient
- ✓ Both 12 step and CB achieve success but 12 step higher

[This article does not report on the year one findings.]

An exploration of the effect of on-site 12-step meetings on post-treatment outcomes among polysubstance-dependent outpatient clients, Alexandre Laudet, Virginia Stanick, & Brian Sands (2007), Evaluation Review, 31(6), 613-646.

PURPOSE: Explore the effect of attending an outpatient treatment program with or without onsite 12 step meetings on subsequent 12 step attendance and on remission outcomes.

DATA SOURCE/METHOD: **Polysubstance.** 1 year fup. Dependent clients, n=219, mostly male and minority. Mean age 39.4.

MEASURES: Lifetime Nonalcohol Psychoactive Substance Use Disorders (subscale of the MINI), Addiction Severity Index, Twelve Step Beliefs Inventory, Addiction Treatment Questionnaire. Sustained abstinence defined as no use in year following treatment.

RESULTS:

- ✓ 12 step attendance during treatment significantly associated with continued attendance at each post treatment fup as well as continuous attendance for the year following treatment end
- ✓ One half (55%) or fewer of study participants reported no drug use since the prior interview at any assessment point and one in five (21.5%) sustained abstinence continuously throughout the 1 year treatment period
- ✓ Onsite 12 step associated with three times greater likelihood of attending 12 step during treatment and five time attending post treatment, these participants four times more likely to maintain abstinence for one year

A 3-year study of addiction mutual-help group participation following intensive outpatient treatment, John F. Kelly, Robert Stout, William Zywiak & Robert Schneider (2006), Alcoholism: Clinical and Experimental Research, 30 (8), 1381-1392.

PURPOSE: Examines predictors of self help participation. Tested the relationship between mutual self help participation in the first and second years post treatment and substance abuse outcomes in the subsequent fup years; tested whether gender, psychiatric comorbidity, religious orientation, and prior mutual help experience moderated any potential outcome benefits; attempted to learn minimum or optimal levels of participation to inform clinical recommendations.

DATA SOURCE/METHOD: **Alcohol.** n = 336 completed 36 month fup. Recruited from HMO outpatient treatment program. 18 – 65, with average age 42. 84% Caucasian.

MEASURES: Structured Clinical Interview for DSM-IV Disorders, Addiction Severity Index, Time Line Follow Back Interview, The Drinker Inventory of Consequences, Health Care Data Form.

- ✓ Attendance patterns at mutual help group meetings:
 - o infrequent in the year prior to entering outpatient treatment

- o majority (79%) reported participation during first year post-treatment
- o attendance declined during 2nd year post-treatment with slight increase 3rd year
- ✓ Greater mutual help participation more likely for persons who:
 - o are Caucasian, have more years of education, and are religious
 - had more intensive alcohol consumption per occasion and greater alcohol related consequences
- ✓ Greater mutual help participation during years 1 and 2 significantly associated with better outcomes, including:
- √ higher rates of abstinence and less intensive alcohol consumption on days client did drink

Utilizing Recovery Management Checkups to shorten the cycle of relapse, treatment reentry, and recovery, Christy K. Scott, Michael Dennis & Mark A. Foss (2005), Drug and Alcohol Dependence, 78, 325-338.

PURPOSE: Document and describe the pattern of transitions in the relapse, treatment reentry, and recovery cycle at quarterly intervals; determine effect of the intervention and explore the ability to make predictions about transitions along the pathways.

DATA SOURCE/METHOD: **Alcohol and drugs.** 2 year fup. n = 448 adults presenting for treatment; two year quarterly assessments; utilized control groups to measure intervention. Participants needed to meet the criteria for lifetime substance abuse or dependence. Over 18 years of age.

MEASURES: Global Appraisal of Individual Needs. Urine and saliva tests. Substance Frequency Scale. [Not clear how these authors are defining recovery.]

RESULTS:

- ✓ Between the beginning and end of each quarter, approximately 32% of participants transitioned to a different point in the recovery cycle (in the community and using, incarcerated, in treatment, in recovery)
- ✓ 82% transitioned at least once over the course of the study
- ✓ 18% began and ended the study as substance users, 17% transitioned to recovery and maintained that status, 65% transitioned between different points in the cycle two or more times
- ✓ Probability of transitioning from substance use to treatment:
 - o decreased with more frequent substance use
 - o increased with problem orientation, desire for help, and enrollment in intervention group
- ✓ Persons with the most severe problems were the least likely to transition to recovery

Thirty-month relapse trajectory cluster groups among adolescents discharged from outpatient treatment, Susan H. Godley, Michael L. Dennis, Mark D. Godley & Rodney R. Funk (2004), Addiction, 99 (Suppl.2), 129-139.

PURPOSE: Identify relapse trajectories for adolescents released from drug treatment.

DATA SOURCE/METHOD: **Alcohol and drugs but screened on cannabis.** 30 months fup. n=563, adolescents who were in drug treatment. CT, FL, IL, PA. Predominantly male, majority white.

MEASURES: Global Appraisal of Individual Needs. Cannabis abuse or dependence DSM-IV and must have used cannabis in the 90 days prior to treatment. Controlled environment: residential treatment, hospital, detention, jail, prison. Urinalysis.

RESULTS:

[Not clear on measure of low or high AOD use]

- ✓ Five trajectory groups identified based on AOD (alcohol or other drug) use and number of days in a controlled environment (CE):
 - o Low use, few CE days (30%) group had:
 - Highest proportion of females and Caucasians
 - Lowest proportion reporting weekly cannabis use
 - o Low use, many CE days (18%) group had:
 - Highest proportion of males and African Americans
 - Highest proportion in the lowest educational attainment category, single parent systems, and criminal justice involvement; lowest percentage with symptoms of conduct disorder, ADHD, depression
 - Moderate and decreasing use, few CE days (21%)
 - o Increasing use, few CE days (23%) group had:
 - High proportion of older adolescents
 - o Consistently high AOD use, few CE days (8%) had:
 - High proportion of older adolescents

Drug and alcohol treatment services effective for methamphetamine abuse, Tracy D. Gunter, Donald W. Black, Janet Zwick & Stephan Arndt (2004), Annals of Clinical Psychiatry, 16, 195-200.

PURPOSE: Assessed the effectiveness of substance abuse treatment for people presenting with primary abuse of methamphetamine.

DATA SOURCE/METHOD: **Drugs**. 1 year fup. [The n's for the different reporting periods are not clear] Majority female, predominantly Caucasian. Mean age 30 years. n = 86 at six months.

MEASURES: Mini International Neuropsychiatric Inventory.

RESULTS:

- ✓ Most subjects reported using 1 or more substances in addition to meth at baseline
- ✓ At six month fup:
 - Over half had significant psychiatric symptoms
 - o 72.6% reported abstinence from any substance use

[This article has limitations because of the inadequately explained n sizes]

Long-term influences of duration and frequency of participation in Alcoholics Anonymous on individuals with alcohol use disorders, Rudolf H. Moos & Bernice S. Moos (2004), Journal of Consulting and Clinical Psychology, 72 (1), 81-90.

PURPOSE: Examine duration and frequency of AA participation in the first year of fup and the duration and frequency of participation in AA in years 2 through 8.

DATA SOURCE/METHOD: **Alcohol.** 8 year fup. Individuals with alcohol use disorders who at baseline had not received prior professional treatment. Recruited through information and referral center or detox program. n = 473. 49.7% female. Predominantly Caucasian. Average age mid 30s.

MEASURES: Abstention defined as no alcohol consumed in prior six months. Health and Daily Living Form. Alcohol Dependence Scale. Situational Confidence Questionnaire. Life Stressors and Social Resources Inventory.

RESULTS:

- ✓ Patterns of AA participation:
 - o 13% had been in AA prior to the study
 - 58% participated in AA in the first year of fup, another 12% entered AA between years 1 and 8 (31% did not participate in AA at anytime during the study)
 - Of those who participated in AA in the first year of fup, 53% participated at some point in the subsequent 8 years
- ✓ 59% entered professional treatment
- ✓ AA participation and outcomes at year 1:
 - Participation for longer periods of time (17 to 32 weeks) = better outcomes on all three alcohol related indices
 - Participation for 33 weeks or more associated with better outcomes on alcohol indices and social functioning
 - o More frequently attending meetings associated with abstinence
 - Those who attended two or more meetings per week more likely to be abstinent
 - 61.1% who attended 4 or more meetings per week were abstinent
- ✓ AA participation in year 1 and outcomes at year 8:
 - Attending two to four meetings per week associated with higher likelihood of abstinence at year 8
 - o Attending four or more meetings per week associated with better social functioning
- ✓ Longer and more frequent participation in AA the first year was associated with a higher likelihood of abstinence at year 1 and year 8 and with a higher likelihood of being free of drinking problems and dependence symptoms at 1 year
- ✓ Gender and marital status did not predict one year outcome

Looking back on cocaine dependence: Reasons for recovery, Patrick M. Flynn, George W. Joe, Kirk M. Broome, D. Dwayne Simpson, Barry S. Brown (2003), American Journal of Addictions 72, 398-411.

DATA SOURCE/METHOD: **Drugs.** Adults admitted to 96 drug treatment programs in the United States. Subgroup of people from DATOS. Of 1010 eligible cocaine-dependent patients 799 (79%) were located, 708 (70%) were interviewed, 40 had died (4%), and 32 refused the interview (3%). Samples of patients were interviewed at years 1 and 5 after discharge. Average age at admission 33 years. Majority male and African American.

MEASURES: Recovery defined as negative urine and hair drug screens (hair specimens were trimmed to 1.5 inches in length, equivalent to about three months of growth). Twelve-Step Help in Year 5 defined as attendance at Narcotics Anonymous (NA) or Alcoholics Anonymous (AA) meetings during the year immediately preceding the 5-year interview. Recovery Perception Scales.

RESULTS:

- ✓ Persons "in recovery" (n=235) versus not in recovery (n=473) at year 5:
 - were significantly more likely to have remained in DATOS treatment beyond the recommended critical retention thresholds (ninety days for long term residential and outpatient drug free programs, and 21 days for short term inpatient)
 - o did not differ on problem severity
 - o were more likely to attend NA meetings

Longitudinal patterns of treatment utilization and outcomes among methamphetamine abusers: A growth curve modeling process, Yih-Ing Hser, David Huang, Chih-Ping Chou, Cheryl Teruya & M. Douglas Anglin (2003), The Journal of Drug Issues, Fall Issue, 921-938.

PURPOSE: Examine the longitudinal patterns of treatment utilization and associated outcomes of abusers.

DATA SOURCE/METHOD: **Drugs.** 36 month fup (1 year post-treatment), n = 205. Recruited from drug treatment. Majority female and white. Mean age 33.9 years.

MEASURES: Natural History Instrument.

RESULTS:

- ✓ 73.2% had prior drug treatment episodes, primarily in outpatient programs
- ✓ Treatment completion associated with:
 - o decreased amphetamine use
 - o lower rates of participation in criminal activity

Alcoholics Anonymous involvement and positive alcohol-related outcomes: Cause, consequence or just a correlate? A prospective 2-year study of 2,319 alcohol-dependent men, John McKellar, Eric Steward & Keith Humphreys (2003), Journal of Consulting and Clinical Psychology, 71 (2), 302-308.

PURPOSE: Investigate whether AA affiliation is causally related to positive alcohol-related outcomes

DATA SOURCE/METHOD: **Alcohol.** 2 year fup. n = 2,319 male alcohol dependent VA inpatients. Majority Caucasian. Average age 43.5.

MEASURES: Health and Daily Living Form. Problems from Substance Use Scale. Stages of Change Readiness and Treatment Eagerness Scale, ICD-9-CM.

- ✓ Patterns of alcohol consumption
 - Nearly all participants reported hazardous levels of alcohol consumption prior to treatment
 - o Consumption declined significantly at 1 year (41.8%) and 2 year (37.5%) fups
- ✓ Patterns of AA involvement

- o from baseline to 1 year fup, mean levels of AA involvement increased significantly
- From year 1 to year 2, overall AA involvement declined somewhat and decreased significantly in terms of frequency of meeting attendance and reading 12 step literature
- ✓ AA involvement and alcohol use
 - o AA involvement in year 1 significantly reduced level of alcohol problems at year 2

Risk factors for nonremission among initially untreated individuals with alcohol use disorders, Rudolf H. Moos & Bernice S. Moos (2003), Journal of Studies on Alcohol, 64, 555-563.

PURPOSE: Identify risk factors for nonremission among initially untreated individuals for alcohol use disorders.

DATA SOURCE/METHOD: **Alcohol.** 8 year fup. Individuals who had an initial contact with information and referral center detox program. n = 473. More women than men in sample, also more employed than unemployed.

MEASURES: Alcohol Dependence Scale, Health and Daily Living Form, Situational Confidence Questionnaire, Personality Research Form, Research Diagnostic Criteria, Life Stressors and Social Resources Inventory, Coping Responses Inventory. Nonremission defined as having one or more alcohol related problems or consuming more than 3 ounces of alcohol on a drinking day. Those who abstained had 3 ounces or less per day and no alcohol related problems.

RESULTS:

- ✓ Compared to non-remitters (53.9%) at year 1, remitters (46%):
 - o were more likely to be older at baseline and female
 - o were less likely to report drinking 10+ ounces on a typical day, engage in heavy drinking, be intoxicated 10+ days within the past month and report increased alcohol tolerance
 - had more confidence to resist high risk situations and were less likely to rely on drinking to cope
 - o had lower number of risk factors
- ✓ AA and remission
 - Longer duration of AA more strongly associated with remission among high risk individuals vs. low risk individuals
 - Longer duration of additional treatment and AA predicted higher likelihood of remission at year 8
- ✓ Duration of additional treatment associated with a reduction in four risk factors (year 1):
 - severity of drinking pattern
 - o tolerance
 - o denial
 - o drinking to cope
- ✓ Duration of AA associated with reduction in three risk factors (year 1):
 - o alcohol tolerance
 - o self efficacy to resist high risk situations
 - o drinking to cope

Predictors of drinking outcomes among alcoholics, Graham Staines, Stephen Magura, Andrew Rosenblum, Chunki Fong, Nicole Kosanke, Jeffrey Foote, Alexander Deluca (2003). The American Journal of Alcohol and Drug Abuse, 29(1) pp. 203–218.

