

Alcohol Use Disorders: Rehabilitation study characteristics

1. Residential Units for alcohol dependence and harmful use (Randomized Controlled Trials (RCTs))

1.1 Residential units vs. outpatient treatment

Study	Comparisons	Outcomes	Baseline Drinking Information	Population Characteristics and Inclusion/Exclusion Criteria	Treatment Characteristics and Assessment points
Chapman1988 (New Zealand)	Inpatient Outpatient Confrontational interview	Abstinence Lapse % of subjects drinking < 60 g absolute alcohol on drinking day Average daily absolute alcohol (g) Average daily absolute alcohol on drinking days (g)	Average daily absolute alcohol (g): Inpatient: 256.3 Outpatient: 202.2 Confrontational interview: 226.2	Study population: n=113, who presented to inpatient alcohol unit; all severe alcoholics, mostly treatment seeking. All suffered significant social, law or physical disturbances due to drinking. 30% had comorbid medical problems. 30% had peripheral neuropathy, 21% showed ECG abnormalities, 18% hypertensive, 18% acute liver disease, 12% major traumatic injuries, 13% bronchitis, 9% alcoholic gastritis. Inclusion Criteria: All who presented to an inpatient alcoholic unit over a 6 month period in 1980. Exclusion criteria: If lived further than 50 miles from hospital, if alcoholism not primary diagnosis, if brief assisted withdrawal only was initially specified by referral agencies, if subjects had already undergone at least 2 previous inpatient treatments for alcoholism in the unit.	Assessed at 6 and 18 months Inpatient programme (n=32): 6 weeks. Carried out by multidisciplinary team (medical & paramedical staff). Eclectic approach to treatment: individual counselling, medical care, psychotherapy groups, social skills groups, educational lectures/films, recreational programme, AA groups. Families were included where possible. Outpatient programme (n=23): 6 weeks, conducted at community based clinic. Asked to attend with a spouse/friend, a twice-weekly outpatient evening programme run by multidisciplinary staff Confrontational interview (n=29): Structured interview at the clinic by a psychologist/social worker. 1-2 hours and based on guideline by Edwards et al & O'Neill. Non-hospital support and seeking support were encouraged.
Rychtarik 2000 (USA)	Inpatient Intensive outpatient Standard outpatient	PDA DDD	DDD (m, SD): Inpatient 10.95(8.14) Intensive outpatient 10.24(6.62) Standard outpatient 10.66(6.77)	Study population: n=192, treatment seeking at a abstinence oriented residential alcohol treatment facility (clinical research centre of the research institute on addictions) but who didn't need assisted withdrawal (if needed assisted withdrawal, referred onwards) Inclusion criteria: a score of 9 or more on AUDI, living within commuting distance of the treatment site, no treatment for substance abuse (other than assisted withdrawal) in past 30 days, active drinking in the past 3 months, no need	Assessed at 6, 9, 12, 15 and 18 months post-treatment. Inpatient (n=62): Scheduled for 41 separate manual guided active treatment sessions (Excluding AA) over 28-day period. Sessions were in addition to activity therapy, interactions with nurses and night staff, and the milieu of residential care. Allowed weekend day passes after their 1st week. Primary treatment components were: a) seventeen 90-min group therapy session; 8 individual counselling sessions (2x week) with a 90-min MI followed by 1-hr sessions involving significant other, 13 1-hr group lectures w/ handbook (RP, AA), three 90-min family group sessions, contracting, attend min of 4 AA meetings

