2016

Forskning om effekt av rusbehandling for unge som har rusproblemer eller samtidig rusproblem og psykiske plager/psykisk lidelse

Systematisk litteratursøk med sortering

folkehelseinstituttet

Utgitt av Folkehelseinstituttet,
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Tittel Forskning om effekt av rusbehandling for unge som har rusproblemer eller samtidig rusproblem og psykiske plager/psykisk lidelse: Systematisk litteratursøk med sortering

English title Research on the effect of substance use interventions for youth who have a drug use disorder or co-occurring drug use disorder and mental problem/mental illness: Systematic literature search

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Innhold

Hovedbudskap

Kunnskapssenteret for helsetjenesten i Folkehelseinstituttet ved Seksjon for velferdstjenester fikk i oppdrag av Barne-, ungdoms- og familiedirektoratet å utføre et systematisk litteratursøk med påfølgende sortering av mulig relevante publikasjoner. Oppdraget var å identifisere studier om effekt av rusbehandling for unge mellom 13 og 23 år innenfor barnevern og psykisk helsevern som har rusproblemer eller samtidig rusproblem og psykisk lidelse.

Metode

En bibliotekar søkte i september 2016 i 13 samfunnsvitenskapelige og medisinske databaser etter litteratur fra 2000 til september 2016. Vi inkluderte systematiske forskningsoversikter og kontrollerte studier om effekten av rusbehandling for unge i alderen 13-23 år innenfor barnevern og psykisk helsevern som hadde rusproblemer eller samtidig rusproblem og psykisk lidelse. To forskere gikk gjennom identifiserte referanser og vurderte relevans i forhold til inklusjonskriteriene. Vi hentet ut noe beskrivende data fra inkluderte systematiske oversikter og randomiserte kontrollerte studier.

Resultater

Vi inkluderte 22 studier (én systematisk oversikt, 12 randomiserte kontrollerte studier, ni kontrollerte før-og-etter studier). Resultatene viste:

- Ulike psykoterapeutiske tiltak var den hyppigst undersøkte typen behandling.
- Den inkluderte systematiske oversikten vurderte effekten av rusbehandling i institusjon og konkluderte med at effekten var usikker.
- Blant de randomiserte kontrollerte studiene var motiverende samtale, med eller uten kognitiv atferdsterapi, den hyppigste undersøkte typen behandling.
- Bruk av alkohol og andre rusmidler var målt i den systematiske oversikten og alle de randomiserte kontrollerte studiene, og mange studier målte også problemer i tilknytning til bruk av rusmidler og psykiske helse.

Tittel:
Forskning om effekt av rusbehandling for unge som har rusproblemer eller samtidig rusproblem og psykiske plager/psykisk lidelse: Systematisk litteratursøk med sortering

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Publikasjonstype:
Systematisk litteratursøk med sortering

Et systematisk litteratursøk med sortering er resultatet av å
- søke etter relevant litteratur ifølge en søkestrategi og
- eventuelt sortere denne litteraturen i grupper presentert med referanser og vanligvis sammendrag

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Svarer ikke på alt:
- Ingen analyse eller sammenfatning av resultatene
- Ingen anbefalinger

Hvem står bak denne publikasjonen?
Kunnskapssenteret har gjennomført oppdraget etter forespørsel fra Barne-, ungdoms- og familiedirektoratet

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Når ble litteratursøket utført?
Søk etter studier ble avsluttet september 2016

Key messages

The Unit for Social Welfare Research at the Norwegian Knowledge Centre in the Norwegian Institute of Public Health was commissioned by the Norwegian Directorate for Children, Youth and Family Affairs to conduct a systematic literature search with a subsequent categorization of relevant research. The commission was to identify scientific evidence about the effect of substance abuse interventions for youth 13-23 years old, who have a drug use disorder or co-occurring drug use disorder and mental problem/mental illness, and who are linked to child welfare services or mental health services.

Methods

In September 2016, a librarian carried out the literature search in 13 social and medical scientific databases from 2000 to September 2016. Two researchers screened all identified references to assess inclusion according to predefined criteria. We extracted some descriptive data from the included systematic reviews and randomized controlled studies.

Results

We included 22 studies (one systematic review, 12 randomized controlled studies, nine controlled before-and-after studies). The results were:

- The most comon type of treatment was various psychotherapeutic treatment approaches.
- The systematic review evaluated the effect of residential treatment centers for substance-abusing adolescents, and concluded that it is uncertain if such centers are effective.
- Among the randomized controlled studies, motivational interviewing, with or without cognitive behavioral therapy, was the most common type of treatment.
- Use of alcohol and other drugs was measured in the systematic review and all the randomized controlled studies, and many studies also assessed problems in connection with substance use as well as mental health.

Title:
Research on the effect of substance use interventions for youth who have a drug use disorder or co-occurring drug use disorder and mental problem/mental illness: Systematic literature search

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Type of publication:
Systematic search and sort
A systematic search and sort is the result of a search for relevant literature according to a specific search strategy. The references resulting from the search are then grouped and presented

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Doesn't answer everything:
- No analysis or synthesis of the results
- No recommendations

Publisher:
National Institute of Public Health

Updated:
Last search for studies:
September 2016

Forord

Seksjon for velferdstjenester ved Kunnskapssenteret i Folkehelseinstituttet fikk våren 2016 i oppdrag av Barne-, ungdoms- og familiedirektoratet å identifisere forskning om effekt av rusbehandling til unge mellom 13 og 23 år innenfor barnevern og psykisk helsevern som har rusproblemer eller samtidig rusproblem og psykisk lidelse. Oppdraget var å utføre et systematisk litteratursøk med sortering. Vi har derfor gjort et systematiske litteratursøk, lest sammendrag og titler av identifiserte studier i tråd med definerte inklusjonskriterier, sortert inkluderte studier og presentert noe data fra de inkluderte studiene. Vi har ikke sammenstilt resultatene, slik vi ville gjort det i en systematisk oversikt.