DATA SOURCE/METHOD: **Alcohol.** 12 month fup. n = 248 at baseline, n = 219 at 3 months, and n = 173 at 12 months. DSM-IV alcohol dependent/abusing patients.

MEASURES: Addiction Severity Index, Treatment Motivation Questionnaire, Beck Depression Inventory, Hamilton Depression Scale, spirituality scale, 12-Step Participation Scale, Structured Clinical Interview for DSM-IV.

RESULTS:

- ✓ Frequency of drinking decreased significantly between intake and the two follow-ups
- ✓ Those who drank less often at 3-month follow-up were more likely at intake to have reported the following:
 - o high treatment motivation (i.e., high commitment to succeed in treatment, and strong internal motivation for entering treatment)
 - o extensive 12-step participation
 - o serious medical problems
 - o being a parent
 - o having a sibling
 - having few family members with psychological problems
- ✓ Those who drank less often at the 12-month follow-up were more likely at baseline to have reported the following:
 - high treatment motivation
 - o extensive 12-step participation
 - high-quality of family life
 - o illegal drug use
 - o few psychological problems
- ✓ Two predictors were significantly associated with decreased drinking at both follow-ups
 - o treatment motivation
 - o 12-step participation

History of abuse and drinking outcomes following inpatient alcohol treatment: a prospective study, Shelly F. Greenfield, Monika E. Kolodziej, Dawn E. Sugarman, Larry R. Muenz, Lisa M. Vagge, David Y. He & Roger D. Weiss (2002), Drug and Alcohol Dependence, 67, 227-234.

PURPOSE: Asks if histories of sexual or physical abuse are associated with abstinence, relapse, time to relapse, or time to first drink in the 12 months following treatment; do background and clinical characteristics modify the relationship between abuse history and drinking outcomes following treatment?

DATA SOURCE/METHOD: **Alcohol.** 1 year fup. Recruited participants from inpatient unit of alcohol and drug treatment program. n = 100.

MEASURES: Structured Clinical Interview for DSM-III-R. Drug and Alcohol Use Questionnaire. Time Line Follow Back. Urinalysis. Breath tests. Relapse defined as three or more standard drinks per drinking day for women and five or more for men. Abstinence defined as no alcohol use during the 12 month fup period. Heavy drinking days defined as number of drinking days that participants drank three or more standard drinks for women and five or more for men. Life Experiences Questionnaire.

- ✓ Compared to those without sexual abuse histories (60%), those with sexual abuse histories (40%) were:
 - o more likely to be female
 - o more likely to have history of physical abuse, DSM Major Depressive and other psych disorders
 - o more likely to have relapsed, have more heavy drinking days, and less likely to have remained abstinent
- ✓ Those with physical abuse histories (57%) did not differ from those without physical abuse histories on demographic, clinical or drinking measures
- ✓ 28% had history of both physical and sexual abuse (more women than men); comparisons between those who had a sexual abuse history only and those with both physical and sexual did not yield significant differences
- ✓ Being married, having more than a high school education and being employed full time = better drinking outcomes

Psychiatric comorbidity, continuing care and mutual help as predictors of five-year remission from substance use disorders, Jennifer Boyd Ritsher, John D. McKellar, John W. Finney, Poorni G. Otilingham & Rudolf H. Moos (2002), 63, 709-715.

PURPOSE: Examine the 5 year remission status of substance use disorder (SUD) patients with and without psychiatric co-morbidity.

DATA SOURCE/METHOD: **Drugs and Alcohol.** 5 year fup. Remitted male patients at VA substance use disorder inpatient treatment programs. n = 2,595. Mean age 42.32. Majority were members of racial-ethnic minority groups.

MEASURES: Stages of Change Readiness and Treatment Eagerness Scale. Brief Symptom Inventory. Remitted defined as abstinence from illicit drug use and either abstinence from or non-problem use of alcohol. In addition, those who did not have alcohol use disorders allowed some use of alcohol as long as it was not associated with any substance use problem. Must have abstained from all 13 drugs studied, no problems related to alcohol or drug use, and consumed 3 ounces of alcohol or less per day on maximum drinking days in the past 3 months.

RESULTS:

- ✓ Remission at year 5 less likely for:
 - o Dual diagnosed patients
 - o Patients with more comorbid psychiatric symptoms
- ✓ Dual diagnosed patients had significantly more mental health outpatient visits than SUD only patients throughout the 5 year fup.
- ✓ Those with SUD only who had more continuing care (number of months with at least two mental health sessions) were more likely to be remitted at year 5
- ✓ Mutual help attendance during year 1 and 2 had a robust relationship with remission for both dual diagnosis and SUD only patients

Predicting post treatment cocaine abstinence for first-time admissions and treatment repeaters, Yih-Ing Hser, Vandana Joshi, M. Douglas Anglin & Bennett Fletcher (1999), American Journal of Public Health, 89 (5), 666-671.

PURPOSE: Examine client and program characteristics that predict post treatment cocaine abstinence among cocaine abusers with different treatment histories.

DATA SOURCE/METHOD: **Drugs.** 1 year fup. Clients in residential programs who participated in DATOS. N = 507. Majority male and African American. Mean age 31.1.

MEASURES: Urine tests.

RESULTS:

- ✓ 62.5% reported having been in drug treatment before the current treatment episode
 - History of prior treatment negatively related to post treatment abstinence
- ✓ Treatment repeaters reported more severe drug use patterns and higher levels of criminal involvement
- ✓ Among first time admissions 62.6% reported abstinence during entire fup period
- ✓ Longer participation in DATOS treatment positively related to post treatment abstinence

Prediction of drinking outcomes for male alcoholics after ten to 14 years, Barbara J. Powell, Jennifer F. Landon, Peggy J. Cantrell, Elizabeth C. Penick, Elizabeth J. Nickel, Barry I. Liskow, Theresa M. Coddington, Jan L. Campbell, Tamara M. Dale, Mary D. Vance, Audrey S. Rice (1998), Alcoholism: Clinical and Experimental Research, 22 (3), 559-566.

PURPOSE: Investigate long-term outcomes of alcoholic men; identify salient characteristics that could be used to predict outcome from alcoholism.

DATA SOURCE/METHOD: **Alcohol.** 10 to 14 years fup. n = 255 men who had been hospitalized for alcohol treatment at VA. Mean age 49.8.

MEASURES: DSM-III dx of alcohol dependence. Minnesota Multiphasic Personality Inventory, Alcohol Use Inventory, Addiction Severity Index, Global Assessment Scale (GAS), Patient Rating of Drinking Scale, Alcohol Severity Scale, Psychiatric Diagnostic Interview. Clinician Rating of Drinking Scale (CRDS) used to establish abstinence (no drinking) to abusive drinking. Abusive drinking defined as periods of alcohol use that resulted in significant complaints from loved ones, arguments, fights, trouble with the law, incarceration/hospitalization, missed work/lost jobs, inability to carry out daily routines, or physical complaints. At final fup abusive drinking scored last year and global.

- ✓ Overall mortality rate was 2.5 times higher than reference group of nonalcoholic males
 - Men who were deceased had reported significantly more alcohol-related medical problems, later age of onset of alcoholism, more detox, more morning shakes and morning drinking
 - o Men who died had reported less drug abuse but greater MMPI severity
 - At 12 months the deceased group had reported more poor physical health, more drinking days, more alcohol related job loss, less abstinence, lower global functioning, and more psychopathology.
- ✓ Divided into four outcome categories based on Clinician Rating of Drinking Scale score
 - Very Good (19.2%) total abstinence or non abusive drinking:
 - fewer hospitalizations and detox, fewer arrests, less time in jail, better physical health, less alcoholism severity, better psychosocial functioning

- significantly later age at first hospitalization or detox and fewer symptoms on the Alcohol Severity Scale at 12 months
- higher levels of overall functioning , lower scores on MMPI severity at 12 month fup
- Antisocial Personality Disorder present in significantly fewer patients in Very Good group
- o Good (17.2%) drank abusively 10 to 40% of the time
- o Fair (25.9%) drank abusively 40 to 70% of the time
- o Poor (37.4%) abusive drinking throughout entire fup period
- ✓ Only four measures at intake predictive of outcome:
 - o age, age at first hospitalization/detox, SES, APD
- ✓ Good drinking outcomes at 12 months predicted by:
 - alcohol severity, drinking days, GAS high, GAS low, MMPI severity

[This article did not report recovery rates]

A 48-week natural history follow-up of alcoholics who do and do not engage in limited drinking after treatment, Charles G. Watson, Martha Hancock, Patricia Malovrh, Lee P. Gearhart & Maria Raden (1996), The Journal of Nervous and Mental Disease, 184 (10), 623-627.

PURPOSE: Investigate the sequelae of limited drinking.

DATA SOURCE/METHOD: **Alcohol.** 48 week fup. n = 51 limited drinkers post treatment and n = 51 paired controls. Men who had been inpatients at VA program. DSM-III dependence. Primarily Caucasian.

MEASURES: Limited drinking defined as no more than 42 ounces in one of 4 week period fups. Paired controls were alcohol dependents who had not been identified as limited drinkers.

RESULTS:

- √ 40% of the limited drinkers reported abstinence at fup
- √ 8% fell into borderline or unacceptable drinking
- ✓ Limited drinkers were more likely to be rehospitalized than those not drinking

The long-term course of treated alcoholism: I. Mortality, relapse and remission rates and comparisons with community controls, John W. Finney & Rudolf H. Moos (1991), Journal of Studies on Alcohol, 52 (1), 44-54.

PURPOSE: Examine the course of alcoholism for sample of patients followed at 2 and 10 years.

DATA SOURCE/METHOD: **Alcohol**. 10 year fup. Patients treated for alcoholism in residential facilities. N = 113 at 18 months. N = 102 at 10 years. Established control group of N = 103 at 10 years. Predominantly male sample.

MEASURES: Health and Daily Living Form, Family Environmental Scale, Work Environment Scale. Alcohol consumption measured by ounces per drinking day and per day. Remission defined as anyone who had not been hospitalized for alcoholism and had not missed work because of alcoholism in the 2 years prior to the long term fup, consumed less than 5 ounces of alcohol per drinking day in the past month, had consumed less than 3 ounces of alcohol per day on average in the last month, and had no problems

associated with drinking. Those classified as in remission had to indicate drinking pattern in last two years as abstinent, social, or moderate drinking.

RESULTS:

- ✓ 49% of patients reported abstinence and 34% reported heavy/binge drinking 6 years prior to fup; 54% indicated abstinence and 22% indicated heavy/binge drinking in the year prior to fup.
- ✓ Significant proportion reported abstinence or nondrinking in the year just prior to year 10 vs. sixth year prior
- ✓ Most of the respondents reported stable drinking patterns
 - o Of initially remitted patients, 77% had same status 8 years later
- ✓ Relapsed patients:
 - o significantly lower family incomes vs. community controls and remitted patients
 - o less cohesion and less organization in their family environments
 - o more negative life events in the past year

Comparison of three outpatient treatment interventions: A twelve-month follow-up of men alcoholics, Barbara J. Powell, Elizabeth C. Penick, Marsha R. Read & Arnold M. Ludwig (1985), Journal of Studies on Alcohol, 46 (4), 309-312.

PURPOSE: Examine differential outcomes based on intensity of interventions

DATA SOURCE/METHOD: **Alcohol.** One year fup of men alcoholics in VA medical center. n = 148. Predominantly white. Average age 45.

MEASURES: Global Assessment Scale. Alcohol Severity Scale. Treatment groups post hospitalization:

RESULTS:

- ✓ Outcomes post treatment did not differ across the following groups:
 - Medication group
 - Prescribed meds and returned monthly to have prescriptions renewed
 - o Active support group
 - Offered meds as needed
 - Thorough assessment of psychological, social, occupational and family needs with attempts to meet needs through counseling or specialized assistance
 - Urged to attend AA
 - Untreated medical monitoring group
 - Seen monthly for 15 minute medical examination

STUDIES BASED ON COMMUNITY SAMPLES

Recovery capital as prospective predictor of sustained recovery, life satisfaction, and stress among former poly-substance users, Alexandre B. Laudet & William L. White (2008), Substance Use and Misuse, 43, 27-54.

PURPOSE: Asks the following questions: does recovery capital prospectively predict sustained recovery; does recovery capital influence subsequent quality of life and stress levels; do the effects of recovery outcomes differ as a function of recovery 'stage'?

DATA SOURCE/METHOD: **Drugs and alcohol.** 1 year fup. Recruited through media and flyers NYC; DSM-IV (TR) criteria for abuse or dependence of any illicit drug but not in past month, self reported abstinence from illicit drugs for one month, not enrolled in residential treatment . n = 312. Over 18 years of age, male and female, majority African American.

MEASURES: Addiction Severity Index, Social Support for Recovery Scale, Social Support Appraisal Scale, Spiritual Well Being Scale, Religious Background and Behavior. Recovery capital defined as social support, spirituality, life meaning, religiousness. 12 step participation defined as meeting attendance and affiliation. [More complete definition of recovery capital is in the articles notes section.] Sustained recovery defined as self reported drug or alcohol use between baseline and fup 1. Recovery stage: group 1 (under six months at baseline), group 2 (6 to 18 months), group 3 (18 to 36 months), group 4 (over three years).