Alcohol Use Disorders: Rehabilitation study characteristics

				<p>for assisted withdrawal, no current legal problems, no serious current psychiatric symptoms (i.e. psychotic episode), able to provide a collateral</p> <p>Exclusion criteria: homeless, required assisted withdrawal upon entry to the study.</p>	<p>during each week of program.</p> <p>Intensive outpatient (n=69): Manual guided active treatment components of the intensive outpatient condition were identical in content/frequency/intensity to those in inpatient condition except for activity therapy, additional interactions w/ nurses/night staff and milieu of residential treatment. Group therapy sessions held 5 days a week of 28 day period, lectures before each group session / week, individual sessions scheduled.</p> <p>Standard outpatient (n=61): Schedule for 8 manual guided active treatment components over 28 days (4 individual sessions, 4 group therapy sessions). Contracted to attend min. 2 AA/NA meetings each week. Lower intensity than other 2 conditions. Group therapy focused on problem solving skills, assertiveness training. Bibliotherapy instead of educational lectures.</p>
Walsh1991 (USA)	<p>Compulsory inpatient treatment</p> <p>Compulsory attendance at AA meetings (outpatient)</p> <p>“Choice” of option (control)</p>	Number of participants with continuous abstinence	<p>Averaged:</p> <ul style="list-style-type: none"> - 6.3 drinks a day - 19.8 drinking days in the month preceding the interview - 21% had been drinking daily - 45% weekly in previous month; - 24% at least one binge in prev. 6 months - 25% 3 or more blackouts. 	<p>Study population: n=227, all patients part of an employee assistance program with an alcohol problem interfering with their work. 96% male, 90% Caucasian, blue-collar workers in skilled and semiskilled jobs.</p> <p>Inclusion criteria: Required to be new to the employee assistance program (Even if previously been treated elsewhere), alcohol abuse as primary problem, had to be uncertain if hospitalization was required (in “gray zone”).</p> <p>Exclusion criteria: If required medically supervised assisted withdrawal, recent history of DTs or grand mal seizures during alcohol withdrawal, clear signs and symptoms suggesting imminent onset of DTs, if required medical attention for a serious illness; if posed an immediate danger to themselves/others; if needed psychiatric care for delusions or other gross impairments of mood, language, memory, or perception of reality, or difficult to follow up because about to be jailed or fired.</p>	<p>Assessed at 1, 3,6, 12 18 and 24 months posttreatment.</p> <p>Compulsory hospitalization(n=73): required to undergo inpatient treatment of 3 weeks duration. Abstinence as goal of treatment. Hospital stay was followed by a year of job probation during which attendance at AA meetings on a regular basis (at least 3 times a week) sobriety at work, and weekly checks w/ the employee assistance program staff were required.</p> <p>Compulsory AA only(n=83): Referred and offered an escort to a local meeting of AA, which they were advised to continue attending daily if possible, but not less than 3 times a week, for at least a year. Treated same as subjects in hospital group for the year after discharge.</p> <p>Choice(n=71): Not required to join AA or enter a hospital, although encouraged by hospital staff.</p>

Note: **DDD:** Drinks per drinking day; **PDA:** Percent days abstinent; **RP:** Relapse prevention; **AA:** Alcoholics Anonymous; **NA:** Narcotics Anonymous; **DT:** Delirium tremens

Alcohol Use Disorders: Rehabilitation study characteristics

1.2 Residential units vs. day hospital

Study	Comparisons	Outcomes	Baseline Drinking Information	Population Characteristics and Inclusion/Exclusion Criteria	Treatment Characteristics and Assessment Points
Bell 1994 (USA)	Residential Unit Day Hospital	Attrition (number not retained in treatment)	42% in residential had alcohol problem; 58% day treatment had alcohol problem.	Study population: n=646. Site was a research focused multiple provider drug treatment facility for the indigent in Texas. 42-58% alcohol problem, 46-54% cocaine problem, 44-56% crack problem. 51% were homeless. Inclusion criteria: Financial indigence, drug problem, psychological stability. Exclusion criteria: Dual diagnosis patients	No follow-up Residential program (n=291): 28-day program. 8 hours a day of activities (mostly therapeutic and educational). Multi modal approach (different therapies and education). 7 day per week program. Outpatient day treatment program(n=355): 28-day program. 8 hours a day of activities (mostly therapeutic and educational). Multi modal approach (different therapies and education). 5 days per week.
Mckay1995 (USA) 2 arms of trial: Self-selecting and randomly assigned	Residential Unit Day Hospital	Mean number of drinking days Number any days intoxicated (>3 drinks) in last 30 days	Days of alcohol intoxication (in previous 30 days): M(SD) Random assignment Day hospital: 16.79(7.29) Inpatient : 12.96(7.64) Non-random assignment Day hospital: 14.52(8.21) Inpatient: 14.84(11.78)	Study population: n=144 male alcoholic veterans, all treatment seeking at the Addiction Recovery Unit of the Philadelphia VA medical centre. Day hospital patients were older, had higher psychiatric severity and better employment status. Inpatient more likely African American, received welfare and report more cocaine use. Exclusion criteria: Female, 60+ years old, abstinent 21 days or more in the 30 days before intake, severe medical problems, dementia, recent psychosis, history of schizophrenia, unstable residence, refused participation in research, referrals to treatment programs other than day hospital or inpatient care, unable to participate in research because of work, in another rehab or assisted withdrawal program before intake, or participating in another research study, pending incarceration.	Assessed at 3, 6 and 12 months. Day Hospital (n=24 randomized, n=65 non-randomized): 5 days/week (27 hrs) for 28 days. Therapy: milieu, daily group, family, individual counselling. Drug and Alcohol testing, recreation weekly (group), self-help group sessions, sponsor available, educational sessions 3x per week *Inpatient facility(n=24 randomized, n=31 non-randomized): Group/individual therapy, stress management, exercise & leisure groups, educational assessment, film discussion groups, spiritual counselling (48 hrs/week). Random drug & alcohol testing, must attend 5AA meetings/week. 28 day program.