Prosjektgruppen har bestått av:

- Jose F Meneses, forsker, Kunnskapssenteret
- Lien Nguyen, forskningsbibliotekar, Kunnskapssenteret
- Rigmor C Berg, seksjonsleder, Kunnskapssenteret

En stor takk til Hilde H. Holte som leste referanser og sorterte inkluderte studier sammen med førsteforfatter.

Signe Flottorp	Rigmor C Berg	Jose Meneses
Avdelingsdirektør	*Seksjonsleder*	*Prosjektleder*

Innledning

Problemstilling

Hva fins av forskning om effekt av rusbehandling til unge mellom 13 og 23 år innenfor barnevern og psykisk helsevern som har rusproblemer eller samtidig rusproblem og psykisk lidelse?

Bakgrunn

Forebygging og behandling av rusproblemer og psykiatriske lidelser er høyt prioritert hos helsemyndighetene (1). Rusmidler inkluderer alkohol, legemidler og ulovlige rusmidler (f.eks. cannabis, amfetamin, opiater og kokain) (2). Data fra World Drug Report 2016 (2) viste at mer enn 200 millioner mennesker brukte ulovlig rusmidler; cannabis var mest brukt, deretter kom opioider, amfetamin og kokain. I dag sliter over 29 millioner mennesker med rusproblemer, og av disse får kun én av seks behandling (2).

Høyest forekomst av injiserende rusmiddelbruk blant personer over 15 år finner vi i høyinntektsland. Norge er blant landene med høyest forekomst i Vest Europa med 0,26–0,50 %, høyere enn Sverige, men sammenlignbart med Finland, Danmark og Storbritannia (2). Rusproblemer blant unge er mer utbredt enn blant voksne (2). I løpet av perioden fra 2008-2009 til 2011-2013 har bruken av cannabis, amfetamin og kokain økt blant unge i Norge, mens bruken av heroin har sunket (3). Studien av Øia og kolleger viste at det mer bruk av cannabis og andre narkotiske stoffer i Oslo sammenlignet med i andre kommuner, mens innenfor Oslo varierte cannabisbruken mellom ca. 11-16 % i sentrum og vest, og 6 % - 8 % i øst (4). I tillegg har antallet sjåfører som blir arrestert på grunn av påvirkning av cannabis eller amfetamin i 2008-2009 steget (5).

Når det gjelder alkoholbruk, så viser undersøkelser at i Norge drikker personer over 15 år i gjennomsnitt ca. åtte liter ren alkohol hvert år. Forbruket har økt med ca. 40 % i løpet av de siste tjue årene (3). Studien "Ung i Oslo 2012" viste at ca. 29 % av unge (15-17 år gamle) hadde vært beruset av alkohol minst én gang (4). Alkoholforbruket blant jenter har økt mer enn blant gutter.

Flere studier har påvist en sammenheng mellom rusproblemer og forskjellig helseskader, slik som psykiske lidelser, overdoser, og infeksjoner med human immundefekt virus (HIV), hepatitt B og hepatitt C (2). Over 13 % av mennesker med injiserende rusmiddelproblemer har blitt diagnostisert med HIV, og mer enn halvparten lever med hepatitt C (2). Nesten 27 % av ulykkesrelaterte akuttbehandlinger på Oslo universitetssykehus er relatert til alkoholbruk (6).

For å håndtere problemene som følger med rusmisbruk har Verdens helseorganisasjon (WHO) valgt fem strategiske områder å jobbe med i 2016 (2):

1) Forebygging av rusproblemer og reduksjon av sårbarheter og risikoer
2) Behandling og omsorg til mennesker med rusproblemer og -lidelser
3) Forebygging og behandling for skader som følge av rusproblemer
4) Tilgang til kontrollerte legemidler
5) Overvåking og vurdering

World Drug Report viste nylig at unge søker behandling for problemer med amfetamin og cannabis oftere enn for andre rusmidler (2). Effektive tiltak for både rusmiddelproblemer og -skader kan bidra til å redusere folkehelseproblemer knyttet til rus og psykiske lidelser, og tiltak på systemnivå kan legge til rette for sammensatte helsetilbud til unge som trenger det (2). Helsedirektoratet har lagt fram Nasjonal strategiplan for arbeid og psykisk helse (2007-2012) og Oppfølgingsplan for arbeid og psykisk helse (2013-2016) som «sentrale føringer for ønsket utvikling og prioritering i tjenestetilbudet rettet mot brukere med psykiske vansker/lidelser» (7).

Styrker og svakheter ved systematisk litteratursøk med sortering

Vi gjennomførte et systematiske litteratursøk i elektroniske databaser og vurderte referansene opp mot inklusjonskritene. Vi innhentet relevante systematiske oversikter og randomiserte kontrollerte studier (RCTer) i fulltekst for endelig vurdering opp mot inklusjonskritene. Vi vurderte også den metodiske kvaliteten til de inkludert systematiske oversiktene. De to sistnevnte trinnene utføres vanligvis ikke ved litteratursøk med sortering, men ble gjort i dette tilfellet etter diskusjon med oppdragsgiver. Ved litteratursøk med sortering gjennomfører vi ingen sammenstilling av resultatene. I dette litteratursøket med sortering trakk vi ut noe deskriptiv informasjon fra de systematiske oversiktene og RCTene, men vi sammenstilte ikke resultatene.

Metode

Søkestrategien ble utarbeidet av forskningsbibliotekar Lien Nguyen. Strategien ble fagfellevurdert av en annen bibliotekar. Vi søkte systematisk etter litteratur i følgende databaser:

- MEDLINE (Ovid)
- PsycINFO (Ovid)
- EMBASE (Ovid)
- Cochrane Library (Cochrane Database of Systematic Reviews, Database of Abstracts of Reviews of Effects, Health Technology Assessment Database)
- Campbell Library
- CINAHL (EBSCO)
- Web of Science Core Collection (SCI-EXPANDED & SSCI)
- Sociological Abstracts (ProQuest)
- Social Services Abstracts (ProQuest)
- Epistemonikos
- PubMed

Søket ble avgrenset til år 2000 og nyere. Søket ble avsluttet i september 2016. Den fullstendige søkestrategien er vist i Vedlegg 1.