RESULTS:

- ✓ Sample characteristics
 - o Majority has used multiple substance; primary substance was crack, followed by heroin
 - Length of recovery ranged from one month to 10 years
 - o Most (approx 75%) had attended 12 step meeting in last year
- ✓ Outcomes at Year 1 compared to baseline
 - Stress significantly lower
 - Life satisfaction significantly lower (Overall, how satisfied are you with your life right now?)
- ✓ Significant predictors of sustained recovery at Year 1
 - o 12 step involvement and life meaning
 - o Greater levels of baseline recovery capital
- ✓ Findings suggest that the predictive powers of recovery capital differs across recovery stages [they had four groups based on length of recovery]

Stability of subtypes of natural recovery from alcohol dependence after two years, Gallus Bischof, Hans-Jurgen Rumpf, Christian Meyer, Ulfert Hapke, & Ulrich John (2007) Addiction, 102, 904-908.

PURPOSE: Analyze whether clusters of remitters show stable patterns of social support and if clusters differ in their stability of remission in a 2 year fup.

DATA SOURCE/METHOD: **Alcohol.** 2 year fup. Recruited untreated remitters through the media, n = 167. 75 participants had received minor formal help not exceeding nine self help group sessions, five counseling session by a physician, or three counseling sessions by a professional. Predominantly male.

MEASURES: DSM-IV, Cloninger's Typology of Alcoholism, Social Support Appraisal Scale, Alcohol Abstinence Self-efficacy Scale, Satisfaction With Life Scale. Recovery defined as meeting DSM-IV criteria of lifetime alcohol dependence but not within the last 12 months; participants fulfilled DSM-IV remission specifiers of sustained full remission. Did not meet criteria for alcohol abuse. Stable natural remission defined as meeting DSM-IV criteria for sustained full remission without utilization of formal self help at fup. Considered unstable if met any criterion for dependence or abuse during previous 24 months if

utilizing formal help. Risk consumption defined by standards set by British Medical Association. Each participant assigned to one cluster (LPLS) – low problems, low social support, (HPMS) – high problems, medium support, (LPHS) – low problems, high support. [groups defined in Bischof et al. *Types of natural recovery from alcohol dependence: a cluster analytic approach.*]

RESULTS:

- ✓ Patterns of alcohol use and help seeking during follow up period
 - o one subject fulfilled criteria for alcohol dependence at follow up
 - o two subjects reported relapses and classified as unstable remitters
 - o nine subjects had utilized formal help
 - o 153 participants reported zero help seeking or reported at risk consumption
- ✓ Three groups defined by alcohol problems and social support
 - o LPLS low problems, low social support
 - highest rate of unstable recoveries
 - higher number of women
 - higher rate of unemployment
 - o HPMS high problems, medium support
 - less likely to be female and were younger
 - o LPHS low problems, high support
 - Higher levels of educational attainment
- ✓ Groups did not differ on marital status or abstinence rates
- ✓ Social support had increased in all groups, but smallest increase in LPLS group
- ✓ "interplay" between psychosocial resources and substance problems remains stable and can account for differences between groups
- ✓ Those with low levels of social support were more likely to seek out formal help

Alcoholism effects on social migration and neighborhood effects on alcoholism over the course of 12 years, Anne Buu, Mary Ann Mansour, Jing Wang, Susan K. Refior, Hiram E. Fitzgerald, & Robert A. Zucker (2007), Alcoholism: Clinical and Experimental Research, 1545-1551.

PURPOSE: Examine the long term effect of individual alcohol use on social migration.

DATA SOURCE/METHODS: **Alcohol.** 12 year fup. Identified through courts (drunk driving). n = 206 families. Met diagnosis for probable or definite alcoholism and one biological son (for another study); contrast/control group of nonalcoholic families by door to door canvas. Average age of men 33. All Caucasians.

MEASURES: Short Michigan Alcohol Screening Test, Diagnostic Interview Schedule, Drinking and Drug History Questionnaire, DSM-IV AUD dx, Antisocial Behavior Checklist. Remitted defined as meeting AUD dx at baseline but recovered in at least 2 consecutive later time points.

- ✓ men with more alcohol involvement tended to reside in more disadvantaged neighborhoods.
- ✓ positive AUD diagnosis and residency in worse neighborhoods at baseline predicted more alcoholic symptoms 12 years later

✓ those in remission tend to live in neighborhoods whose residential characteristics are not distinguishable from those of persons without alcohol problems

Stability of remission from alcohol dependence without formal help, Hans-Jurgen Rumpf, Gallus Bischof, Ulfert Hapke, Christian Meyer & Ulrich John (2006), Alcohol and Alcoholism, 41 (3), 311-314.

PURPOSE: Aims to add knowledge to the field by providing longitudinal data from a sample of untreated remitters; analyze the stability of remission without formal help.

DATA SOURCE/METHOD: **Alcohol.** 24 months fup. Recruited from media and general population study, n = 130. Predominantly men. Mean age 48.8. German.

MEASURES: Munich Composite International Diagnostic Interview, CIDI. Remission without formal help defined as meeting DSM-IV criteria for alcohol dependence during lifetime but not last 12 months; participants fulfilled remission specifiers of sustained full remission. Did not meet criteria for alcohol abuse. Formal help defined as utilizing some kind of addiction treatment in lifetime. Up to two self help groups not considered formal treatment. Those receiving psychotherapy within 2 years prior or one year post remission excluded. Remission considered unstable if during previous 12 months participant met criteria for dependence or abuse (DSM) or if partial remission criteria met, or if utilized formal self help, or if dependence probable based on collaterals.

RESULTS:

✓ Majority of unassisted remissions were stable within the follow up period of 2 years

The three year course of alcohol use disorders in the general population: DSM-IV, ICD-10 and the Craving Withdrawal Model, Carla de Bruijn, Wim van den Brink, Ron de Graaf, & Wilma A.M. Vollebergh, (2005), Addiction, 101, 385-392.

PURPOSE: Asks what is the course and diagnostic stability of alcohol abuse and dependence in the general population?; Do the diagnoses yielded by the three classification systems (DSM, ICD, CWM) differ in their course?

DATA SOURCE/METHOD: **Alcohol.** 3 year fup. Data derived from Netherlands Mental Health Survey and Incidence Study, three waves. Age 18-64. n = 6041. Majority male.

MEASURES: Composite International Diagnostic Interview 1.1; AUD dx based on DSM-III-R, DSM-IV, and ICD-10; Craving Withdrawal Model

RESULTS:

✓ Large proportion of subjects with abuse at baseline remitted [definition not stated, but seems to mean did not meet dx criteria] over a period of 1 year and 3 years

Individual and partner predictors of recovery from alcohol-use disorder over a nine year interval: Findings from a community sample of alcoholic married men, Mary J. McAweeney, Robert A. Zucker, Hiram E. Fitzgerald, & Leon I. Puttler (2005) Journal of Studies on Alcohol, 66, 220-228.

PURPOSE: Hypothesized that alcoholics who are in recovery at fup will have more education, higher family cohesion, fewer depressive symptoms, less antisocial behavior, less severe drinking, larger social support network, more years of intervening recovery, more experiences with treatment, and fewer

years of smoking as compared to those who meet criteria for diagnosis. Partners will more likely not have AUD at baseline, report higher family cohesion, larger social support network, fewer depressive symptoms, and less antisocial behavior than those partnered with men who continue to meet diagnosis.

DATA SOURCE/METHOD: **Alcohol.** 9 year fup. Recruited from courts (drunk driving) and neighborhood canvas. Men (n=134) and partners. All were parents of young children. Mean age of men 32.5, mean age of women 30.3. Sample predominantly white. 87% men had dependence diagnosis at baseline. Other abuse.

MEASURES: Moos Family Environment Scale, Beck Depression Inventory, Antisocial Behavior Checklist, Norbeck Social Support Questionnaire, Drinking and Drug History Questionnaire; AUD established through Diagnostic Interview Schedule (DSM criteria), Short Michigan Alcohol Screening Test, and Drinking and Drug History Questionnaire(established DSM –III-R and DSM-IV dx); Lifetime Alcohol Problems Score. Recovery defined as not meeting AUD diagnosis criteria for three years. Justified use of this as meeting criteria for securely abstinent based on the literature. 12 step classified as treatment.

RESULTS:

- ✓ Patterns of recovery:
 - o 46% in recovery at follow up
 - Among persons with AUD, odds of recovery increased 1.72 times with each additional year of recovery
 - 41% of the men who had dependence diagnosis at baseline met criteria for dx at 3,6,9 years
 - 62% had stable drinking patterns over 9 years (were either stably remitted or AUD diagnosis persisted)
- ✓ Partners of those in the recovery group went from 18% to 11% with AUD (39% decrease) while partners of those in AUD group went from 30% to 33% with an AUD (10% increase)
- ✓ Predictors of long term recovery include...
 - o baseline measure of higher achievement
 - o partner without AUD (odds of recovery for men who had partners that did not have AUD were 1.37 greater)
 - o social support
 - o more intervening treatment experiences
 - more intervening years of recovery

Predictors of short-term course of drinking in untreated rural and urban at-risk drinkers: Effects of gender, illegal drug use and psychiatric comorbidity, Brenda M. Booth, Geoffrey M Curran & Xiatong Han (2004), Journal of Studies on Alcohol, 65, 63-73.

PURPOSE: Examine predictors of changes in drinking and drinking consequences in untreated at risk drinkers in a community sample.

DATA SOURCE/METHOD: **Alcohol.** 18 month fup. n = 520 completing 18 month fup. n = 625 completed at least 3 of the 4 fups. n = 479 completed all 4 fups. [This study does not do a good job of reconciling the n's in different tables.] Predominately white, baseline average age 31.8.

MEASURES: Composite International Diagnostic Interview Substance Abuse Module. Safe drinking defined as no more than two drinks per day for men; no more than one drink per day for women. Did not define formal or informal treatment.

RESULTS:

- ✓ Significant decreases in number of drinking days over the course of the study
- ✓ The following variables positively associated with drinking days:
 - Use of other drugs
 - Age
 - o Male versus female
 - o Living in rural vs. urban area
- ✓ The following variables negatively associated with drinking days:
 - o having someone to discuss important matters with
 - o religiosity

A 60-year follow-up of alcoholic men, George E. Vaillant (2003), Addiction, 98, 1043-1051.

PURPOSE: Attempts to answer the following: how does alcohol abuse persist over the life course, why does prevalence decline with age, how long must abstinence or return to controlled drinking persist before someone is considered in secure recovery, why do alcoholics die young?

DATA SOURCE: **Alcohol.** 60 year fup. n = 456 (core sample) males from early adolescence to age 31 in a non delinquent community sample, included no African Americans; n = 268 (core sample) Harvard sophomores.

MEASURES: dx made by consensus of two clinicians DSM-III, Problem Drinking Scale. Abstinent defined as less than one drink a month for a year. Return to controlled drinking defined as former abuser drinking more than one drink a month for a year with no reported problems

- ✓ Patterns of drinking and recovery by age 70:
 - o 20% of college men met DSM criteria for alcohol abuse; 31% of the city men
 - 54% of the 72 successfully followed alcohol dependent city men had died, 32% were abstinent, 1% were controlled drinkers, and 12% were still abusing alcohol
 - o 58% of the 19 successfully followed college alcohol dependent men had died, 21% were abstinent, 10.5% were controlled drinkers and 10.5% were still abusing alcohol
 - In both groups, alcohol abuse could persist for decades without remission, death, or progression to dependence
 - Return to controlled drinking rarely persisted past one decade without a return to relapse or abstinence
 - Follow up of five years rather than 1 or 2 appears necessary to determine stable recovery
 - o Progression from alcohol abuse to dependence is not inevitable
- ✓ Predictors of recovery are different from predictors of onset of alcoholism
- ✓ Recovery from alcohol dependence associated with:
 - o finding a non-pharmacological substitute for alcohol
 - o compulsory supervision
 - o new relationships
 - o involvement in spiritual programs,
 - o less severe alcohol dependence

- AA attendance (men who achieved stable abstinence attended roughly 20 times as many AA meetings as men who did not)
- ✓ Paradox socially disadvantaged men with strong family history of alcoholism and early onset more likely than other men to become stably abstinent

Short-term course of drinking in an untreated sample of at-risk drinkers, Brenda M. Booth, Stacy M. Fortney, John C. Fortney, Geoff M. Curran & Joann E. Kirchner (2001), Journal of Studies on Alcohol, 62, 580-588.

PURPOSE: Describe the short-term "natural" course of drinking, including variation in abstinence, average number of drinks per drinking day, number of drinking days, social consequences and alcohol use disorders in a community sample.

DATA SOURCE/METHOD: **Alcohol.** 2 year fup. Community sample drawn from six southern states. 18 and older, mean age 31.8. Excluded those individuals who received treatment during the 2 years (including 12 step). n = 479. Mostly white and male.

MEASURES: DSM-IV criteria for Alcohol Use Disorder at baseline, at risk drinkers defined as those who met at least one of the criteria for DSM or were considered to be at risk of meeting criteria in the future. Abstinence defined as not drinking alcohol during previous 6 months. Moderate drinking defined as an average of no more than two drinks per day for men and one for women. CIDI-SAM, Alcohol Outcomes Module.

RESULTS:

- √ 87.9% remained drinkers throughout the study
- ✓ Of those with no dx at baseline, 21.8% (61) met criteria at 6 and 12 month interviews
- ✓ Diagnosis of recent (past 6 months) alcohol use disorder significantly decreased across 6 to 12 months and 12 to 18 months.
 - Of the 41.5% of sample with alcohol use disorder at baseline, one third (34.2%) met criteria for a past 6 month disorder in two subsequent fups, one third met criteria on one of the fups
- ✓ Significant increase in abstinence and moderate drinking and significant decrease in the number of drinks per drinking day
 - 12.1% (58) maintained six month abstinence in one of the fup periods; only 10 participants were abstinent for all three intervals
- ✓ Negative social consequences decreased only between 6 to 12 month interview

The natural history of drug use from adolescence to the mid-thirties in a general population sample, Kevin Chen & Denise B. Kandel (1995), American Journal of Public Health, 85, 41-47.

PURPOSE: Extends observations of previous studies to those in mid thirties.