Alcohol Use Disorders: Rehabilitation study characteristics

<p>McLachlan 1982 (CANADA)</p>	<p>Residential Unit Day Hospital</p>	<p>Number abstinent Relapse</p>	<p>Patients had been drinking regularly for an average of 23 years and excessively for average of 14 years. Drunk on average of 295 days in previous 365 days and consumed an average of 18 1.5-ounce drinks (17ml) of 40% ethanol per day.</p>	<p>Study population: n=100, all severely dependent, treatment-seeking alcoholics, nearly all employed, seeking treatment at a public hospital specializing in treating alcohol and drug misusers. 20% of pop previously treated for alcoholism. Inclusion criteria: Diagnosed as alcoholic, primary addiction alcohol rather than drugs, did not require a hospital bed for management of physical illness or withdrawal, could commute daily and agreed to accept either inpatient or day clinic treatment.</p>	<p>Assessed at 1 year follow-up. Inpatient (n=50): 7 day Assisted withdrawal, orientation and exams. Remaining 21 days group psychotherapy, education, physiotherapy and physical education, relaxation training, nutritional counselling, med consultation, lifestyle planning, disulfiram or calcium carbimide. Encouraged to attend weekly after meeting for 1 yr. Weekly contact by a volunteer in follow-up. 28 day treatment. Day hospital (n=50): Same as IP but in a day hospital setting. 28 day treatment</p>
<p>Fink1985 and Longabaugh1983 (USA)</p>	<p>Residential unit Day hospital</p>	<p>Number of patients abstinent Number of patients drinking daily</p>	<p>Days abstinent (past 180 days) 44.7 (50.12) Days with 6 drinks or more, past 180 days 83.23(61.54)</p>	<p>Study population: n=200. All severe alcoholics. Patients required detoxification at a hospital. 78% married, 98.3% Caucasian. 92% diagnosis of alcoholism. Inclusion criteria: Diagnosis of alcohol abuse or alcohol dependence or a problem list entry of alcohol abuse in the problem-oriented medical record, a score of 5 or greater on the MAST Exclusion criteria: Acutely suicidal or significantly disorganized by psychosis, irreversible brain syndrome.</p>	<p>Assessed at 6, 12, 18, 24 months. Inpatient (n=60): Subjects received 1 week of detox and medical/psychiatric assessment and inpatient treatment, followed by a behaviourally oriented problem drinkers program (provided in a psychiatric ward). 16.5 days of IP, 10.6 six and a half hour sessions (68.3 hours together) Outpatient (n=114): After inpatient detox, same behaviourally oriented problem drinker program as inpatient. Behavioural analysis and teaching of behaviour change skills, goal setting, education of patients and families, modelling of abstinence by volunteers, and social skills training. 14.7 days of program (14.6 6.5 hour sessions (94.9 hrs all together) of program</p>
<p>Rychtarik 2000 (USA)</p>	<p>Residential Unit Intensive outpatient Standard outpatient</p>	<p>PDA DDD</p>	<p>DDD (m, SD) Inpatient (n=62) 10.95(8.14) Intensive outpatient (n=69) 10.24(6.62) Standard outpatient (n=61) 10.66(6.77)</p>	<p>Study population: n=192, treatment seeking at a abstinence oriented residential alcohol treatment facility (clinical research centre of the research institute on addictions) but who didn't need assisted withdrawal (if needed assisted withdrawal, referred onwards) Inclusion criteria: a score of 9 or more on AUDI, living within commuting distance of the treatment site, no treatment for substance abuse (other than assisted withdrawal) in past 30 days, active drinking in the past 3 months, no need for assisted withdrawal, no current legal problems, no serious current psychiatric symptoms (i.e. psychotic episode), able to provide a collateral</p>	<p>Assessed at 6, 9, 12, 15 and 18 months post-treatment. Inpatient (n=62): Scheduled for 41 separate manual guided active treatment sessions (Excluding AA) over 28 day period. Sessions were in addition to activity therapy, interactions with nurses and nigh staff, and the milieu of residential care. Allowed weekend day passes after their 1st week. Primary treatment components were: a) 17 90-min group therapy session; 8 individual counselling sessions (2x week) with a 90-min MI followed by 1-hr sessions involving significant other, 13 1-hr group lectures w/ handbook (RP, AA), 3 90-min family group sessions, contracting, attend min of 4 AA meetings during each week of program. Intensive outpatient (n=69): Manual guided active treatment components of the intensive outpatient condition were identical in</p>