Inklusjonskriterier

Populasjon: Ungdom i alderen 13-23 år med enten a) rusproblemer eller b) rusproblemer og psykiske lidelser, som er i barneverninstitusjon eller psykisk helsevern, og som bor i høyinntektsland.

Med rusproblemer mener vi all skadelig eller farlig bruk av psykoaktive stoffer, inkludert alkohol og illegale rusmidler (1).

Med psykiske problemer mener vi psykiske plager og lidelser. Vi benytter Folkehelseinstituttets beskrivelse av psykiske plager og lidelser (8): Psykiske plager er tilstander som for enkeltindividet oppleves som belastende, men ikke i så stor grad at de karakteriseres som psykiske diagnoser. Betegnelsen psykiske lidelser benyttes kun når be-

stemte diagnostiske kriterier er oppfylt, men kan omfatte alt fra lettere angst og depresjonslidelser, til omfattende og alvorlige tilstander som schizofreni. Fellesnevner for alle psykiske lidelser er at de påvirker individets tanker, følelser, atferd og omgang med andre.

Barneverninstitusjon er en fellesbetegnelse for institusjonene i barnevernet. Institusjonene kan være private, offentlige eller ideelle. Det finnes ulike typer barnevernsinstitusjoner, bl.a. akutt- og utredningsinstitusjoner, omsorgsinstitusjoner og ungdomsinstitusjoner (9).

Psykisk helsevern er en samlebetegnelse for institusjoner i psykisk helsevern. I praksis dreier dette seg som oftest om avdelinger ved sykehus, men det kan også være en egen institusjon (9).

Vi benyttet følgende definisjon av høyinntektsland, publisert av Verdensbanken (10): et høyinntektsland med et bruttonasjonalprodukt per innbygger over US$12,475 i 2015. Derav inkluderte vi studier fra følgende land: Andorra, Antigua og Barbuda, Aruba, Australia, Bahamas, Bahrain, Barbados, Belgia, Bermuda, Brunei, Canada, Caiman Øyene, Chile, Curacao, Danmark, Ekvatorial-Guinea, Estland, Færøyene, Finland, Frankrike, Fransk Polynesia, Grønland, Guam, Hellas, Hong Kong, Island, Irland, Israel, Italia, Japan, Kanaløyene, Kroatia, Korea Rep, Kuwait, Kypros, Latvia, Liechtenstein, Litauen, Luxembourg, Macao, Malta, Monaco, Nederland, New Caledonia, New Zealand, Nord-Marianene, Norge, Oman, Polen, Portugal, Puerto Rico, Tsjekkia, Tyskland, Østerrike.

Tiltak: Alle typer rusbehandling, alene eller i kombinasjon med andre tiltak, som er rettet mot populasjonen beskrevet ovenfor. I henhold til helsenorge.no omfatter rusbehandling alle tiltak med mål om «å bidra til å fremme selvstendighet, tilhørighet og styrke evnen til å mestre eget liv for mennesker med psykiske lidelser og rusmiddelproblemer» (11).

Sammenligning: Andre aktive tiltak, standard tiltak, ingen tiltak.

Utfall: Alle typer utfall.

Studiedesign: Oversikter over oversikter, systematiske oversikter, randomiserte kontrollerte studier (RCT), ikke-randomiserte kontrollerte studier, kontrollerte før-og-etter studier, og avbrutte tidsserieanalyser.

Språk: Vi inkluderte studier på alle språk så lenge det fantes sammendrag på engelsk eller et annet språk som beherskes av prosjektgruppen (norsk, svensk, dansk, tysk, spansk).

År: Studier publisert 2000-2016.

Eksklusjonskriterier

Tiltak:	Primærforebyggende tiltak.
Studiedesign:	Ikke-empiriske studier og observasjonsstudier.

Artikkelutvelging

To forskere (JM og Hilde H. Holte) vurderte uavhengig av hverandre titler og sammendrag fra litteratursøket mot inklusjons- og eksklusjonskriteriene. Eventuell uenighet om en referanses relevans ble avgjort ved gjentatt lesing av sammendraget og påfølgende diskusjon. Det var i flere tilfeller vanskelig å avgjøre om populasjonen var tilknyttet barnevernet eller psykisk helsevern. Etter diskusjon med oppdragsgiver besluttet vi å inkludere studier der vi var i tvil om studiepopulasjonen faktisk var tilknyttet barnevernet eller psykisk helsevern.

Kvalitetsvurdering av systematiske oversikter

To av forfatterne (JM og RB) utførte uavhengig av hverandre en metodisk kvalitetsvurdering av de inkluderte systematiske oversiktene ved hjelp av Kunnskapssenterets sjekkliste. Uenighet ble avgjort ved gjentatt lesing av oversikten og påfølgende diskusjon. Vi utførte ingen metodisk kvalitetsvurdering av studier med andre studiedesign.

Uthenting av data

Prosjektleder (JM) hentet ut følgende data fra de inkluderte systematiske oversiktene og RCTene: forfattere, år, tittel, formålet med studien, dato for litteratursøket i systematiske oversikter, inkluderte studier i systematiske oversikter, populasjon, kontekst, tiltak, sammenlikning(er), utfall, resultat og konklusjon. RB sjekket at korrekte data var hentet ut. Vi hentet ikke ut data fra studier med andre design.