DATA SOURCE/METHOD: **Alcohol and drugs.** 19 year fup. Adolescents enrolled in NY State public secondary schools. n = 1160.

RESULTS:

✓ Overall, most active patterns of change in drug behavior, whether initiation or cessation, occur by late 20s.

- ✓ From late 20s to the mid 30s a much higher proportion of users stopped than started using drugs.
 - If substance use was initiated during this age period, it tended to be the use of medically prescribed substances for both men and women
- ✓ Alcohol and cigarettes most persistently used substances
- ✓ Two behavioral features of drug use continue to be strongly associated with persistence of use throughout adulthood: recent use and frequency of use at an earlier age

The natural history of alcohol abuse: Implications for definitions of alcohol use disorders, Deborah S. Hasin, Bridget Grant & Jean Endicott (1990), American Journal of Psychiatry, 147 (11), 1537-1541.

PURPOSE: Test the hypothesis that outcomes of subjects with initial indicators of alcohol abuse would differ from those subjects with initial indicators of alcohol dependence.

DATA SOURCE/METHOD: **Alcohol.** 4 year fup. Drawn from sample used for another study. Men. n=180. 20 and older. Mostly white.

MEASURES: DSM-III-R criteria. Categorized three subgroups of subjects to correspond to abuse and dependence: a) neither abuse nor dependence indicators, b) abuse indicators with no dependence indicators, c) dependence indicators with or without abuse indicators

RESULTS:

- ✓ Of the 71 with only alcohol abuse at baseline, 70% reported alcohol abuse only (n = 17) or remission (n = 33) at follow up. 30% reported indicators of alcohol dependence with or without indicators of alcohol abuse.
- ✓ Of the 109 with initial indicators of alcohol dependence at baseline, 46% reported dependence, 15% reported abuse only, 39% remission at follow up
- ✓ Most of the men who had reported abuse either stayed in abuse or remitted; 30% transitioned from abuse to dependence.

Natural history of male alcoholism, George E. Vaillant & Eva S. Milofsky (1982), Archives of General Psychiatry, 39, 127-133.

PURPOSE: Describes an effort to understand naturalistically the recovery process in alcoholism.

DATA SOURCE/METHOD: **Alcohol.** 33 year fup. Cohort of 456 nondelinquent inner-city school boys, demographically at risk for alcoholism. This group was a control group for another study. n = 383 at age 47. n = 110 for this report. White sample. Obtained complete drinking histories on 400 men.

MEASURES: Childhood Environmental Strengths, Childhood Environmental Weaknesses, Boyhood Competence or Success at Erikson's Stage 4 Tasks, Health Sickness Rating Scale, Sociopathy Scale, Social Competence, Alcohol Dependence based on DSM-III, Problem Drinking Scale (PDS). Social drinkers with 0 to 1 item on PDS, alcohol abusers with four or more. Abstinence defined as less than a drink a month for 12 consecutive months or remaining totally abstinent for 24 months except for a single drinking bout of less than seven days. Return to social drinking defined as men in the past who had met criteria for abuse and now drank more than once a month but had gone 12 months without any identified problems on PDS.

RESULTS:

- ✓ Patterns of alcohol abuse and dependence:
 - Of the 400, 110 met criteria for alcohol abuse and 71 met criteria for alcohol dependence
 - By age of 31 more than half who were classified as abusers were manifesting four or more alcohol related problems
 - By age 47 more than half of the abusers had become abstinent or returned to social drinking
 - Many men who had experienced five or fewer problems on the PDS currently met definition for return to social drinking but none stopped drinking for a year or more
 - Only four of the 72 men with more than six problems on the PDS ever returned to social drinking
- ✓ Predictors of recovery:
 - Childhood variables that are predictive of lifelong mental health did not seem to affect the outcomes in alcohol addiction
 - o Self help appeared more useful than clinical treatment
 - Discovery of stable source of increased hope and self esteem associated with remission in more than half – included increased religious and AA involvement [numbers on AA attendance are not clear]
 - o AA tended to be treatment of last resort (those who used tended to be binge drinkers and far more symptomatic than those who became abstinent by other means)
 - Absence of maternal neglect and presence of warm childhood premorbid indicators of AA utilization
 - Abstinence correlated with social recovery [not clear in article, but social recovery seems to refer to social competence, enjoying ones children and marriage, earning a living]
- ✓ Recovery is ongoing
- ✓ Key to recovery seemed to be recognition they were no longer in charge of drinking and use of alcohol not under voluntary control
- ✓ AA is not better than clinical intervention; rather, it is different

STUDIES BASED ON BOTH TREATMENT AND COMMUNITY SAMPLES

Treated and untreated alcohol-use disorders, Rudolf H. Moos & Bernice S. Moos (2007), Evaluation Review, 31 (6), 564-584.

PURPOSE: Asks the following: When individuals first initiate help seeking what proportion actually obtains treatment or joins a self help group and how long do initial episodes last? Does more extended participation in treatment or self help lead to a higher likelihood of short term or long term remission? What is the impact of treatment on remission stability?

DATA SOURCE/METHOD: **Alcohol.** 16 year fup. Individuals with alcohol use disorders who had contacted information and referral centers or detox programs. n = 461. Majority men, predominantly Caucasian.

MEASURES: Health and Daily Living Form, Situational Confidence Questionnaire, Life Stressors and Social Resources Inventory. Remitted defined as abstinence from alcohol or light moderate drinking in each of

the past six months, no drinking problems in the last six months, and no intoxication or consumption of more than 2 ounces of alcohol on drinking days in the past month.

RESULTS:

- ✓ Individuals who stayed in treatment longer were more likely to be remitted at all four fups
- ✓ Individuals who delayed treatment were less likely to be remitted at 8 years fup
- ✓ Individuals who participated in AA for 9 weeks or more in the first year were more likely to attain 1 and 8 year remission as compared to those who did not participate
- ✓ Length of participation in AA significant for those who did not start AA in first year
- ✓ 36% of individuals in no help group remitted at 3 year fup as compared to 61% in help group
- √ 43% relapse in help group at year 3 as compared to 61% in no help group
- ✓ Participation in AA made a positive contribution to remission over and above contribution of treatment

How important is treatment? One-year outcomes of treated and untreated alcohol-dependent individuals, Constance Weisner, Helen Matzger, & Lee Ann Kaskutas (2003), Addiction, 98, 901-911.

PURPOSE: Hypothesized that rates of abstinence would be higher for those in treatment as compared to the untreated sample. Expected that lower substance abuse and psychiatric problem severity at baseline would be related to abstinence and that having a social network who were involved in drug or problematic use would be negatively related to positive outcomes [not clear what they mean by abstinence].

DATA SOURCE/METHOD: **Alcohol.** 1 year fup with individuals admitted to treatment and comparison group in the general population without treatment. Treatment sample n=359. Gen pop sample n=111. Gen pop had not received treatment in the last year (9.5% had received treatment prior to that period). One year outcomes only reported for those who met the criteria for dependence. Ages 17 and above. Treatment – 64% men. Untreated – 67% men. Treatment sample included 35% African Americans.

MEASURES: problem drinking established through meeting two criteria during twelve month period (five or more drinks in a day monthly for men – three for women, and one or more social consequences or more dependence symptoms), Diagnostic Interview Schedule for Psychoactive Substance Abuse' Addiction Severity Index. Treatment defined as detox, inpatient, outpatient. 12 step not included in treatment. Abstinence 30 days prior to follow up.

- ✓ Treatment sample vs. untreated sample:
 - o Higher abstinence rates at 1 year (57% vs. 12%)
 - Higher rates of non-problematic use
- ✓ Abstinence less likely when:
 - o There is co-occurring drug use and greater psychiatric severity
 - o Respondents are over the age of 40 compared to those under the age of 25
- ✓ Developing sober social networks seems to be a critical part of the recovery process as it pertains to abstinence as well as non-problematic use

Mixed Methods Studies

What does recovery mean to you? Lessons from the recovery experience for research and practice, Alexandre B. Laudet (2007), Journal of Substance Abuse Treatment, 33, 243-256.

PURPOSE: Asks the following: does recovery require total abstinence from all drugs and alcohol; is recovery defined solely in terms of substance use or does it extend to other areas of functioning as well?

DATA SOURCE/METHOD: **Alcohol and Drugs.** Three year fup. Recruitment in NYC through media and flyers over a one year period. n= 289, majority men and African American, age range 19 to 65. Conducted qualitative life history interviews with additional 50 participants.

MEASURES: Drug Abuse Screening Test, Mini International Neuropsychiatric Interview, Addiction Severity Index, Addiction Belief Inventory, saliva samples, DSM-IV criteria for abuse or dependence of any illicit drug for at least one year in one's lifetime but not in the past month; self reported abstinence for at least one month, not enrolled in residential treatment. 12 step participation noted for having ever participated and past year participation. Recovery defined as option to choose among four choices ranging from no use to moderate.

- ✓ Patterns of substance use:
 - Most participants were polysubstance users, most frequent primary problem crack, followed by heroin
 - Two thirds (66.2%) had not used drugs between baseline and fup 1; 68.5% has not used since fup 1 at fup 2
 - Abstinence length at baseline was significantly associated with greater likelihood of sustained abstinence at fup 1, fup 2
 - At fup1, 78.9% considered selves in recovery; fup2, 78.2%
- ✓ Recovery rates:
 - o 55.5% who had used since baseline considered selves in recovery
 - 94% of past year abstainers considered selves in recovery as compared to 42.4% of past year users
- ✓ Definition of recovery
 - o Fup 1, 86.5% total abstinence as their definition of recovery; fup 2, 83%
 - Fup2, 84.9% total abstinence as goal and definition of recovery
 - 14% changed recovery definition between fup1 and fup 2; 46% of those defined recovery as moderation to recovery as abstinence from fup1 to fup2 and 54% went in the opposite direction
 - o 97% agreed with statement that recovery is a process
 - process of self improvement and opportunity at new and better life
 - Recovery means getting back something that was lost
 - o Recurrent theme recovery is regaining an identity lost to addiction
- ✓ Treatment and 12-step participation
 - o 85.8% had received treatment and participated in 12 step
 - 6.4% had not participated in treatment or 12 step and reported significantly lower lifetime addiction

 Prior exposure to treatment and 12 step significantly associated with defining recovery as abstinence

Cross-sectional Design Studies

STUDIES BASED ON TREATMENT SAMPLES

The association between healthy lifestyle behaviors and relapse rates in a homeless veteran population, James P. LePage & Elizabeth A. Garcia-Rea (2008), The American Journal of Drug and Alcohol Abuse, 34, 171 – 176.

PURPOSE: Hypothesized that higher levels of healthy lifestyle behaviors will have an additive effect over traditional recovery behaviors.

DATA SOURCE/METHOD: **Drugs and Alcohol.** n = 97. Average age 46. Men. Majority African American.

MEASURES: Urine tests, breathalyzers. Veterans recorded healthy lifestyle behaviors, groups attended, and substance recovery activities. Some spot checking by staff after returning from off VA grounds. 70 (72%) received a non-relapse related discharge (planned or non-relapse rule violation) and 27 (28%) relapse related discharges.

RESULTS:

- ✓ Individuals who did not relapse engaged in more total lifestyle behaviors (leisure/recreation, social/family, coping/spiritual) than those who relapsed. No difference was found in recovery behaviors.
- ✓ Groups differed within all lifestyle domains leisure, social, and coping.
- ✓ Consequences of low numbers of healthy lifestyle behaviors extended past discharge with lower levels of homelessness in high performers than low performers
- Indicate that healthy lifestyle behaviors have an association with homelessness after discharge

Religiosity and participation in mutual-aid support groups for addiction, Randolph G. Atkins Jr. & James E. Hawdon (2007), Journal of Substance Abuse Treatment, 33, 321-331.

PURPOSE: Examine the relationship between religious/spiritual beliefs, beliefs of the group, and level of participation. [12 step and others.]

DATA SOURCE/METHOD: **Alcohol and drugs**. n = 822. (161 = 12 step, 104 = SOS, 321 = SMART, 236 = WFS, 102 = other). Mean age 47 years, 18 to 82. Majority female, predominantly white. 51% married. 78.8% used primary drug of choice 10 years.

MEASURES: universal characteristics of mutual aid groups - shared problem or status of members, emphasis on experiential knowledge and reciprocal assistance. Sobriety defined as respondents "clean and sober date" per self report; mutual help groups defined as 12 step, Secular Organizations for Sobriety (SOS), Self-Management and Recovery Training (SMART recovery), Women for Sobriety (WFS).

RESULTS:

✓ Factors associated with remaining "clean and sober":

- Older age
- o Number of close friends who are also in recovery
- Support group participation, but type of group does not matter
- ✓ Factors associated with support group participation
 - o Religiosity and belief in higher power
 - o Older age
 - o Number of close friends also in recovery
- ✓ Interaction between SMART and religiosity and SOS and religiosity were significant, less effective in stimulating program participation than in 12 step programs
- ✓ Strong and significant difference of opinion between groups on whether 12 steps are religious or spiritual

Examining the relative importance of social context referents in predicting the intention to change substance abuse behavior using the EASE, Holly Matto, Keith A. Miller & Christopher Spera (2007), Addictive Behaviors, 32, 1826-1834.

PURPOSE: Sought to understand how social context referents encourage or discourage cognitive, affective, and behavioral attachment to addiction and recovery communities using Ecological Assessment of Substance Abuse Experiences. Hypothesized that intention to use drugs positively associated with drug related social identity and intention to use drugs positively related to client's perception that social referents encourage drug use.

DATA SOURCE/METHOD: **Alcohol and drugs.** Nonprobability sampling in recruiting clients who were in treatment. n = 302. Majority males. Average age 36. 18 to 62 years old. 50.8% White.

MEASURES: Ecological Assessment of Substance Abuse Experiences.