Alcohol Use Disorders: Rehabilitation study characteristics

				<p>Exclusion criteria: homeless, required assisted withdrawal upon entry to the study.</p>	<p>content/frequency/intensity to those in inpatient condition except for activity therapy, additional interactions w/ nurses/night staff and milieu of residential treatment. Group therapy sessions held 5 days a week of 28 day period, lectures before each group session / week, individual sessions scheduled.</p> <p>Standard outpatient (n=61): Schedule for 8 manual guided active treatment components over 28 days (4 individual sessions, 4 group therapy sessions). Contracted to attend min. 2 AA/NA meetings each week. Lower intensity than other 2 conditions. Group therapy focused on problem solving skills, assertiveness training. Bibliotherapy instead of educational lectures.</p>
Weithmann 2005 (GERMANY)	Residential unit Day Hospital	PDA DDD Relapse Premature termination Continuous abstinence	<p>DDD (m, SD) Inpatient: 12.3(6.9) Day hospital: 26.6(32.2)</p> <p>PDA (m, SD) Inpatient: 26.6(32.) Day hospital: 28.6(28.9)</p> <p>Drinking day = 30 days before admission.</p>	<p>Study Population: n=109, all treatment seeking, those with an additional psychiatric disorder were excluded; treated at a psychiatric hospital in Germany.</p> <p>Inclusion criteria: Patients with severe alcohol dependence, treatment-seeking.</p> <p>Exclusion criteria: 7.7% of patients were excluded because of an additional psychiatric disorder, serious somatic consequences of consumption or other medical problems requiring prolonged inpatient treatment, impending or manifest DT's or complicated withdrawal requiring > 7 days of inpatient medical treatment, acute suicidal ideation or intent, not living close to hospital, homeless, living in a social care facility.</p>	<p>Assessed at 3,6,9 and 12 months after discharge.</p> <p>Inpatient (n=54): Somatic treatment of withdrawal symptoms + broad-spectrum psychosocial therapeutic elements. Integrated group and individual therapy sessions, MET elements, theme-centred groups, family counselling as well as occupational/creative art therapy, multimodal and abstinence oriented treatment approach. Advised to attend AA after treatment. Pharma treatment of withdrawal symptoms. 4 week duration.</p> <p>Day hospital (n=55): Same treatment, however patients could leave the ward in the afternoons and stayed home on weekends, while IPs could engage in structured activities.</p>
Withbrodt 2007 (USA)	Rehabilitation Unit Day Hospital	Number Abstinent at 6 and 12 month FU	<p>ASI score (m, SD) .44(.33)</p>	<p>Study population: n=733, All treatment seeking from metropolitan area chemical dependence programs. Majority had drug dependence but 66% alcohol dependent. 21% crack and 21% stimulant dependence. 40% polysubstance dependence.</p> <p>Inclusion criteria: had to meet ASAM level III patient placement criteria (American Society of Addiction Medicine)</p>	<p>Assessed at 6 and 12 month follow-up.</p> <p>Day hospital(n=154 randomized, n=321 self-selected day treatment): 5 day hospital programs representative of mainstream private community day programs developed as an alternative to Minnesota model inpatient treatment. Treatment consisted of didactic and counselling groups. Clients spent 3-4 hrs a day in groups at the 2 week CD program and 5.5 hr/day at 3 week CD program. Clients expected to attend 12-step meetings during treatment.</p> <p>Community residential(n=139 randomized, n=82 directed to</p>

Alcohol Use Disorders: Rehabilitation study characteristics

				<p>Exclusion criteria: Inability to speak English departure from the assisted withdrawal unit against medical advice, pending legal issues, treatment in the prior 30 days, participation in another CD program study, involvement in methadone maintenance. Some participants excluded because mandated to day hospital by an employer or judge.</p>	<p>community residential): 7 programs. Clinical staff monitored a client's need to stay in residential program on a weekly basis by making calls to the program to assess progress and need for continued stay. Like day hospital, residential clients were also encouraged to step down to progressively lower levels of care (day treatment and/or outpatient groups) at a CD program in the weeks following their stay in a community residential program. Didactic and process groups & attended 12-step groups or meetings daily (in house/community). Didactic sessions focused on working a 12-step program.</p>
--	--	--	--	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

Note: **DDD:** Drinks per drinking day, **PDA:** Percent days abstinent

1.3 Day hospital vs. outpatient treatment

Study	Comparisons	Outcomes	Baseline Drinking Information	Population Characteristics and Inclusion/Exclusion Criteria	Treatment Characteristics and Assessment Points
Morgenstern 2003 (USA)	Day hospital (partial hospitalisation) Outpatient	PDA	<p>PDA (m, SD):</p> <p>Inpatient: 48.1</p> <p>Intensive outpatient: 54.4</p> <p>Outpatient: 61.8</p>	<p>Study population: n=252 individuals seeking treatment in a 12-step oriented community based substance abuse treatment program, over 50% were an ethnic minority.</p> <p>Inclusion criteria: Must meet American Society of Addiction Medicine (SAM) patient placement criteria for low intensity outpatient treatment or level 1. Had to meet current DSM-IV substance use disorder criteria.</p> <p>Exclusion criteria: no substance use in prior 60 days, intensive treatment in the past month, less than 6th grade reading level, no stable residence, taking methadone, difuslfirm or naltrexone, IV drug use in past 6 months, gross cognitive impairment, psychiatric, medical or legal problems interfering with study participation, no collateral, required a higher level of care.</p>	<p>Assessed at 3, 6, 9 months</p> <p>Standard outpatient (n=103): no group treatment, 12 weekly sessions of individual counselling</p> <p>Intensive outpatient (n=55): received 9 hours a week of group treatment in addition to the study counselling. Attended average of 22.77 days of group treatment</p> <p>Partial hospital (n=94): Received 20-30 h a week of group treatment plus the study counselling. Attended average of 31.3 days of group treatment</p>
Rychtarik 2000 (USA)	Day hospital	PDA	DDD (m, SD)	Study population: n=192, treatment seeking at a	Assessed at 6, 9, 12, 15 and 18 months post-treatment.