Beskrivelse av data

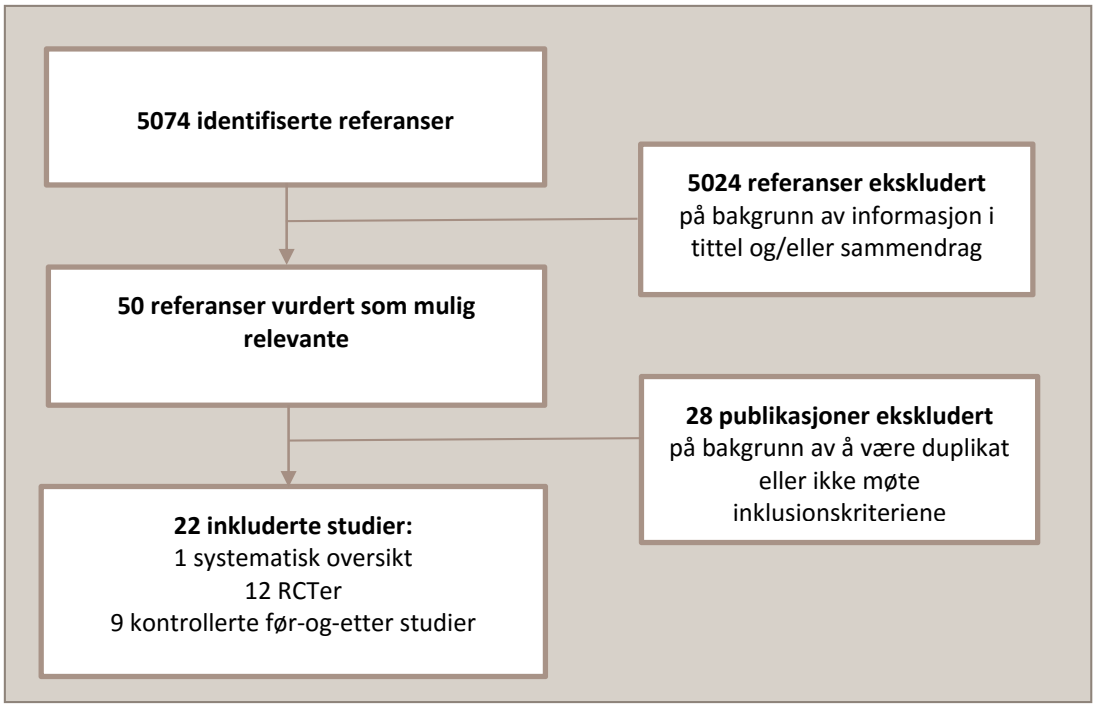
Basert på datauttrekket beskrev vi data for de inkluderte systematiske oversiktene og RCTene i tekst og tabeller. I tillegg gjenga vi forfatternes resultater og konklusjoner i tabeller.

For inkluderte kontrollerte før-og-etter studier gjenga vi referansene. Abstraktet er gjengitt i de tilfellene studien er publisert som open access (dette er i henhold til opphavsrett til åndsverk).

Resultater

Resultat av litteratursøket

Søket resulterte i 5074 referanser totalt. Av disse ble 5024 ekskludert i henhold til våre inklusjons- og eksklusjonskriterier. Hovedårsaken til eksklusjon var at populasjonen ikke var innenfor barnevern eller psykisk helsevern. Vi vurderte 50 referanser som mulig relevante, og inkluderte til slutt 22 studier. Utvelgelsesprosessen er illustrert i Figur 1.



Figur 1. Flytskjema over identifisert litteratur.

Beskrivelse av inkluderte studier

Vi inkluderte 22 studier: én systematisk oversikt, 12 RCTer og ni kontrollerte før-og-etter studier.

Den inkluderte systematiske oversikten omhandlet effekt av rusbehandling i institusjon. Behandling i institusjon betyr at rusmisbrukere bor i institusjon og får behandling 24 timer i døgnet i en periode på dager eller måneder. Også ni av primærstudiene undersøkte effekten av ulik behandling gitt i institusjon. Blant primærstudiene var det også noen studier som undersøkte effekten av motiverende samtale, med eller uten kognitiv atferdsterapi, samt familieterapi og ulike ikke-spesifiserte psykoterapeutiske tiltak. Psykoterapeutiske tiltak var den hyppigst undersøkte typen behandling. Få studier så ut til å vurdere rusbehandling med legemidler (Tabell 1). Vi gir ytterligere detaljer om den systematiske oversikten og de 12 RCTene nedenfor.

Tabell 1: *Inkluderte primærstudier sortert etter type tiltak/behandling*

Type tiltak/behandling	**Antall studier: 21**
Anonyme Alkoholikere 12-trinnsprogram	2
Motiverende samtale	6
Kognitiv atferdsterapi	2
Motiverende samtale + Kognitiv atferdsterapi	4
Multikomponent behandling i institusjon	9
Minnesota Model (rusbehandling)	1
Ikke spesifisert rusbehandling + psykologisk hjelp	1
Ikke-spesifisert psykoterapeutisk behandling	5
Familieterapi	3

Forklaring: Antall tiltak er høyere enn antall studier pga. at mange studier fordelte deltakerne til ulike aktive tiltak.

Beskrivelse av den inkluderte systematiske oversikten

Vi vurderte at den systematiske oversikten hadde lav metodologisk kvalitet (Vedlegg 2). Oversikten var utført av én forsker, Tripodi, som hadde søkt etter studier som var publisert etter 1990 og som hadde vurdert effekten av rusbehandling i institusjon eller kollektiv for ungdommer mellom 12 og 18 år (12). Forfatteren oppsummerte resultater fra 8 studier: syv kontrollerte studier og én ikke-kontrollert før-og-etter studie. Hvilken type behandling de unge mottok i institusjon (omfang, innhold, lengde intensitet, teoretisk tilnærming) var ikke nærmere beskrevet i oversikten. Tripodi beskrev heller ikke hva sammenligningen var. Hovedutfallet var rusmisbruk og oppfølgingstiden varierte mellom seks måneder og to år. Forfatteren oppsummerte resultatene slik: “Of the eight studies reviewed, only three used a strong quasi-experimental design. Out of the four most rigorous studies reviewed, two found significant differences in substance abuse reduction between the treatment and comparison groups. Of the remaining studies, despite having strong selectivity bias, only one found significant differences between

treatment and comparison groups, and it was for females only at the one year follow-up."

Tripodis' konklusjon var: "Due to the fact that the majority of studies that assess the influence of adolescent residential treatment centers on positive substance abuse outcomes have severe methodological limitations, social work practitioners and researchers remain unaware if residential treatment centers are effective for adolescents. Future studies must avoid methodological limitations that increase the chances of committing both type I and type II errors. Most importantly, social work researchers must implement truly comparable control groups that decrease the chances that adolescents in the experimental group are more motivated to change."