- ✓ More favorable attitudes towards recovery associated with:
 - o having begun to make changes in drug use
 - o actively doing things to reduce drug use
 - o clients perception of working hard to reduce drug use
- ✓ Positive attitude towards recovery related to:
 - o strong intention to stay off drugs in first six months post treatment
 - o concern about substance use
 - o perceived success in not using first six months post treatment
- ✓ Acquaintances, close friends, people in neighborhoods perceived by respondents to hold most favorable attitudes towards drug use and unfavorable attitudes towards recovery
- ✓ Client's family and religious community held most unfavorable attitudes towards drug use and the most favorable attitude towards recovery
- ✓ Factors associated with increased likelihood of changing substance abusing behavior:
 - o Attitudinal similarity towards recovery between client and social network
 - o number of people in social network who favor recovery and with unfavorable attitudes toward drug use
 - o perceived importance of people in network encouraging recovery related behaviors
 - weak beliefs that drugs will lead to positive outcomes

Estimating the effect of help-seeking on achieving recovery from alcohol dependence,

Deborah A. Dawson, Bridget F. Grant, Frederick S. Stinson & Patricia S. Chou (2006) Addiction, 101, 824–834.

DATA SOURCE: Same as Dawson et al., 2005.

MEASURES: **Alcohol.** Same as Dawson et al., 2005. Those who ever sought help were asked if they had ever gone to each of 13 different sources (e.g. Alcoholics Anonymous or other 12-Step organizations, detoxification centers, out-patient clinics, etc.), which were grouped into three categories: (1) 12-Step program participation only; (2) 12-Step and formal treatment (the latter comprising all sources other than 12-Step programs); and (3) formal treatment only.

RESULTS:

- ✓ 25% of those with PPY (prior to past year)-onset alcohol dependence ever sought help for alcohol problems.
 - o 3.1% 12-Step programs only
 - o 5.4% Formal treatment only
 - o 17.0% Both 12-Step and formal treatment.
- ✓ Help-seeking increased the likelihood of any recovery

The relationship between sense of coherence and attribution of responsibility for problems and their solutions and cessation of substance abuse over time, Rena Feigin & Yaffa Sapir (2005), Journal of Psychoactive Drugs, 37 (1), 63-73.

PURPOSE: Examines the significant personal factors in the process of giving up drug use that affect the ability of addicts to mobilize personal coping resources and help overcome crisis. Chose two main personality variables — one relating to attributing of responsibility and the other is sense of inner coherence (personal construct indicating the ability to manage tension well). Specific questions: Does attribution of responsibility differ between short term and long term abstinent subjects?; Does the sense of coherence play a role in successful abstinence?; Is there a relationship between environmental and demographic variables and the sense of inner coherence and attribution?; Do variables relating to addiction differ in long term vs. short term abstinence?

DATA SOURCE/METHOD: **Drugs**. Two groups: n = 128 short term abstinent recently enrolled in treatment and in early stages of recovery (4 months). n = 40 long term abstinent (two to eight years) that had remained in contact with treatment centers. Israel. Both groups mean age ranged 36.2 to 38.8 years. Predominantly male.

MEASURES: Attribution of Responsibility Questionnaire, Sense of Coherence Questionnaire

- ✓ Short-term (ST) abstinent vs. long-term (LT) abstinent group:
 - Similar on all demographics except occupation and economic status (majority of long term worked and reported average economic status)
 - Half of ST group addicted to heroin, more than half of LT group had been polydrug abusers
 - o Half of ST group had been imprisoned, 73.3% of LT group
 - Larger number of LT group had participated in NA in addition to treatment received)

- ✓ For both groups, most frequently endorsed model of attribution was compensatory (attribute responsibility of problem to the other but responsibility for change to self)
- ✓ ST group had lower mean score on coherence
- ✓ For ST group there was a significant relationship between sense of coherence and attribution of responsibility of problem to themselves

A partner's drug-using status impacts women's drug treatment outcome, Michelle Tuten & Hendree E. Jones (2003), 70, 327-330.

PURPOSE: Characterize the drug using partners of pregnant drug dependent women, to identify their partner's psychological needs and to determine if their partners' drug using status impacts a woman's treatment outcome.

DATA SOURCE/METHOD: **Drugs.** n = 167 pregnant women enrolled in treatment.

MEASURES: Relationship Survey. 49% reported partners drug using at baseline.

RESULTS:

- ✓ Drug using partners as compared to drug free partners are more likely to:
 - o be Caucasian
 - o have less education
 - o lower rates of employment
 - o greater psychosocial needs
 - o give money to pregnant partners for drugs
 - o less likely to be supportive of treatment attempts by partners
- ✓ Women with drug using male partners:
 - o have poorer treatment outcomes
 - o more likely to drop out of treatment, (52 days vs. 73 days, length of stay for women with and without drug using partners, respectively)

STUDIES BASED ON COMMUNITY SAMPLES

Alcohol treatment utilization: Findings from the National Epidemiologic Survey on Alcohol and Related Conditions, Emily Cohen, Richard Feinn, Albert Arias & Henry R. Kranzler (2007), 86, 214-221.

PURPOSE: Examined specific alcohol treatment modalities utilized by individuals with an AUD, the characteristics of individuals who sought alcohol treatment, and reasons for not seeking alcohol treatment among survey respondents who had considered seeking treatment

DATA SOURCE/METHOD: **Alcohol.** NESARC over 18. n = 43,093.

MEASURES: DSM-IV for AUD (AUDADIS-IV). AA included in treatment category.

- ✓ 30.3% of n=43,093 met criteria for lifetime AUD. Of that 30.3% the mean age 42.2, 66.5% male, 79.8% white, majority were married (61.9%), 87.8% completed high school.
- ✓ 14.6% reported ever having sought treatment, excluding self help drops to 11.8%. Mean age treatment first sought 30.5

- ✓ Those who reported abuse and dependence more likely:
 - o to have sought treatment
 - o reported greater number of different kinds of treatment
- ✓ Most common treatment 12 step
 - Followed by alcohol or drug rehab, private physician or other, alcohol or drug detox or clinic
- ✓ Individuals who utilized treatment were more likely to be:
 - o Older
 - o Divorced
 - o Male
 - West or Midwest
 - o lower income
 - lower education
 - o more DSM disorders
- ✓ Reasons those who considered seeking treatment but did not (n=500):
 - o should be strong enough to handle it alone (44.4%)
 - o thought problem would get better by itself (31.5%)
 - o stopped drinking on own (24.4%)

Maturing out of alcohol dependence: The impact of transitional life events, Deborah A. Dawson, Bridget F. Grant, Frederick S. Stinson (2006), Journal of Studies on Alcohol, 67, 195-203.

PURPOSE: Provide an adequate test of the hypothesis that the life events identified as relevant to the process of maturing out of heavy alcohol use will also be positively associated with recovery from alcohol dependence. Interested in life events related to non-abstinent recovery vs. abstinent recovery.

DATA SOURCE/METHOD: **Alcohol.** 2001-2002 National Epidemiologic Survey on Alcohol and Related Conditions. 18 and older. n = 4,422.

MEASURES: DSM-IV alcohol dependence that had an onset at some time prior to the 12 months preceding the interview. Alcohol Use Disorders and Associated Disabilities. Positive for non-abstinent recovery (NR) if no past year symptoms of alcohol abuse or dependence and no severe headaches due to drinking and their past year use within low risk guideline identified by NIAAA. Continuously abstinent defined as abstinent recovery (AR).

- ✓ Differences between individuals who achieved non-abstinent recovery (NR) and abstinent recovery (AR)
 - NR had exposure periods that were 5 years shorter on average than those with AR or not recovered.
 - Life transitions that affected likelihood of AR differed in every respect from those affecting NR
 - Entering and exiting a first marriage associated with short term increase in achieving NR and those who were still dependent 3 or more years after either of these events decreased likelihood of NR
 - Likelihood of AR associated with initiation of full time employment and becoming a parent; 3 or more years between initiating employment reduced likelihood of AR among those still dependent

- Becoming a parent within past 3 years more than doubled likelihood of AR
- ✓ As number of psychiatric symptoms increased the effects of completing school, full time work, and exiting or entering a marriage became less significant

Natural history of alcohol dependence and remission events for a Native American sample, Kamilla L. Venner & Sarah W. Feldstein (2006), Journal of Studies on Alcohol, 67, 675-684.

PURPOSE: Examines the interplay of the onset of alcohol related behaviors and change efforts among Native Americans with alcohol dependence in sustained, full remission (DSM-IV-TR); the developmental sequencing of alcohol problem/dependence and within sample differences related to gender and cultural identification.

DATA SOURCE/METHOD: **Alcohol.** Recruited through letters, flyers, newspaper, word of mouth. Native American. n = 44, majority men. Average age of 48. All met criteria for DSM dependence with one full year of remission.

MEASURES: Structured Clinical Interview. Sustained full remission based on DSM-IV-TR criteria. QFV – 60 – Quantity, Frequency and Volume of Drinking, Alcohol Dependence Scale, Acculturation Questionnaire, World Health Organization Quality of Life Survey, Alcohol –Related Behaviors Survey, Change Efforts Card Sort.

RESULTS:

- ✓ Alcohol use patterns
 - o First drink mean 12.8 years; first intoxication mean 14.1 years
 - o Early twenties first alcohol related problems; late twenties clinical dependence
 - o On average, 13 years from start of heavy drinking to sobriety
 - o On average, 16 years first change effort to onset of sobriety
 - Average duration of abstinence is 10 years
- ✓ Gender differences in alcohol use consequences
 - Decrease in moral standards, change in family activities, not thinking clearly emerged earlier for women
- ✓ Alcohol use change efforts
 - o In comparison with samples from other studies, being afraid occurred earlier for group that resolved their alcohol problems
 - Majority began change efforts on own without professional help
 - Around age 30 most prayed and asked God for help
 - First decision to quit rarely successful
- ✓ Change efforts appear to begin during the development of alcohol problems rather than after the person "hits bottom"
- ✓ Differences in sequence may be more discrepant inter-tribally than cross-culturally

Short-term recovery from alcohol abuse or dependence: Any evidence of a relationship with treatment use in a general population sample? John A. Cunningham. (2005). Alcohol and Alcoholism, 40 (5), 419-421.

PURPOSE: Test whether survey respondents who report alcohol misuse in the past year are more likely to be abstinent or binge free in the past 30 days if they have used treatment, than if they have not.

DATA SOURCE/METHOD: **Alcohol.** From 2002 National Survey on Drug Use and Health. 12 years of age or older. n = 5730.

MEASURES: treatment use defined as accessing any treatment services for either illicit drugs or alcohol use in the past year (hospital, inpatient, outpatient, mental health center, emergency room, doctor's office, treatment in prison, self help groups,). DSM-IV. Short term recoveries measured 1) asked if they had consumed 5 or more drinks on one occasion in the past 30 days 2) if they had consumed alcohol in the past 30 days.

RESULTS:

- ✓ Substance use:
 - o 10% were abstinent in the past month
 - o 22.5% had not consumed 5 or more drinks on one occasion in the past 30 days
- ✓ Treatment:
 - Less than 10% had accessed any type of treatment in the past year
 - Respondents who had accessed some type of treatment more likely to be abstinent and to have not binged in past month

Recovery from DSM-IV alcohol dependence: United States, 2001-2002, Deborah A. Dawson, Bridget F. Grant, Frederick S. Stinson, Patricia S. Chou, Boji Huang & W. June Ruan (2005), Addiction, 100, 281-292.

PURPOSE: Investigate the prevalence and correlates of recovery from DSM-IV alcohol dependence

DATA SOURCE/METHOD: **Alcohol.** Data from the National Epidemiologic Survey on Alcohol and Related Conditions. n = 4422. 18 and older. Majority male and predominantly white.

MEASURES: prior to past year DSM-IV alcohol dependence. Alcohol Use Disorders and Associated Disabilities Interview Schedule. Risk drinking defined as more than 12 standard drinks per week or five or more drinks in a single day one or more times in the past year (men). Women risk drinking more than 7 drinks per week or four or more in a single day one or more times in past year. Five categories of past year status: still dependent (3+ criteria for alcohol dependence), partial remission (did not meet criteria for dependence but reported 1+ symptoms of abuse or dependence, Asymptomatic risk drinker (past year risk drinker with no symptoms of abuse or dependence), low risk drinker (past year drinker, no symptoms and not classified as past year risk drinker), abstainer (did not consume any alcohol in past year). Full remission defined as asymptomatic risk drinker, low risk drinker, abstainer. Recovery defined as low risk drinker or abstainer. Included AA as treatment category.

- ✓ Patterns of dependence and recovery:
 - 25% of all U.S. adults with prior to past year alcohol dependence were still dependent in the past year
 - o Natural recovery rate is 24.4%
 - Stable recovery (5+ years) rate is 20.6%
- ✓ Factors associated with continued dependence:
 - High levels of alcohol intake and 10+ lifetime dependence symptoms and histories of illicit drug use

- Younger age, less educational attainment, male gender, and being never married or divorced
- ✓ Treatment and recovery:
 - Proportion of past year abstainers was three times as high among those who had received treatment as among those who had not
 - Partial remission and asymptomatic risk drinking also were more common among the never treated
- ✓ Suggests a typical course of recovery might consist of continued drinking, accompanied by symptoms of alcohol use disorder that persists for 5 to 10 years before resolving into asymptomatic risk drinking and ultimately low risk drinking or abstinence.

Types of natural recovery from alcohol dependence: a cluster analytic approach, G. Bischof, H. J. Rumpf, U. Hapke, C. Meyer & U. John (2003), 98, 1737-1746.

PURPOSE: Find homogeneous subgroups

DATA SOURCE/METHOD: **Alcohol**. Recruited through media solicitation. Germany. n = 178.