Alcohol Use Disorders: Rehabilitation study characteristics

	Standard outpatient	DDD	<p>Inpatient (n=62) 10.95(8.14)</p> <p>Intensive outpatient (n=69) 10.24(6.62)</p> <p>Standard outpatient (n=61) 10.66(6.77)</p>	<p>abstinence oriented residential alcohol treatment facility (clinical research centre of the research institute on addictions) but who didn't need assisted withdrawal (if needed assisted withdrawal, referred onwards)</p> <p>Inclusion criteria: a score of 9 or more on AUDI, living within commuting distance of the treatment site, no treatment for substance abuse (other than assisted withdrawal) in past 30 days, active drinking in the past 3 months, no need for assisted withdrawal, no current legal problems, no serious current psychiatric symptoms (i.e. psychotic episode), able to provide a collateral</p> <p>Exclusion criteria: homeless, required assisted withdrawal upon entry to the study.</p>	<p>Inpatient (n=62): Scheduled for 41 separate manual guided active treatment sessions (Excluding AA) over 28 day period. Sessions were in addition to activity therapy, interactions with nurses and night staff, and the milieu of residential care. Allowed weekend day passes after their 1st week. Primary treatment components were: a) 17 90-min group therapy session; 8 individual counselling sessions (2x week) with a 90-min MI followed by 1-hr sessions involving significant other, 13 1-hr group lectures w/ handbook (RP, AA), 3 90-min family group sessions, contracting, attend min of 4 AA meetings during each week of program.</p> <p>Intensive outpatient (n=69): Manual guided active treatment components of the intensive outpatient condition were identical in content/frequency/intensity to those in inpatient condition except for activity therapy, additional interactions w/ nurses/night staff and milieu of residential treatment. Group therapy sessions held 5 days a week of 28 day period, lectures before each group session /week, individual sessions scheduled.</p> <p>Standard outpatient (n=61): Schedule for 8 manual guided active treatment components over 28 days (4 individual sessions, 4 group therapy sessions). Contracted to attend min. 2 AA/NA meetings each week. Lower intensity than other 2 conditions. Group therapy focused on problem solving skills, assertiveness training. Bibliotherapy instead of educational lectures.</p>
--	---------------------	-----	----------------------------------------------------------------------------------------------------------------------------------------------	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

Note: **DDD:** Drinks per drinking day, **PDA:** Percent days abstinent

1.4 Residential unit vs. Residential unit (two different therapeutic approaches)

Study	Comparisons	Outcomes	Baseline Drinking Information	Population Characteristics and Inclusion/Exclusion Criteria	Treatment Characteristics and Assessment Points
Keso1990 (FINLAND)	<p>Minnesota model residential rehabilitation unit (Kalliola)</p> <p>Traditional</p>	<p>Number abstinent</p> <p>Controlled Drinking, excluding those who are abstinent</p>	<p>Consumption of alcohol 2 month average in grams per day (m, SD)</p> <p>Kalliola:</p>	<p>Study Population: n=35 employed severely dependent alcoholics; 65% had previous outpatient treatment.</p> <p>Inclusion criteria: DSM-III criteria for alcohol dependence, no polysubstance abuse.</p>	<p>Assessed bi-monthly for 1 year</p> <p>Minnesota Hazelden based treatment (Kalliola) n=74: Only treated employed alcoholics. Aim of treatment is enduring abstinence. Highly structured treatment scheme (education, therapy, AA-program, once weekly group therapy sessions).</p>

Alcohol Use Disorders: Rehabilitation study characteristics

residential rehabilitation unit (Jarvenpaa)	Relapse	112.2(80.3) Jarvenpaa: 98.3(72.8)	Exclusion criteria: Patients who did not have serious problems with alcohol (didn't meet DSM-III criteria), refused either inpatient treatment or follow-up, had preference for specific institution, were a drug addict, were expected to be imprisoned during follow-up, whose state of health precluded normal life (serious brain damage, severe psychiatric illness).	Expected participation in AA meetings. 28 days treatment. Traditional treatment (Jarvenpaa) n=67: Treatment to all alcoholics (not only employed) and to families when necessary. Abstinence recommended but treatment aims worked on. Incorporates personal therapy, group therapy, family and work therapy. 8 hrs of psychotherapy each week. Option to go home during treatment occasionally. Treatment not highly structured and varies from one ward to another. Patient expected to stay at least 6 weeks and AA-attendance post-treatment is recommended but no arrangements made.
---------------------------------------------	---------	--------------------------------------	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