Beskrivelse av de inkluderte randomiserte kontrollerte studiene

Vi inkluderte 12 RCTer (13-26). Én studie, av Tait og medarbeidere, var presentert i tre publikasjoner som presenterte studiens resultater fra ulike oppfølgingstider (24-26).

De randomiserte kontrollerte studiene var publisert mellom 2002 og 2016. De fleste var fra USA, men der var også én studie hver fra Australia, Nederland, Spania og Sverige. De 12 studiene oppsummerte data fra 3200 ungdommer. Vi gir informasjon om populasjon, tiltak, sammenligning og utfall (PICO) i teksten nedenfor og PICO for hver studie er presentert i Tabell 2. Resultatene og konklusjon for hver RCT fins i Tabell 3.

Beskrivelse av PICO i de randomiserte kontrollerte studiene

Populasjon: Populasjonen i de 12 RCTene var ungdommer i alderen 12-22 år, med en gjennomsnittsalder på 15 år. En av studiene inkluderte kun jenter mens de andre ti studiene inkluderte både jenter og gutter der andelen jenter utgjorde mellom 20-75 % av utvalget (21). Studiene inkluderte ungdom med rusproblemer (15-17, 19-24) og ungdom med både rusproblemer og psykisk lidelse (13, 14, 18). Mange av ungdommene i studiene med ungdom med rusproblemer hadde også en psykisk lidelse, men ikke alle. Når det gjelder hvilken type rusproblemer ungdommene hadde så omhandlet én studie ungdom med cannabisavhengighet (19) og en annen studie ungdom med alkohol- eller rusavhengighet (23). Studien fra Sverige dreide seg om unge jenter med risikofylt alkoholbruk (21). De fleste studiene forklarte at ungdommene hadde et rusproblem (13-18, 20, 22-24).

Tiltak: Ulike typer tiltak var gitt i de inkluderte RCTene. Tiltakene var motiverende samtale (13, 18, 21), kognitiv atferdsterapi med en time motiverende samtale (14), sosial utvikling (15), multikomponent familieterapi (19) og kortvarig strategisk familieterapi (22). Én studie randomiserte ungdommene i fire grupper med ulike typer behandling, deriblant kognitiv atferdsterapi (16), og tre andre studier randomiserte deltakerne i to eller tre grupper der de blant annet kunne motta motiverende samtale (17, 20, 23). Den siste studien omhandlet et korttidstiltak som gikk ut på å identifisere og diskutere spesifikke negative konsekvenser i tilknytning til rusbruk (24).

Sammenligning: Den vanligste sammenligningen var standard behandlingstilbud. I noen av RCTene var deltakerne randomisert til å motta ett av flere aktive tiltak som ikke var et standard behandlingstilbud (16, 19, 20, 23).

Utfall: Bruk av alkohol og andre rusmidler var målt i alle studiene. I tillegg målte enkelte studier avholdenhet (16, 17, 20) og problemer i tilknytning til bruk av rusmidler (13-16, 18, 20). Seks av studiene målte psykisk helse (13, 14, 18, 19, 20, 24). Andre relevante utfall nevnt i studiene inkluderte kognitiv funksjon, kunnskap om rusproblemer og konsekvenser, kriminell atferd, forhold i familien, fravær fra skole eller jobb og voldelig atferd (se Tabell 2).

Tabell 2: *Beskrivelse av PICO i de inkluderte randomiserte kontrollerte studiene (n=12)*

Forfattere, år (ref)	**Populasjon** **Kjønn, alder, land**	**Tiltak** **Lengde/varighet**	**Sammenligning**	**Utfall**
Brown, 2015 (13)	n=151 psychiatrically hospitalized adolescents, with comorbid psychiatric and substance use disorder. Around 50% females. Ages 13–17. USA.	Motivational interviewing 2 sessions of 45-min (individual)	Treatment as usual	Daily alcohol and drug use (Timeline Follow-back interview). Negative (social, health, and legal) consequences (Adolescent Problem Use Scale). Psychiatric symptomatology and behavior problems (The Youth Self-Report).
Esposito-Smythers, 2011 (14)	n=40 psychiatrically hospitalized adolescents, with co-occurring alcohol or other drug use disorder and suicidality. 68% females. Ages 13-17 (mean=15). USA.	Integrated outpatient cognitive behavioral treatment with one session of motivational interviewing. *Acute phase (6 months)*: adolescents 1 session per week, parents 2-4 sessions per month. *Continuation phase (3 months)*: adolescents 2 sessions per month, parents 1-2 sessions per month. *Maintenance phase (3 months)*: adolescents 1 session per month, parents 1 session per month as needed.	Enhanced treatment as usual (diagnostic evaluation report that was shared with community providers, and medication management)	Cognitive functioning (The Kaufman Brief Intelligence Test). Treatment services (The Child and Adolescent Services Assessment). Psychiatric diagnosis (Schedule for Affective Disorders and Schizophrenia for School-Age Children). Alcohol/marijuana consumption and problems (Timeline Follow-back interview). Suicide attempts, ideation, and other adverse psychiatric/legal outcomes (suicide items from K-SADS-PL depression module). General Impairment (The Columbia Impairment Scale). Mental health symptoms (Reynolds Adolescent Depression Scale).

Forfattere, år (ref)	Populasjon Kjønn, alder, land	Tiltak Lengde/varighet	Sammenligning	Utfall
Friedman, 2002 (15)	n=251 court-adjudicated male adolescents in a residential treatment center for alcohol and other drug use. 24% females. Mean age=15 years. USA.	Social learning program, with an average of 34.2 sessions during one month. The program included: 1) Botvin Life Skills Training, 2) Prothrow-Stith Anti-Violence Program, 3) Values Clarification	Treatment as usual	Problem behaviors (Adolescent Drug Abuse Diagnosis. Competencies and problems (Youth Self-Report).
Godley, 2010 (16)	n=320 adolescents referred to services (by juvenile justice system, family member, agency, or other source) with a substance abuse or dependence diagnosis. 24% females. Ages 12-18 (mean=16). USA.	1) Chestnut Bloomington Outpatient, or 2) Cognitive Behavior Treatment /Motivational Enhancement Therapy (7 sessions).	1) Chestnut Bloomington Outpatient + Assertive Continuing Care, or 2) Cognitive Behavior Treatment /Motivational Enhancement Therapy+ Assertive Continuing Care (12 to 14 weeks)	Abstinence from alcohol and other drugs. Substance use problems (Substance Problem Scale). Recovery.