MEASURES: Recovery meeting DSM-IV criteria of alcohol dependence but not within the last 12 months; fulfilled DSM-IV remission specifiers of sustained full remission; participants did not meet criteria for alcohol abuse and did not exceed limits of risky drinking as defined by the British Medical Association. Natural recovery defined as not utilizing formal help defined as counseling, inpatient, outpatient, self help, or antabuse. Could utilize minor formal help defined as not exceeding 9 self help group sessions, 5 counseling sessions from a physician who does not specialize in addictions, 3 counseling sessions by an addictions professional. Excluded comorbid psych treatment two years prior and 1 year after remission. Severity Scale of Alcohol Dependence, Multidimensional Health Locus of Control Scale, Social Support Appraisal Scale, Coping Behavior Inventory, Alcohol Abstinence Self-efficacy Scale, Mental Health Screening Test, Questionnaire on Health Behavior

- ✓ Low problems-low support (LPLS) (n=65) characterized by:
 - o early onset with medium adverse consequences
 - o high severity of dependence
 - o low social pressure
 - o more women; less often married; higher rates of unemployment
- ✓ High problems-medium support (HPMS) (N=37) characterized by:
 - o early age onset with high adverse consequences from drinking
 - o high severity of dependence
 - o high social pressure
 - less likely to be married and were younger
- ✓ Low problems-high support (LPHS) (n=76) characterized by:
 - o late onset
 - o low severity of dependence
 - o lower daily average alcohol intake prior to remission
 - o low social pressure
 - o higher school education level
- ✓ No differences for reasons not seeking help identified
- ✓ Triggering factors of remission process different

- LPHS higher satisfaction with life domains prior to remission
- o HPMS gave more emphasis on impact of partnership on remission as compared to LPLS,
- o HPMS gave higher emphasis on impact of financial and legal events
- ✓ Most specific pattern of maintenance HPMS, revealed more about former drinking problems, revealed more support in remaining abstinent, sought social support more often,
- ✓ HPMS and LPHS revealed more social support by partners and family even after resolution as compare to LPLS

Maintenance factors of recovery from alcohol dependence in treated and untreated individuals, Gallus Bischof, Hans-Jurgen Rumpf, Ulfert Hapke, Christian Meyer and Ulrich John (2000), Alcoholism Clinical and Experimental Research, 24 (12) 1773-1777.

PURPOSE: Analyze if natural remitters and subjects assisted by treatment or self help revealed different maintenance mechanisms.

DATA SOURCE/METHOD: **Alcohol.** From project Transitions in Alcohol Consumption and Smoking. Germany. Recruited through the media. Group 1, n = 93 natural recovers (73.1% male). Group 2, n = 42 remitted with extensive self help group participation (83.3% male).

MEASURES: recovery defined as meeting DSM-IV criteria of lifetime alcohol dependence but not within last 12 months. All participants fulfilled criteria for sustained full remission. Natural recovery defined as no inpatient or outpatient treatment, no self help group participation, no psychotherapy within 2 years before and 1 year after remission. Intensive self help — at least 50 self help group meetings [time frame not specified]. Lubeck Alcohol Dependence Scale. Social Support Appraisal Scale. Coping Behavior Inventory. Questionnaire on Health Behavior. Alcohol Abstinence Self Efficacy Scale.

RESULTS:

- ✓ At time of interview self help attenders vs. non attenders:
 - o were more likely to be married and older;
 - reported lower average of daily alcohol intake during their highest consumption
 - o had higher severity of alcohol dependence and less unemployment before recovery
- ✓ Differences in seeking social support and number of individuals informed about previous drinking problems (higher in self help group)

Gender differences in natural recovery from alcohol dependence, Gallus Bischof, Hans-Jurgen Rumpf, Ulfert Hapke, Christian Meyer & Ulrich John (2000), Journal of Studies on Alcohol, 61, 783-786.

PURPOSE: Examine gender differences of natural remitters.

DATA SOURCE/METHOD: **Alcohol.** n = 143. Recruited through media. Predominantly male. German

MEASURES: Natural recovery defined as (a) met DSM-IV criteria for alcohol dependence in lifetime but not within last 12 months; (b) no inpatient or outpatient treatment or psychotherapy for comorbid psychiatric disorders within 2 years prior and 1 year after remission and maximum of 2 self help meetings. Remission defined as consumption of alcohol without any signs of dependence or risk drinking according to the British Medical Association. Coping Behavior Inventory.

- ✓ Women reported less frequently driving while intoxicated and less social pressure from partner and workplace prior to remission, as compared to men
- ✓ Women informed fewer individuals about their former drinking problems and perceived less support from their partner in maintaining abstinence

Remissions from drug dependence: is treatment a prerequisite? John A. Cunningham (2000), 59, 211-213.

PURPOSE: What proportion of respondents had ever accessed addictions treatment services?

DATA SOURCE/METHOD: **Drugs.** 1992 National Longitudinal Alcohol Epidemiological Survey. 18 and over. n = 42,862. Used respondents who had no current diagnosis of past 12 months abuse or dependence but had met the criteria for lifetime diagnosis.

MEASURES: DSM-IV for 12 months and lifetime drug dependencies. Remission criteria defined as no current diagnosis for the same drug and no current diagnosis for any drug. Self help attendance was counted as treatment.

RESULTS:

- ✓ 43.1% of respondents who had remitted from cannabis utilized treatment
- ✓ 90.7% of respondents who had remitted from heroin utilized treatment

Depressive symptoms, stress, and coping among women recovering from addiction, Gayle D. Weaver, Norma H. Turner, Kristi J. O'Dell (2000), Journal of Substance Abuse Treatment, 18, 161-167.

PURPOSE: Determine level of depressive symptoms, identify the nature and extent of psychosocial stress; examine differences in depressive symptoms by sociodemographic characteristics, psychosocial stress and coping strategies.

DATA SOURCE/METHOD: **Alcohol and drugs.** n = 102 women who have been in recovery 1 to 5 years. From Community University Partnership Project II Survey. Over 18 years of age. Half Anglo American, half African American (AA). Mean age 39.08. Anglos more likely to have college education and higher income.

MEASURES: Women in Recovery Questionnaire. Center for Epidemiologic Studies Depression Scale. Ways of Coping Scale.

- ✓ Substance use and recovery patterns
 - o Alcohol and crack most commonly used drugs. ¾ report parental substance abuse.
 - Alcohol primary drug for Anglo, crack African American
 - 2/3 had been in recovery for 1 to 2 years
 - Anglos longer recovery (2.7 vs. 2.0)
- ✓ Comorbidity
 - Over half of the sample reported that a clinician had diagnosed them with depression;
 History of depression associated with race, marital status, and years of substance use
 - 29% of the sample scored 16 or more indicating risk of depression exceeds community based samples of 13% to 20%
- ✓ Treatment patterns

- Majority received formal treatment with the highest percentage in outpatient
- o Among those receiving treatment half had been in multiple times
- ✓ Factors associated with recovery
 - o Most attributed recovery to 12 step programs, one out of five attributed to treatment
 - o Money, emotional health, physical health, family, intimate relationships and parenting major stresses both pre and post recovery.
 - Significant decreases in all stress scores post recovery, and significant increase in utilization of positive coping strategies.

Untreated remissions from drug use: the predominant pathway, John A. Cunningham (1999), Addictive Behaviors, 24 (2), 267-270.

PURPOSE: Examine untreated remissions for drug use.

DATA SOURCE/METHOD: Drugs. 15 years and older. Canada, 1994 Canadian Alcohol and Drug Survey.

MEASURES:[Not clear if they included people who received treatment for alcohol problems as having received treatment]. Remission defined as no drug but in the last year.

RESULTS:

√ Vast majority of prior drug users have never come in contact with any drug treatment services.

Patterns of onset and cessation of drug use over the early part of the life course, David J. DeWitt, David R. Offord & Maria Wong (1997), Health Education and Behavior, 24 (6), 746-758.

PURPOSE: Examines pattern of onset and cessation of alcohol, illicit drug use, and prescribed drug use among adolescents and young adults.

DATA SOURCE/METHOD: **Alcohol and drugs.** Canada. n = 4,364 ages 15 to 35.

MEASURES: Age of regular and stable drinking age when respondent began drinking the most. Near/daily use defined as the age when respondent began drinking alcohol at least 4 to 6 times per week. Cessation means not having used for at least one year.

- ✓ Age at onset patterns vary by substance
 - o Major risk period for initiating alcohol and marijuana use is mostly over by the age of 22
 - o For alcohol use and dependence (DSM) the risk of onset begins around age 12 and then rises sharply to reach a peak at age 16. By age 22 the risk has leveled off
 - Risk period for hallucinogens begins early at age 12 and then rises steeply to peak at age
 17
 - Cocaine/crack risk period begins at ages 15 and 16 and fluctuates with sharp peaks at 18, 20, and 25. By 29 major period of risk begins to stabilize.
- ✓ Cessation patterns
 - o For regular alcohol consumption, cocaine/crack, and hallucinogen cessation most likely to occur within first 2 years of starting, by 8 to 10 years further cessation is unlikely.
 - o Marijuana and illicit prescription drugs more persistent
 - Drug users who began before the age of 15 are less likely to quit their habit than those beginning at later ages

Recovery from alcohol problems with and without treatment: Prevalence in two population surveys, Linda C. Sobell, John A. Cunningham, & Mark B. Sobell (1996), American Journal of Public Health, 86 (7), 966-972.

PURPOSE: Examines the prevalence of treated and untreated recoveries from alcohol problems

DATA SOURCE/METHOD: **Alcohol.** Data from National Alcohol and Drugs Survey and the Ontario Alcohol and Drug Opinion Survey. National Survey – 15 years of age and older, Ontario survey 18 years of age and older. This study reports on those 20 and older only. n=5526. Men and women.

MEASURES: Resolved abstinent defined as current abstainers who reported past problems with alcohol use and had quit drinking at least one year prior to interview; resolved non-abstinent defined as current drinkers who reported past problems related to use and reduced drinking to a non-problem level at least 1 year prior to the interview; current problem drinkers defined as reported experiencing problems related to use within previous year or who drank at a level associated with health risks (men seven drinks per day, women five drinks or more); current social drinkers defined as no problems and no health risk drinking.

"Resolved" respondents further classified by treatment including AA

RESULTS:

- ✓ 77.5% in National Survey (322) and 77.7% in Ontario Survey (70) resolved alcohol problem without formal treatment or help.
- ✓ Majority of respondents in both surveys who had used some type of treatment had used AA
 - o Those who used treatment had more alcohol related problems than those who did not
- ✓ Non-abstinent recoveries may be more likely to occur among respondents who recovered without treatment

Resolution from alcohol problems with and without treatment: Reasons for change, John A. Cunningham, Linda C. Sobell, Mark B. Sobell, Geeta Kapur (1995), Journal of Substance Abuse, 7, 365-372.

PURPOSE: Develop a better understanding of the change process; compare reasons for change between those with and without treatment.

DATA SOURCE/METHOD: **Alcohol.** 19 years of age and older. Volunteers recruited at a science center in Canada. n = 235. Men and women.

MEASURES: AA included as treatment option but not formal treatment. CAGE. Prior alcohol problem identified with score of ≥ 2 on CAGE. Resolved abstinent defined as current abstainers who met criteria for problem drinking and had been abstinent for one year or more; resolved non-abstinent defined as current drinkers who met criteria for problem drinking but had reduced drinking to a non-problem level for a year or more; non problem drinking defined as three or fewer drinks per day for men on drinking days and two for women, since resolution no day of more than 7 drinks, 5 to 7 drinks two days in past year except for holidays.

RESULTS:

✓ 27% (64) met criteria for alcohol problem with successfully resolved for more than 1 year ○ 11% were resolved abstinent

- o 16% were resolved non-abstinent
- o 75% resolved without treatment or self help groups
- ✓ All resolved non-abstinence occurred without treatment and had moderate drinking prior to resolution
- ✓ Those who resolved with treatment:
 - o older
 - o higher percentage of meeting CAGE criteria and high risk drinking
 - o more heavy drinking days
 - o rated their alcohol problems as more severe
 - o more likely to say 'hit rock bottom' and 'warning from spouse or other'
 - o endorsed more reasons for resolution than those without treatment

STUDIES BASED ON BOTH TREATMENT AND COMMUNITY SAMPLES

Recovery with and without treatment: A comparison of resolutions of alcohol and drug problems, Jan Blomqvist (2002), Addiction Research and Theory, 10(2), 119-158.

PURPOSE: Explore substance specific characteristics in treated and untreated recovery from addiction problems.

DATA SOURCE/METHOD: **Drugs and alcohol.** Recruitment via media and participants in treatment programs in Stockholm. n = 96. Majority men. More women in the alcohol self remitters.

MEASURES: Life Drinking History. Fulfilling lifetime criteria for alcohol or drug dependence according to DSM-III-R and reporting a period of ≥ 5 years of alcohol misuse or amphetamine and/or opiate misuse. For those with drug dependence, recovery defined as ≥ 3 years of abstinence; for those with alcohol dependence recovery is problem free social drinking. Untreated subjects not allowed to attribute any extent of their resolution to any form of drug or alcohol treatment. Treatment defined as any inpatient or outpatient program or any form of counseling by therapists, doctors, social workers, etc.

- ✓ Help seeking by alcohol misusers often prompted by psychosocial problems other than excessive drinking:
 - o financial, work related, or relationship problems
- ✓ Barriers to treatment:
 - o concerns about personal integrity and fears of being labeled
- ✓ Former drug users found to have a more problematic background than alcohol misusers and more involvement in subculture
- ✓ Self remitters in both groups exhibited more severe and stable misuse pattern with decreased use prior to resolution
- ✓ Stable recovery was preceded by prolonged experiences of high negative stress and increased negative events
- ✓ For treated remitters, work, financial problems and "rock bottom" experiences are motivators
- ✓ Stability and improvements in life areas

- ✓ Self remitters from alcohol more often to return to previously established life style than self remitters from drug use
- ✓ Remitters often substituted social networks and often entire way of life

Meta-Analyses

The evidence base for the effectiveness of Alcoholics Anonymous: Implications for social work practice, Amy R. Krentzman (2007), Journal of Social Work Practice in the Addictions, 7 (4), 27-48.