1.5 Short vs. long duration inpatient treatment

Study	Comparisons	Outcomes	Baseline Drinking Information	Population Characteristics and Inclusion/Exclusion Criteria	Treatment Characteristics and Assessment points
Mosher 1975 (USA)	9 day inpatient stay 30 day inpatient stay	Abstinence (complete) Abstinence 60-90% of the time Abstinent less than 60% of the time	All diagnosed alcoholics.	Study population: n=200, all patients eligible except those with psychosis, chronic brain syndrome or severe physical disease. Patients were admitted for the management of alcohol withdrawal, health problems associated with excessive drinking and intervention in behavioural patterns related to alcohol consumption. 12% of patients came from skid row. Inclusion criteria: All patients were eligible unless they met exclusion criteria. Exclusion criteria: Psychosis diagnosis, chronic brain syndrome or severe physical disease (this excluded 8% of the pop)	Assessed at 3, 6 months Medical assisted withdrawal took place first 3-5 days and remaining time allotted to individual counselling, group discussions and AA meetings. All patients attended a 9-day program. Long Inpatient (n=95): Assisted withdrawal followed by individual counselling, group discussions, AA meetings, recreational therapy and educational films. 21 days of additional stay. Short inpatient (n=105): 3-5 days of assisted withdrawal first, then individual counselling, group discussion and AA meetings. 9 day stay.

Alcohol Use Disorders: Rehabilitation study characteristics

<p>Pittman 1972 (USA)</p>	<p>Inpatient care with outpatient elements Inpatient care only</p>	<p>Abstinence (number of participants abstinent)</p>	<p>92.3% intoxicated upon admission to treatment, all alcoholism diagnosis.</p>	<p>Study Population: n=255, moderate to severely dependent alcoholics, admitted to the Alcoholism treatment and research centre of the Malcolm bliss mental health centre, an acute admitting/ short term public psychiatric treatment facility. Centre did not require patients to be abstinent from alcoholic beverages upon admission.</p> <p>Inclusion criteria: Steady socioeconomic status (married, living with spouse or family members or friends, stead job for 2 or more yrs in last 10 years, referral, self or by family or agency)</p> <p>Exclusion criteria: Participants with progressive or debilitating medical disease, (cirrhosis, cancer), psychiatric disease (OCD, schizophrenia, chronic brain syndrome).</p>	<p>Assessed at 3 and 12 months</p> <p>Inpatient and outpatient: (n=177): Extensive treatment regimen, consisting of: medical psychiatric social casework treatment, group therapy, didactic lectures, OT, in addition to assisted withdrawal. After 3-6 weeks of inpatient care, encouraged to have outpatient contact with treatment staff, return to participant in AA group and referred to social agencies in the community. More broad coverage of illness over longer period of time devoted to both in & outpatient activities.</p> <p>Inpatient only (n=78): Given standard assisted withdrawal (7-10 days of inpatient care). Encouraged to participate in therapy, lectures, designed for the experimental group. Offered no outpatient aftercare.</p>
<p>Stein 1975 (USA)</p>	<p>In an inpatient alcohol treatment centre: Assisted withdrawal and aftercare services Assisted withdrawal and aftercare services + intensive psychosocial in-hospital treatment</p>	<p>Abstinence (number of participants abstinent)</p>	<p>All had primary diagnosis of alcoholism</p> <p>M(SD) of previous alcohol admissions: 1.93(2.02) for D group, 2.93(2.62) for TR group</p>	<p>Study Population: Men; 33% married and living with family, many had regular jobs, seeking treatment at an Alcoholic Treatment Centre of Mendota State hospital in US.</p> <p>Inclusion criteria: Patients who had fewer than 5 prev. admissions to Centre, had to be local residents.</p> <p>Exclusion criteria: Those with severe psychiatric or physical disease. Excluded if required more than 10 days of assisted withdrawal.</p>	<p>Assessed at 2, 4, 7, 10, and 13 months after admission into the study.</p> <p>Assisted withdrawal and after care services (n=29): mean length of stay= 9 days. Assisted withdrawal and any medical problem needing attention was addressed. Social worker assessed needs for aftercare services with patients. Arrangements were made with agencies to provide services in the community prior to discharge. Mean number of days spent in hospital 9.31(1.85)</p> <p>Assisted withdrawal, aftercare + psychosocial inhospital treatment (n=29) : Mean length of stay = 30 days. 25 days in eclectic milieu program that included small group psychotherapy, ward meetings, AA, recreational and occupational therapy, and didactic lectures on the medical and psychological aspects of alcohol and alcoholism. Religious counselling and volunteer support available upon request. Mean number of days spent in hospital 30.45(2.86)</p>