Forfattere, år (ref)	Populasjon Kjønn, alder, land	Tiltak Lengde/varighet	Sammenligning	Utfall
Godley, 2014 (17)	n=337 adolescents admitted to residential treatment for alcohol and other drug use. 37% females. Mean age=15 years. USA	1) Contingency Management (12 sessions), or 2) Assertive Continuing Care, or 3) Contingency Management + Assertive Continuing Care (12 sessions)	Usual Continuing Care	Abstinence from alcohol and other drugs (Global Appraisal of Individual Needs). Remission. Adverse events.
Goti, 2010 (18)	n=237 adolescents admitted to psychiatric department who reported substance use. Around 75% females. Ages 12-17 (mean=15). Spain.	Motivational Interviewing (1 session with adolescent and 1 session with parents or mentors)	Treatment as usual	Psychiatric diagnosis (DSM-IV). Substance-use pattern: Semi-structured interview and patients' clinical records (Adult Addiction Severity Index). Knowledge about psychoactive substances. Intention to use substances. Risk perception of substance use. Problems derived from substance use.
Hendriks, 2013 (19)	n=109 adolescents with a cannabis use disorder Around 20% females Age 13-18 (mean=17). Netherlands.	Multidimensional Family Therapy (3 sessions each week for 5-6 months)	Cognitive Behavioral Therapy (1 session each week for 5-6 months)	Cannabis use (Adolescent Diagnostic Interview, Diagnostic Interview Schedule for Children, Timeline Follow-back, Addiction Severity Index). Self-efficacy for drug use (Self-efficacy List for Drug Users). Delinquency (Self-report Delinquency Scale). Psychological problems (Youth Self Report). Family functioning (Family Environment Scale). Absence from school or work (Adolescent Interview).

Forfattere, år (ref)	Populasjon Kjønn, alder, land	Tiltak Lengde/varighet	Sammenligning	Utfall
Kelly, 2016 (20)	Adolescents with alcohol/drug use disorders. Further population details not reported. USA.	Integrated Twelve-Step Facilitation (iTSF): 2 individual and 8 group sessions over approximately 10 weeks	Motivational enhancement therapy/Cognitive Behavioral Therapy	Abstinence (% days abstinent, longest period of abstinence, proportion abstinent). Alcohol/drug consequences. Psychiatric symptoms.
Palm, 2016 (21)	n=1051 young women with risk drinking. 100% females. Age 15-22 (mean=18). Sweden.	Motivational Interviewing and a health dialogue with a midwife/social worker about alcohol consumption	Treatment as usual	Alcohol consumption, illegal substance use, tobacco smoking (AUDIT-C). Violence victimization (NorVold Abuse Questionnaire).
Robbins, 2011 (22)	n=471 adolescents referred for drug abuse treatment. Around 51% females. Mean age=15 years. USA.	Brief Strategic Family Therapy: 12-16 sessions over 4 months	Treatment as usual	Drug use (Timeline Follow-Back, urine drug screens) Drug abuse or dependence (Diagnostic Interview Schedule for Children). Family functioning (Parenting Practices Questionnaire, Family Environment Scale).
Slesnick, 2013 (23)	n=179 adolescents with alcohol or drug abuse dependence, recruited from a runaway shelter. Around 52% females. Age=12-17 (mean=15). USA.	1) Community Reinforcement Approach (14 sessions), or 2) Motivational Interviewing (4 sessions)	Ecologically-Based Family Therapy (14 sessions)	Frequency of drug and alcohol use (Form 90 Substance Use Interview). Illicit drug use (cannabinoids, amphetamines, methamphetamines, phencyclidine, cocaine/crack, opiates (urine samples),

Forfattere, år (ref)	Populasjon Kjønn, alder, land	Tiltak Lengde/varighet	Sammenligning	Utfall
Tait, 2004 (24) and Tait, 2005 (25) and Tait, 2016 (26)	n=127 adolescents with emergency department presentation that involved alcohol and other drug use. Around 45% females. Age=12-19 (mean=16). Australia.	Brief-intervention: identifying and discussing specific negative consequences associated with personal drug use, identifying impediments to reducing negative consequences and 'high-risk' (trigger) situations.	Treatment as usual	Drug related questions (Drug use of teenagers questionnaire). Family functioning (Family assessment device). General psychological well-being (General health questionnaire-12). Alcohol use disorders (AUDIT-3).

Beskrivelse av resultatene i de randomiserte kontrollerte studiene

Tabell 3 nedenfor gjengir forfatternes egne resultater og konklusjoner (på engelsk). Vi presenterer her en kort sammenfatning av hver av studiene på norsk:

Brown og medarbeidere (13) rapporterte at ungdommene som mottok motiverende samtale viste bedre resultater sammenlignet med de som mottok standard servicetilbud når det gjaldt tid inntil første bruk av rusmidler, mengde rusmiddelbruk og lovbrudd.

Esposito-Smythers og medarbeidere (14) fant at integrert kognitiv adferdsterapi var bedre enn standard servicetilbud med hensyn til noen utfallsmål angående bruk av rusmidler og suicidalitet. Kognitiv adferdsterapi var også bedre enn standard servicetilbud med hensyn til psykiske helseutfall og bruk av helsetjenester som akuttinstitusjoner.

Friedman og medarbeidere (15) kom frem til at opplæringen i sosiale ferdigheter var bedre enn standard servicetilbud når det gjaldt bruk av rusmidler og salg av rusmidler, men ikke alkoholbruk, vold eller problemer på skolen.