✓ PURPOSE: Systematically review the literature to assess effectiveness of AA. Seven studies explored three basic research questions: comparisons between AA and professional outpatient treatment; impact of the depth of involvement in AA on outcomes; the role of social support

DATA SOURCE/METHODS: **Alcohol.** Systematic search of the literature. Bibliography of self help group references. n = 7 studies conducted in past 10 years and focus on alcoholism and AA only.

MEASURES: Not applicable

RESULTS:

- ✓ Humphreys and Moos (1996): AA works as effectively as treatment and can reduce healthcare costs
- ✓ Timko et al. (2000): AA, formal treatment and the combination of the two are more effective than receiving no help at all
- ✓ Lemke and Moos (2003): those who attended more meetings and had a sponsor fared better than those who did not
- ✓ Moos and Moos (2004): individuals who attended AA frequently and for a longer duration were more likely to be abstinent
- ✓ Conners et al. (2001): AA helps to increase an individuals' confidence in their ability to avoid drinking during tempting situations; drinkers in one's social network can discourage AA participation
- ✓ Kaskutas et al. (2002): support from AA members doubles the odds of an individual's achieving abstinence

Attrition in substance abuse prevention: A meta-analysis of 85 longitudinally followed cohorts, William B. Hansen, Nancy S. Tobler & John W. Graham (1990), Evaluation Review, 14 (6), 677-685.

PURPOSE: Provide normative data regarding rates of attrition in longitudinal substance abuse prevention research

DATA SOURCE/METHOD: collected from published and unpublished school based substance abuse prevention programs. n = 85 cohorts. Those with 3 years or less of fup.

MEASURES: not applicable

- ✓ Retention generally decreases over time
- ✓ Time from pretest does not account for much of the variance

✓ Authors suggest they have standard deviation units that should be considered when trying to decide if attrition is excessive or not

Qualitative Studies

Rural women's stories of recovery from addiction, Judith Grant (2007), Addiction Research and Theory, 15 (5), 521-541.

PURPOSE: Provide rural women's narratives of their recovering selves, their self perceptions and their processes of change

DATA SOURCE/METHOD: **Alcohol and drugs.** n = 25. Recruited by placing posters in local newspaper and public forums. 20 or older and in recovery 18+ months. Mean age 40 years. Majority Caucasian. Appalachia.

RESULTS:

- ✓ Stages of recovery
 - o The disgusted self
 - o The aware self
 - o The alternative self
 - o The stable self
- ✓ Given lack of treatment, participants compensated with own social networks and self help

African-American Alcoholics: An interpretive/Constructivist model of affiliation with alcoholics (AA), Arthur Durant (2005), Journal of Ethnicity in Substance Abuse, 4(1), 5-21.

PURPOSE: Explores how African American alcoholics modify the steps and traditions of AA to affiliate with the organization.

DATA SOURCE/METHOD: **Alcohol.** Intensive and semi structured interviews with 48 African American alcoholics (27 men), age range 23 to 65. Grounded Theory.

- ✓ African Americans construct recovery programs in the subculture of AA by converting and modifying the process to meet their affiliation needs.
- ✓ Six phases of affiliation
 - Pain make contact with AA as a result of pain, emotional. Specific and overarching metaphor with specific racial and cultural meaning
 - Learning about AA and accepting drinking problem most had viewed as a "white cult", traditional AA language often replaced by culturally influenced talk, talk changes depending upon if meeting predominantly black or white; have a more difficult time buying into disease concept
 - Speaking in opposites talk about bads of drinking not yet connected to the goods
 - o Chairing meeting or sponsoring indicative of considering a commitment to AA
 - o Commitment to AA or the church
 - Affiliation with AA

"I don't have another run left with it": ontological security in illness narratives of recovering on methadone maintenance, Lee Garth Vigilant, (2005), Deviant Behavior, 26, 399-416.

PURPOSE: How do methadone patients understand the meaning of recovery in their own illness careers and do these conceptualizations conform to or differ from the expectations of the methadone clinic and the AA/NA sobriety communes.

DATA SOURCE/METHOD: **Drugs.** n = 45 patients, qualitative. Recruited through media and snow balling. 21 females. Age range 21-56. 35 = Euro American.

RESULTS:

- ✓ Four distinct meaning categories for recovery that were accompanied by distinct practices.
 - Recovery as being normal and recapturing lost time
 - Includes sense of gaining control over heroin; governed by constraints of family and work, etc. and not heroin
 - Not necessarily equated with abstinence
 - o Recovery as a perpetual, ongoing process, without a "recovered state"
 - Belief that recovered state was not possible
 - Resumption of ordinary patterns without the persistent worry of dope sickness
 - Recovery was to be ordinary
 - Continuous process with no end that may include periods of sobriety and heroin use
 - o Recovery as self centered care for the self
 - Recovery framed as a time to reflect upon and resolve the emotional or corporeal crises that catalyzed entrance into heroin subculture
 - Recovery also stands for literal period of self care for the body neglected during heroin use
 - Recovery as associated change
 - Recovery defined as a time to sever associational ties that were reminders of the heroin lifestyle
 - Fans of the geographic cure
- ✓ Methadone clients deal with two competing recovery paradigms one is methadone clinics which states cessation of opiate use; other AA/NA can't use anything.
- ✓ Paradoxical nature of recovery one is perpetually in recovery but never fully recovered

Recovery processes in a treatment program for women, Mary Russell & Annemarie Gockel (2005), Journal of Social Work Practice in the Addictions, 5 (4), 27-46

PURPOSE: Explore women's perceptions regarding the group processes that are most beneficial to recovery.

DATA SOURCE/METHOD: Canada. **Alcohol and drugs.** Ages 20 to 50, primarily Caucasian. Women attending a treatment program. Follow up focus group post treatment. N = 32.

- ✓ Main metaphorical theme Building a House of Recovery
- ✓ Recovery perceived as a process of rebuilding the self

- ✓ Required the use of multiple tools:
 - o Groups
 - o AA groups
 - o individual treatment
- ✓ Foundation of safety that included appropriate gender mix and acceptance of relapse (nonjudgmental)
- ✓ Women who had attended both women only groups and mixed gender groups agreed that women only groups provided more safety for initial disclosures while subsequent mixed groups offer other benefits (hearing the opinions of men)
- ✓ Connections with women formed the mortar
- ✓ Primary components of rebuilding lives:
 - Self care (example meditation)
 - self validation
 - o identification and acceptance of feelings

Social context and "natural recovery": The role of social capital in the resolution of drugassociated problems, Robert Granfield & William Could (2001), Substance Use & Misuse, 36 (11), 1543-1570.

PURPOSE: This paper draws insight relevant to the concept of social capital and how this might facilitate natural recovery from alcohol and drug addiction.

DATA SOURCE/METHOD: **Alcohol and drugs.** Interviews with n = 46 former alcohol and drug dependent individuals who overcame without treatment or participation in self help groups (90% no treatment, 10% minimal). Mean age 38.4. Mean length of cessation 6.5 years. Snowballing and advertisement via media. Large city in Western U.S. Majority males.

MEASURES: Alcohol or drug dependent for a period of at least one year with symptoms of cravings, extended periods of daily use, and serious consequences. Had to resolve dependency for a period of at least one year. They were allowed to have participated minimally in treatment if they did not attribute recovery to treatment.

Social Capital - (citing Coleman) a variety of different entities having two characteristics in common: they all consist of some aspect of social structure, and they facilitate certain action of individuals within the structure. Like other forms of capital, social capital is productive, making possible the achievement of certain ends that would not be attainable in its absence [does not give specific examples from Coleman]

- ✓ Characteristics of the sample:
 - o Social networks not characterized by use of intoxicating substances
 - Had substantial social capital and stability that limited personal deterioration that often accompanies drug use, able to avoid criminal justice system and able to work
 - Many remained employed during dependencies
- ✓ Individuals with strong obligations to other increased motivation to act in particular ways —to constrain drug use
- ✓ Many of the respondents able to maintain relationships with nonusing friends and family
- ✓ Emancipation is not equally distributed affected by social structure and social relations
- ✓ Social capital is one way of operationalizing emancipatory opportunities

- ✓ Those who possess larger amounts of social capital will be likely candidates for less intrusive forms of treatment
- ✓ Harm reduction approach to recovery would seek to increase capacity treatment might be more effective if it directed at enhancing social capital
- ✓ Focus on social context may lead to reevaluation of disease model
- ✓ Social capital a reminder that clinicians needs to focus on treatment as least intrusive to most intrusive

The recovery from dependent drug use: addicts' strategies for reducing the risk of relapse, James McIntosh & Neil McKeganey (2000), Drugs: education, prevention and policy, 7 (2), 179-192.

PURPOSE: Describe the ways that individuals sought to avoid becoming re-addicted. What are the significant elements in the process of coming off?

DATA SOURCE/METHOD: **Drugs.** n = 70. Semi-structured interviews. Average age 29.5. Average length of drug use 9.3 years. Majority female. Heroin drug of choice 60%. Average length of time not using 4.3 years. Scotland.

RESULTS:

- ✓ Individuals have to distance themselves from their former life, and in particular their drug using network, with social and physical strategies:
 - o move, avoid, be careful about times of leaving the house, etc.
 - o develop a range of new non-drug activities and relationships to replace those they have given up and to reinforce and sustain their new identities
 - o find a meaningful say to occupy time (college, volunteer work, etc)
- ✓ Acceptance by non-addicts of the individuals new identity was crucial in maintaining recovery from dependent drug use
- ✓ New life created a barrier against relapse too much to lose stake in the present, stake in the future, confirm and reinforce their new identity as a non-addict and useful member of society
- ✓ Residual longing remains a constant threat and requires strategies to minimize it:
 - Substitute another drug for drug of choice (usually alcohol or pot); for most of this sample, this was a short term solution or employed in moderation
 - o Distraction

Addicts' narratives of recovery from drug use: constructing a non-addict identity, James McIntosh & Neil McKeganey (2000), Social Science & Medicine, 50, 1501-1510.

PURPOSE: Aim was to collect detailed information from drug users themselves on their experience of coming off illegal drugs. Motivated by concern that the correspondence between addicts own accounts of their recovery and those of professional drug workers may be not so much the result of the intrinsic nature of the recovery process as a product of the socially constructed nature of the narratives and the fact that the latter may have been developed in conjunction with those working in the drug treatment industry.

DATA SOURCE/METHOD: **Drugs and Alcohol**. n = 70. Scotland. Recruited through media and services. Average age 29.5. Majority female. 60% heroin drug of choice.

- √ Three key areas in which the recovering addicts' narratives could be seen constructing a new non addict identity
 - Reinterpretation of aspects of drug using lifestyle
 - Reinterpreting various elements of using into a negative light
 - Reinterpretation of relationships with other users
 - Reinterpretation of activities to maintain an addicts life
 - o Reconstruction of the individual's sense of self
 - Contrasted with who they had been in the past and who they hoped to be in the future
 - Differentiating between who they were "at heart" and what they had become
 - Presenting the future as an opportunity to reclaim control and to fulfill potential
 - o Provision of convincing explanations for their recovery
 - Emphasis on rock bottom experiences or existential crisis
 - Didn't always have to be a negative experience
- ✓ Narratives frequently constructed with others

Review Articles

Factors influencing the course of opiate addiction, N. Scherbaum & M. Specka (2008), International Journal of Methods in Psychiatric Research, 17 (SI), S39-S44.

PURPOSE: Conducted lit review to elucidate the factors that affect the course of opiate addiction and to identify factors that place individuals at risk for continued drug use. Criteria: empirical results of long term course of opiate addiction, progress of opiate addicts during and after treatment, variables that predict remission and abstinence, comparisons of treated and untreated samples, and recovery from opiate addiction without formal help. [does not state number of articles reviewed]

- √ High rates of active use are common, even decades after contact with treatment system.
- ✓ No particular age at which the probability of becoming abstinent either increases or decreases; neither age nor chronicity predict recovery from opiate addiction
- ✓ Any period of abstinence increases likelihood of abstinence at a later point
- ✓ According to studies on recovery without treatment, recovery occurs a median of six years after active use begins
- ✓ Opiate addicts in treatment reduce use; when recovery is defined as abstinence, rates of recovery are less that 20%
- ✓ Length of treatment and adherence positively related to recovery
- ✓ Treatment retention and treatment progress:
 - o positively associated with age, employment status, partnership status
 - o negatively associated with criminal activity, polysubstance use, psychological distress
- ✓ Addicts seeking treatment had greater current depression and psychiatric problems than those not seeking treatment
- ✓ Data suggests that people who enter treatment cannot quit on their own
- ✓ Most important initial reasons given for quitting among treatment and natural recovery groups:
 - humiliating experiences, pressure from significant others, drug related death of significant others, health problems
- ✓ Significant factors associated with maintaining recovery:
 - o new and important personal relationships, sources of social support

Spirituality and recovery in 12-step programs: An empirical model, Marc Galanter (2007), Journal of Substance Abuse Treatment, 33, 265-272.

PURPOSE: Develop a model of recovery from addiction that is compatible with the spiritual orientation espoused by many members of AA

- ✓ Two most commonly used, empirically grounded frameworks of recovery
 - o medical model recovery takes place with resolution of specific symptoms
 - o behavioral psychology focuses on discrete phenomena that can be observed
- ✓ A third perspective relies on substance dependent individuals own subjective experiences
 - Relates to spiritual grounded recovery as it emphasizes achievement of meaningful or positive experiences
 - Recovery can be understood as process where an abstinent addicted person is moving toward a positive adaptation in life
- ✓ "Spirituality" = that which gives people meaning and purpose in life
- ✓ Issues related to the spiritual aspect of recovery:
 - o loss of sense of purpose due to excessive substance use
 - o feeling of inadequate social support because of one's addiction
 - o continued use of a substance while experiencing moral qualms
 - o loss of the will to resist temptation when the substance is available

The life course perspective on drug use: A conceptual framework for understanding drug use trajectories, Yih-Ing Hser, Douglas Longshore & M. Douglas Anglin (2007), Evaluation Review, 31 (6), 515-547.