Studies not included in meta-analyses but described in evidence summary

Alcohol Use Disorders: Rehabilitation study characteristics

Study Characteristics & Reason for Exclusion	Treatment Characteristics
<p>CHICK1988(UK) 1. Simple advice 2. Amplified advice 3. Extended inpatient or outpatient treatment</p> <p>Reasons for Exclusion from Meta-Analysis Did not meet definition of residential rehabilitation unit</p>	<p>Baseline characteristics Consumption in past week or typical week : <1000 g (%) : Simple advice: 39, Amplified advice: 48, Extended treatment: 34 1000-1600 g (%) Simple advice: 22 Amplified advice: 28 Extended treatment: 26 1600 g (%) : Simple advice: 39 Amplified advice: 24 Extended treatment: 40</p> <p>Treatment Characteristics Simple advice (n=41): no longer than 5 minutes, patient told they had drinking problem and should address the issue Amplified advice (n=55): Same as simple advice but psychiatrist allowed 30-60 minutes during which he/she attempted to enhance motivation of patients. Similar to motivational interviewing but not same method. Extended treatment (n=58): Offer of further help post-advice, including assisted withdrawal, further appointments or inpatient or day patient attendance at 2-4 week milieu and group therapy based treatment programme. Counselling offered as either non-directive or cognitive in style, programme oriented towards abstinence. Assessment Points: 2 years</p>
<p>EDWARDS1967 (UK) 1.Inpatient programme 2.Outpatient programme</p> <p>Reasons for exclusion from meta-analysis No usable outcome data to put into meta-analyses</p>	<p>Baseline characteristics: Average stated daily alcohol consumption was equivalent to 500 ml per day and 480 ml per day absolute alcohol for inpatients and outpatients</p> <p>Inpatient (n=20): patients admitted to 30 bed general psychiatric ward on which there were 4-5 alcoholics. Eclectic treatment regimen. Patients encouraged to attend meetings (AA) and sponsor accompanied patients to meetings. Calcium carbimide given each day. Social worker and family case-work. Approx stay 8 weeks. Outpatient group (n=20): Similar treatment except emphasis was placed on the need to regard alcoholism as an illness. Length of treatment was 8 weeks Assessment points: 12 months</p>
<p>ERIKSEN1986 (NORWAY) 1.Inpatient treatment 2.Wait list control</p> <p>Reasons for exclusion from meta-analysis No usable outcome data to put into meta-analyses; Too small of a sample size</p>	<p>Baseline characteristics: None mentioned</p> <p>Waiting list group (n=8): Patients told to wait before admission to inpatient treatment unit due to lack of capacity. Short report questionnaire concerning 4 behaviours. Given an appointment 2 weeks later – self reports reviewed, proceed waiting time. 2nd appointment, after 4 weeks, patients told they could join. Inpatient treatment group (n=9): Traditional short term abstinence oriented inpatient treatment: individual counselling, discussion groups, occupational training, recreational activities, physical training, educational sessions. Average inpatient stay 47 days. Assessment Points: 2, 3 months</p>
<p>FOSTER2000(UK) 1.7-day stay in assisted withdrawal</p>	<p>Baseline characteristics All DSM-IV alcohol dependent subjects requiring assisted withdrawal 53% of clients had a score on the SADQ within the severe range, >30 (SS mean: 30.1, LS mean: 32.1)</p>

Alcohol Use Disorders: Rehabilitation study characteristics

<p>2.28-day stay (assisted withdrawal + residential treatment)</p> <p>Reasons for exclusion from meta-analysis Allocation was not random</p>	<p>Treatment Characteristics Short stay group (n=32): Admitted for assisted withdrawal only which could last up to 7 days (medical intervention). Alcohol withdrawal treated with diazepam. Discussion of plans for discharge. Long-stay (n=32): Further residential period which could be up to an additional 21 days. Opportunity to set up further community or residential support. Assigned a key worker, nurse or social worker. Attendance at a daily group programme expected, focusing on relapse prevention, assertiveness training and social skills. Assessment Points: 3 months</p>
<p>LONG1998 (UK) 1. Two week inpatient (day) programme (assisted withdrawal) 2. Five week residential programme</p> <p>Reasons for exclusion from meta-analysis Allocation was not random</p>	<p>Baseline characteristics % days abstinent (m, SD): 4.73(17.87) Units per day (m, SD): 18.77(11.72) Treatment Characteristics: (n=212) Both treatments were identical in approach (both services targeted addiction-related problems and attended same types of sessions), with the exception that: Inpatients received more hours of care per day The 2 week programme involved both inpatient (assisted withdrawal) and day-patient elements Assessment Points: 6, 12 months</p>
<p>TRENT1998 (USA) 1. Four week inpatient stay 2. Six week inpatient stay</p> <p>Reason for exclusion from meta-analysis No usable outcome data; Allocation was not random</p>	<p>Baseline characteristics: None available Treatment Characteristics: Both inpatient settings (4 week, n=1380, and 6 week, n=1443) followed an open-format, milieu-based treatment protocol centred around Alcoholics Anonymous principles. Failure to comply with the treatment regimen can lead to expulsion from treatment and potential discharge from naval service. Counsellors determine a patient's actual length of stay in treatment based on the individual's responsiveness and needs; however, most enrolment terms coincide with the intended length of stay. An individualized aftercare program is mandated for one year, and patients in recovery are monitored by their command Drug and Alcohol Program Advisor. Assessment Points: 12 months</p>