Den første studien til Godley og medarbeidere (16), som randomiserte ungdommer til fire ulike tiltak, viste at tiltaket 'Chestnut Bloomington Outpatient' hadde en litt bedre effekt på avholdenhet fra rusmidler enn de andre tre tiltakene. Den andre studien til Godley og medarbeidere (17), som også randomiserte ungdommer til fire ulike tiltak, viste at 'Contingency Management' var bedre enn 'Usual Continuing Care' når det gjaldt avholdenhet fra alkoholbruk, mens 'Assertive Continuing Care' var bedre enn 'Usual Continuing Care' med hensyn til generell bruk av rusmidler. Forfatterne konkluderte med at 'Assertive Continuing Care' og 'Contingency Management' var lovende tiltak for ungdom som hadde mottatt behandling i institusjon.

Studien fra Spania, av Goti og medarbeidere (18), viste at motiverende samtale førte til økte kunnskaper om rusmidler, sammenlignet med standard servicetilbud. Det var ingen forskjeller mellom gruppene med hensyn til bruk av rusmidler, intensjon om rusmiddelbruk, problemer i forbindelse med rusbruk, vurdering av risiko i forbindelse med rusbruk eller psykisk helse. Goti og medarbeidere konkluderte med at det nok ville være bedre effekt av en mer intensiv type tiltak.

Studien fra Nederland kom frem til at multikomponent familieterapi ikke var signifikant bedre enn kognitiv atferdsterapi, men at begge tiltakene over tid førte til positive effekter på cannabisbruk og kriminell atferd blant ungdommer med cannabis avhengighet (19).

Det var én RCT som undersøkte effekten av Anonyme Alkoholikere 12-trinnsprogrammet for ungdom (20). Forskergruppen konkluderte med at det var forskjeller mellom AA-tiltaket og det andre aktive tiltaket, i favør av AA-tiltaket og at det derfor virket lovende som et behandlingstilbud for ungdommer med rusproblemer.

Studien fra Sverige rapportere at motiverende samtale ikke var signifikant bedre enn standard servicetilbud, men at både motiverende samtale og standard tilbud over tid førte til positive effekter på alkoholbruk blant jenter med risikofylt alkoholbruk (21).

Robbins og medarbeidere (22) sammenlignet kortvarig strategisk familieterapi og standard servicetilbud. Resultatene viste at kortvarig strategisk familieterapi hadde bedre effekt på ungdoms selvrapporterte antall dager med rusbruk. Dette tiltaket var også bedre når det gjaldt foreldreinvolvering i behandlingen samt familierelasjoner.

Den siste studien fra USA, av Slesnick og medarbeidere (23), randomiserte ungdommer til tre ulike tiltak: motiverende samtale, familieterapi og 'Community Reinforcement Approach.' Den viste at det var små eller ingen forskjeller mellom tiltakene, men at alle over tid førte til reduksjon i bruk av rusmidler.

Til slutt nevner vi studien til Tait og medarbeidere, som var en RCT med langtidsoppfølging og resultater rapportert i tre publikasjoner (24-26). Resultatene viste at ved fire måneder var det korte tiltaket bedre enn standard servicetilbud med hensyn til generell psykisk helse, men ellers var det ingen statistisk signifikante forskjeller mellom gruppene på noe oppfølgingstidspunkt. Ved ti-års oppfølging var det heller ingen forskjeller i kostnadseffektivitet.

Tabell 3: *Resultater og konklusjoner fra de inkluderte randomiserte kontrollerte studiene (n=12).*

Resultater og konklusjon
Brown, 2015 (13)
"Results indicated that the MI group had a longer latency to first use of any substance following hospital discharge relative to TAU (36 days versus 11 days). Adolescents who received MI also reported less total use of substances and less use of marijuana during the first 6 months post-discharge, although this effect was not significant across 12 months. Finally, MI was associated with a significant reduction in rule-breaking behaviors at 6-month follow-up." *Conclusion*: "a motivational interviewing (MI) intervention targeting substance use that was provided to adolescents with comorbid psychiatric and substance use disorders during inpatient psychiatric hospitalization was associated with longer latency to first use of any substance following psychiatric hospital discharge, reduced frequency of marijuana and any substance use for 6 months post-discharge, and some effect on externalizing symptoms (specifically, reduction in rulebreaking behavior) but had no effect on internalizing symptoms for 6 months following treatment."
Esposito-Smythers, 2011 (14)
"Using intent-to-treat analyses, I-CBT was associated with significantly fewer heavy drinking days and days of marijuana use relative to E-TAU, but not drinking days. Those randomized to I-CBT in comparison to E-TAU also reported significantly less

Resultater og konklusjon
global impairment as well as fewer suicide attempts, inpatient psychiatric hospitalizations, emergency department visits, and arrests. Adolescents across groups showed equivalent reductions in suicidal ideation" *Conclusion*: "I-CBT for adolescents with co-occurring AOD and suicidality is associated with significant improvement in both substance use and suicidal behavior, as well as markedly decreased use of additional health services including inpatient psychiatric hospitalizations and emergency department visits. Further testing of integrated protocols for adolescent AOD and suicidality with larger and more diverse samples is warranted."
Friedman, 2002 (15)
"The follow-up assessment (N = 251), at six months after discharge to home and community, showed that the program group reported a significantly greater degree of reduction in drug use/abuse, and in the selling of drugs, but not in alcohol use, or in illegal violent behavior, or in school problems. By means of dosage and process analyses, it was determined that (1) it was the Botvin LST program that was effective in reducing substance use/abuse and the selling of drugs; and (2) that those participants who participated more positively in the Prothrow-Stith Anti-Violence program reduced their violent behavior at follow-up to a significantly greater degree." *Conclusion*: "The main conclusion from the experience of this project is that for adjudicated male adolescents, with problems sufficiently serious that removal from their home/school environments was indicated, our data suggest that an appropriate social learning model, the LST/Botvin program, can be effective in reducing the degree of use/abuse of drugs, and the degree of involvement in the selling of drugs, and that the P-S Anti-Violence program has the potential to be effective in reducing violent behavior. However, for the court-adjudicated population sampled by this project, the triple-modality classroom program that was utilized did not show a significant advantage for reducing the degree of illegal or violent behavior, or for reducing the degree of school problems."
Godley, 2010 (16)
"All study conditions attained high rates of participant engagement and retention. Follow-up interviews were completed with over 90% of the adolescents at three, six, nine, and twelve months after treatment admission. There was a significant time by condition effect over 12 months, with CBOP having a slight advantage for average percentage of days abstinent. Unlike previous findings that ACC provided incremental effectiveness following residential treatment, there were no statistically significant findings with regard to the incremental effectiveness of ACC following outpatient treatment. Analysis of the costs of each intervention combined with its outcomes revealed that the most cost-effective condition was MET/CBT7 without ACC." *Conclusion:* Main conclusions were not reported by authors