PURPOSE: This article focuses on the life course drug use trajectories of dependent users, who place the heaviest burden on social services. Attempts to expand drug and treatment career framework by incorporating theoretical and empirical perspectives from several disciplines and address phenomena often characterized as chronic – criminality and illness

- ✓ Career is defined as a process in which drug use "often escalates to more severe levels, with repeated cycles of cessation and relapse occurring over an extended period," and which needs to be studied through a "longitudinal, dynamic approach"
- ✓ Life course approach recognizes importance of timing and temporal processes
- ✓ Trajectories refer to long term patterns of behavior and are marked by a sequence of transitions. Transitions are marked by life events and embedded in trajectories.
- Criminology research closely parallels drug abuse research in its conceptualization of dynamic patterns of long term behavior as a combination of static and temporal patterns. Likewise, illness concepts (onset, relapse, remission, etc.).
- ✓ Life course study for drug use focuses on long term patterns of stability and change, both gradual and abrupt; incorporates intersection of individual events and social change and social structure
- ✓ Research on drug use careers has produced important theoretical and practical insights not apparent when drug use is studied only in the short term
 - o long term trajectory of drug abuse use may differ depending on the drug used
 - More research is needed on trajectories of specific drugs
 - long term cessation of heroin is slow
- ✓ Transitions, turning points, and social capital are important concepts to understanding processes of change in the life course of drug dependence

- ✓ High rates of relapse are typical after any given remission or episode of treatment
- ✓ Stable cessation is among the least studied phenomena in drug abuse research
- ✓ Individuals with drug problems encountered in medical, criminal justice, welfare, other service systems
- ✓ For various types of drugs, the average time between drug use initiation and initial entry into treatment is 5 to 10 years
- ✓ Long term abstinence may be significantly more likely for drug users able to quit drug use after one or two treatment episodes than for those with three or more
 - Long term prospects for recovery may be greater for people who reenter treatment more promptly after relapsing
 - Research is needed on interplay between drug use and drug treatment and primary health services, criminal justice, and mental health systems
 - Past studies show increased success rates that provide an orderly progression of service mix – inpatient, residential, outpatient, self help
- ✓ Life course perspective consistent with the current discussion on reconceptualizing and restructuring the treatment delivery system so as to shape the system around concepts including "continuity of care," "disease management," and "chronic care model"

Active ingredients of substance use-focused self-help groups, Rudolf H. Moos (2007), Addiction, 103, 387-396.

PURPOSE: Provides an overview of some of the probable active ingredients of self help groups in light of four related theories; social control, social learning theory, behavioral economics and behavioral choice theory, stress and coping theory.

- ✓ Individuals make more visits to self help than to all mental health professionals combined (citing Kessler et al.)
- √ 9% of adults have been to AA; 80% who seek help for dependence participate in AA (Room et al., Dawson et al.)
- ✓ Social control theory: strong bonds motivate individuals to engage in responsible behavior
 - Consistent with social control theory, self help groups provide support, goal direction and structure – stress strong bonds
- ✓ Social learning theory: substance use originates in substance specific attitudes and behaviors or role models
 - Social learning and coping self help focuses on helping others and engaging in substance free activities
- ✓ Behavioral economics or behavioral choice: alternative rewards provided by activities other than substance use
- ✓ Stress and coping: stressful life events lead to distress and alienation and eventually substance misuse
- ✓ Self help groups have three dimensions that are active relationship, goal orientation, system maintenance.

Addiction recovery: Its definition and conceptual boundaries, William White (2007), Journal of Substance Abuse Treatment, 33, 229-241.

PURPOSE: discusses 10 questions critical to the achievement of recovery definition and offers working definition.

- ✓ Growing evidence of shift away from longstanding pathology and intervention paradigms to solution focused recovery
- ✓ First challenge is crafting a single definition that can meet four distinct uses of the term: a) as a lived experience, b) experience as the connective tissue within communities of recovery, c) outcome that can be measured, d) as both an organizing vision/goal and benchmark of accountability
- ✓ Ideal definition would meet six criteria precision, inclusiveness, exclusiveness, measurability, acceptability, simplicity
- ✓ Who has the authority to define recovery at personal, professional and cultural levels?
- ✓ Should the term recovery be applied only to the resolution of particular types of AOD problems?
- ✓ Seems to advocate that the term recovery is best reserved for those persons who have resolved or are in the process of resolving severe AOD based on DSM-IV, less medicalized terms for others quit and cessation. Resolution embraces both
 - o Substituting one drug for another is not recovery, may be partial recovery
- ✓ What are the essential defining ingredients of recovery experience?
- ✓ Recovery can be both a process and an unplanned sudden event
- ✓ Does recovery from substance use require complete and enduring abstinence?
- ✓ Does recovery require abstinence from or a deceleration of all psychoactive drug use?
- ✓ Does the use of prescribed psychoactive drugs disqualify one from the status of recovery?
- ✓ Is recovery something more than elimination or deceleration of AOD problems from an otherwise unchanged life?
- ✓ Is recovery an all or nothing proposition or something that can be achieved in degrees?
- ✓ Must recovery be conscious, voluntary, and self-managed?
- ✓ What are the temporal benchmarks of recovery?
- ✓ Proposed definition of recovery: the experience (a process and sustained status) through which individuals, families, and communities impacted by severe alcohol and other drug (AOD) problems utilize internal and external resources to voluntarily resolve these problems, heal the wounds inflicted by AOD-related problems, actively manage their continued vulnerability to such problems, and develop a healthy, productive, and meaningful life.

Controlled drinking, harm reduction and their roles in the response to alcohol –related problems, Nick, (2006), Addiction Research and Theory, 14 (1), 7-18.

PURPOSE: Clarify various meanings in the literature of the term 'harm reduction', particularly in relation to alcohol problems and controlled drinking goal of treatment and to elaborate a position on the roles of harm reduction and the controlled drinking goal in the treatment of alcohol problems.

DISCUSSION:

- ✓ More precise definition of the term harm reduction is needed
- ✓ An attempt to ameliorate the adverse health, social, or economic consequences of moodaltering substances without necessarily requiring a reduction in the consumption of these substances. (European definition)
- ✓ Controlled drinking is not harm reduction because it requires reduction in drinking.
- ✓ Controlled drinking better thought of as use reduction
- ✓ The American use of harm reduction is more similar to concepts related to controlled drinking
- ✓ Controlled drinking in U.S. rests on the premise that abstinence is unobtainable so that harm reduction by controlled drinking preferable to unrealistic goal of harm elimination by total abstinence; reduces controlled drinking goal as second best alternative

Obstacles to the adoption of low risk drinking goals in the treatment of alcohol problems in the United States: A commentary, Mark B. Sobell & Linda Carter Sobell, (2006), Addiction Research and Theory, 14 (1), 19-24.

PURPOSE: Unlikely that counselors (traditional) will offer moderation services in the provision of services to problem drinkers in primary care medical settings.

DISCUSSION:

- ✓ Moderation goals for individuals with alcohol problems has been controversial in U.S. but more accepted in other parts of the world
- ✓ Disparity not due to lack of research on moderation goals and outcomes but rather lack of dissemination of research findings
- ✓ Many practitioners believe in traditional concepts of recovery because it is similar to their own recovery approach
- ✓ Collective literature on moderation and its approach has yielded three important conclusions:
 - Recoveries of individuals who have been severely dependent on alcohol predominantly involve abstinence
 - Recoveries of individuals who have not been severely dependent on alcohol predominantly involve reduced drinking
 - The association of outcome type and dependence severity appears to be independent of advice provided in treatment
- ✓ The association between successful outcomes and dependence severity applies both to individuals in treatment and to those who recover without treatment
- ✓ Many outcomes in the literature are reported as reductions in drinking; change is reflected as improvement rather than total abstinence
- ✓ Although the goal is usually abstinence, published outcomes are reported in terms of harm reduction
- ✓ In most helping professions training is evidence based and licensure is contingent on passing an evidence based exam; the alcohol field has departed markedly from this model; due to entrenched group of practitioners when credentialing was first introduced.
- ✓ Limited number of providers in the U.S. now offer moderation services
- ✓ Moderation Management a self help moderation alternative
- ✓ Moderation approaches are a reasonable first step for use with those who have no known medical or social contraindications to drinking
- ✓ Slow in coming to the U.S.

Alcoholics Anonymous: Cult or cure?, George E. Vaillant (2005), Australian and New Zealand Journal of Psychiatry, 39, 431-436.

PURPOSE: Discuss the mechanisms of action, the efficacy and the safety of AA in treatment of alcoholism.

✓ Part of the reason treatment often fails is that addiction does not reside in the cortex of the human brain; lies in what has been called the "reptile brain"

- ✓ Cellular changes in midbrain nuclei…eventually loss of plasticity of neuronal responses to these centers renders abstinence beyond the reach of willpower, conditioning, and psychoanalytic insight
- ✓ At least 2 of the following four factors are needed to prevent relapse.
 - o External supervision AA provides this through sponsorship, daily reminders
 - o Ritual dependency on competing behavior AA provides through scheduled meetings
 - O New love relationships AA provides in the form of new bonds
 - Deepened spirituality spirituality in AA emphasizes love, tolerance, humility and awe toward the universe
- ✓ Empirical data on AA is hard to come by
- ✓ Cites evidence that AA can be effective
 - A 60 year study which shows that men with good outcomes reported attending about
 20 times as many AA meetings
 - o Another study which showed that during first two years of treatment AA as effective as cognitive behavioral and motivational enhancement
 - o Two other studies that show efficacy of AA over professional treatment
- ✓ AA is not a cult
 - o Does not deprive members of medicine
 - o Leadership model is different from cults

Recovery: Its history and renaissance as an organizing construct concerning alcohol and other drug problems, William White (2005), Alcoholism Treament Quarterly, 23 (1), 3-15.

PURPOSE: Traces the history of the concept of recovery in America as applied to alcohol and other drug problems and describes the addiction field's evolution through problem (pathology) and intervention (treatment) paradigms to the call for a recovery paradigm as central governing image.

- ✓ Problem paradigm (defining the problem in a way that creates and sustains the professional claim to cultural ownership of the problem)
- ✓ Intervention paradigm (developing, institutionalizing and refining problem resolution technologies with perceived effectiveness and value)
- ✓ Solution paradigm (achieving sustainable, visible proof that the problem definitions and proffered technologies work)
- ✓ 1935 AA founded, with re-emergence of recovery
 - AA resolution of alcoholism not as decision or event but ongoing process; where recovery becomes a central organizing construct – more than physical; cognitive, emotional, behavioral and spiritual
- ✓ Currently experiencing a recovery renaissance which includes varieties of 12 step, alternatives to 12 step, celebration of diversity of American communities of recovery
- ✓ Calls to get treatment reconnected to the larger and more enduring process of recovery and to shift focus of treatment from initiating recovery in the institutional environment to anchoring recovery within the natural environment
- ✓ Move from acute models to long term recovery management; Parallels approached used in treatment of other long term chronic conditions
- ✓ Emergence of recovery concept is a major shift in the central organizing constructs of American responses to AOD problems
- ✓ Recovery system of care
 - Based on assumption that solutions already exist in lives of those with AOD problems

- o Intensification of pretreatment recovery services that strengthen engagement, enhance motivation, etc.
- o Intensification of in treatment support services to enhance retention and transfer from institution to the environment
- o Shift from acute stabilization to post treatment management

The varieties of recovery experience: A primer for addiction treatment professionals and recovery advocates, William White & Ernest Kurtz (2005), International Journal of Self Help & Self Care, 3 (1-2), 21-61.

PURPOSE: Describe current approaches to recovery.

- ✓ Recovery is the process through which severe alcohol and other drug problems (DSM-IV) are resolved in tandem with the development of physical, emotional, ontological, relational, and occupational health
- ✓ Terms such as quitting, cessation and resolution more aptly describe the problem solving processes of individuals who have transient and less severe problems
- ✓ This article focus on the more severe forms of addiction
- ✓ Cites studies of recovery prevalence with rates ranging from 30% to 72%

[This article is a massive article (it really is a primer) and repeats much of the information previously presented. This would be a good article to read if someone wanted an overview.]

Applying an ecological framework to understanding drug addiction and recovery, Holly C. Matto (2004), Journal of Social Work Practice in the Addictions, 4(3), 5-22.

PURPOSE: Presents a new conceptual model of drug addiction and recovery from an ecological framework – the Acculturation Model which conceptualizes addiction and recovery as a transactional process. Individuals entering into recovery faced with making significant sociocultural transformation

- ✓ Medical model may have served to reduce social stigma
- ✓ Medical model does not examine cultural, social factors that perpetuate, cause, and maintain addictions
- ✓ Focus on illness and deficit compromises sense of worth, dignity, and self determination
- ✓ Treatment needs to focus on acculturation across cultural membership
- ✓ Relapse is viewed as sign of significant tension between confluence of two competing cultural memberships

Natural recovery from alcohol and drug problems: Methodological review of the research with suggestions for future directions, Linda C. Sobell, Timothy P. Ellingstad & Mark B. Sobell (2000), 95 (5), 749-764.

PURPOSE: Comprehensively evaluates the methodology of natural recovery articles reported up to 1997.

- ✓ Natural recovery defined as self change
- ✓ In the literature recovery without treatment defined as self quitters, self change, spontaneous remission, natural remission, natural resolution, spontaneous recovery, untreated remission, spontaneous resolution, natural recovery, autoremission)
- ✓ Future natural study recovery studies should:
 - o report respondents demographic characteristics at the time of their recovery

- o describe respondents pre recovery problem severity
- explore in some depth what factors, events or processes are associated with self change process
- o provide corroboration of respondents self reports
- o examine factors related to maintenance
- o conduct interviews with those who have naturally recovered from cocaine, pot, polysubstance
- o include a fup interview to examine stability of natural recovery
- o require a 5 year recovery time frame

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