1.6 Residential unit studies excluded from this guideline

STUDY ID	REASON FOR EXCLUSION
ARAUJO1996	Primary focus is drugs, not alcohol (8.1 % abusing alcohol, 8.8% other, 45.9% heroin, 37.2% cocaine)
BLONDELL2006	Primary focus is drugs, not alcohol
CHAN1997	Primary focus is drugs, not alcohol (5-16% drug of choice for alcohol, majority had crack/cocaine as drug of choice)
FRANKEN1999	Not an RCT; only 10% alcohol users combined with other substances
GOSSOP1998	Heroin dependence most frequently reported problem (only 28% alcohol as drug)
GUYDISH1998, GUYDISH1999	Primary focus is drugs, not alcohol

Alcohol Use Disorders: Rehabilitation study characteristics

MELNICK2001	Primary drug Crack, Heroin, and non-crack cocaine, only 17.6-20.6% of 2 cohorts had alcohol as primary drug
MELNICK2001b	10-12% of sample meet criteria for alcohol misuse/dependence; not enough of the sample is drinking
NUTTBROCK1997	No specification of alcohol misuse/dependence
OTOOLE2005	Drugs, not alcohol (96.4% heroin, Alcohol 44.6%) Chart review; not useful for analysis
PETTINATI1993	Research protocol; cannot meta-analyse
POWELL1985	More about medically managing disulfiram, not about different treatment settings
WESTREICH1997	Crack cocaine study not alcohol

References of Excluded Studies

- Araujo, L., Goldberg, P., Eyma, J., et al. (1996). The effect of anxiety and depression on completion/withdrawal status in patients admitted to substance abuse detoxification program. *Journal of Substance Abuse Treatment*, 13, 61-66
- Blondell, R., Amadasu, A., Servoss, T. et al. (2006). Differences among those who complete and fail to complete inpatient detoxification. *Journal of Addictive Diseases*, 25, 95-104.
- Chan, M., Sorensen, J., Guldish, J., et al (1997). Client satisfaction with drug abuse day treatment versus residential care. *Journal of Drug Issues*, 27, 367-377.
- Franken, I. & Hendriks, V. (1999). Predicting outcome of inpatient detoxification of substance abusers. *Psychiatric Services*, 50, 99-817.
- Gossop, M., Marsden, J., Stewart, D. et al (1999). Treatment retention and 1 year outcomes for residential programmes in England. *Drug and Alcohol Dependence*, 57, 89-98.
- Guldish, J., Sorensen, J. L., Chan, M., et al. (1999). A randomized trial comparing day and residential drug abuse treatment: 18-month outcomes. *Journal of Consulting & Clinical Psychology*, 67, 428-434.
- Melnick, G., De, L., Thomas, G., & Kressel, D. (2001). A client-treatment matching protocol for therapeutic communities: first report. *Journal of Substance Abuse Treatment*, 21, 119-128.
- Melnick, G., De, L., Thomas, G., Kressel, D., & Wexler, H. (2001). Treatment process in prison therapeutic communities: Motivation, participation, and outcome. *American Journal of Drug and Alcohol Abuse*, 27, 633-650.
- Nuttbrock, L., Ng-Mak, D., Rahav, M., et al. (1997). Pre and post admission attrition of homeless, mentally ill chemical abusers referred to residential treatment programs. *Addiction*, 92(10), 1305-1316.
- Nuttbrock, L., Rahav, M., Rivera, J., et al (1997). Mentally ill chemical abusers in residential treatment programs: Effects of psychopathology on levels of functioning. *Journal of Substance Abuse Treatment*, 14(3), 269-274.
- O'Toole, T., Conde-Martel, A., Young, J., et al. (2006). Managing acutely ill substance-abusing patients in an integrated day hospital outpatient program. *Journal of General Internal Medicine*, 21, 570-576.
- Pettinati, H., Meyers, K., Jensen, J., et al. (1993). Inpatient vs. outpatient treatment for substance dependence revisited. *Psychiatric Quarterly*, 64(2), 173-182.
- Powell, B., Penick, E., Read, M., et al. (1985). Comparison of three outpatient treatment interventions: A twelve-month follow-up of men alcoholics. *Journal of Studies on Alcohol*, 46(4), 309-312.
- Westreich, L., Heitner, C., Cooper, M. et al. (1997). Perceived social support and treatment retention on an inpatient addiction treatment unit. *The American Journal on Addictions*, 6(2), 144-149