Resultater og konklusjon
Godley, 2014 (17)
"CM had significantly higher rates of abstinence than UCC for heavy alcohol use (t(297)= 2.50, p<.01, d = 0.34), any alcohol use (t(297)= 2.58, p<.01, d = 0.36), any AOD use (t(297)= 2.12, p=.01, d = 0.41), and had a higher rate in remission (Odds Ratio [OR]=2.45 [90% CI: 1.18 to 5.08], p=.02). ACC had significantly higher rates of abstinence than UCC from heavy alcohol use (t(297)= 2.66, p<.01, d = 0.31), any alcohol use (t(297)= 2.63, p<.01, d = 0.30), any marijuana use (t(297)= 1.95, p=.02, d = 0.28), any AOD use (t(297)= 1.88, p=.02, d = 0.30), and had higher rates in remission (OR=2.31 [90% CI: 1.10 to 4.85], p=.03). The ACC+CM condition was not significantly different from UCC on any outcomes." *Conclusion*: "CM and ACC are promising continuing care approaches after residential treatment. Future research should seek to further improve their effectiveness."
Goti, 2010 (18)
"No significant differences between the two groups were identified in socio-demographic features or substance-use. Nonparametric analyses showed a significant increase across time in overall knowledge about drugs and perception of risk in the experimental group (P<0.05). A significant increase in overall knowledge in the experimental group compared to controls was found (P<0.05). No differences were observed for other variables such as intention of use or perception of risk." *Conclusion*: "Brief intervention in adolescents entering psychiatric treatment led to a significant change in overall knowledge about psychoactive substances but not in other variables related to use. Our results point to the need of more intensive interventions."
Hendriks, 2013 (19)
"Adolescents in both treatment groups showed significant and relevant reductions in cannabis use and delinquency over 12 months. Although the MDFT treatment lasted longer and was more intensive than the CBT treatment, there was no difference in the key outcome measures of the treatments. Secondary analyses indicated that older adolescents and those without comorbid psychiatric problems derived considerably more benefit from CBT, whereas younger adolescents and those with comorbid psychiatric problems benefited much more from MDFT." *Conclusion*: "MDFT and CBT are equally effective in reducing cannabis use and delinquent behavior in adolescents with a cannabis use disorder. Age and comorbid psychiatric problems turned out to be important moderators of the treatment results of MDFT and CBT and could therefore be used as a starting point for matching adolescent substance abusers to the most appropriate type of treatment."
Kelly, 2016 (20)

Resultater og konklusjon
"Adolescents assigned to iTSF were significantly more likely to attend 12-step meetings during treatment (58% vs. 18%, $p < 0.001$). Accounting for baseline differences, patients assigned to iTSF had significantly fewer substance-related consequences during the follow up period relative to MET/CBT patients ($p < 0.003$). Findings also suggested longer periods of continuous abstinence favoring iTSF over time, but did not reach statistical significance." *Conclusion:* "This integrated Twelve-step Facilitation (iTSF) treatment appears promising in the treatment of adolescents with alcohol/drug use disorders. Relative to current state-of-the-science treatments such as MET/CBT, iTSF may be particularly useful at helping young people participate in 12-step mutual-help meetings, reduce negative consequences related to their substance use, and possibly achieve longer periods of sustained abstinence."
Palm, 2016 (21)
"Of 1445 eligible young women, 1051 (73%) consented to randomisation and were enrolled in the study. The follow-up rate was 54%. There was a significant decrease in risk- and binge drinking, from baseline to follow-up, in both the intervention and the control groups. Generalised estimating equation analyses demonstrated no significant effect between groups. Of participants who did not have risk drinking at baseline, about 20% in both groups had developed high-risk drinking by the 12-month follow-up." *Conclusion*: "No significant differences in risk drinking between young women who received motivational interviewing and controls were found. There was a large intra-individual mobility in young women's risk drinking behaviour. This highlights the importance of finding reliable screening tools that can capture the mobility in drinking behaviour in youth. More research is needed before recommendations can be made."
Robbins, 2011 (22)
"No overall differences between conditions were observed in the trajectories of selfreports of adolescent drug use. However, the median number of days of self-reported drug use was significantly higher, $\chi2(1) = 5.40$, $p < .02$, in TAU (Mdn = 3.5, interquartile range [IQR] = 11) than BSFT (Mdn = 2, IQR = 9) at the final observation point. BSFT was significantly more effective than TAU in engaging, $\chi2(1) = 11.33$, $p < .001$, and retaining, $\chi2(1) = 5.66$, $p < .02$, family members in treatment and in improving parent reports of family functioning, $\chi2(2) = 9.10$, $p < .011$." *Conclusion*: "We discuss challenges in treatment implementation in community settings and provide recommendations for further research."
Slesnick, 2013 (23)
"Hierarchical linear modeling revealed statistically significant improvement in frequency of substance use among runaways in all three treatment groups with a slight

Resultater og konklusjon
increase at post-treatment. Latent trajectory profile analysis explored individual differences in change trajectories and yielded a 3 class model. The majority of adolescents (n = 136, 76%) showed reductions in substance use over time with a slight increase at follow-up (Class 1: Decreasing). Twenty-four (13.4%) adolescents had shown high levels of substance use over time with patterns of increase and decrease (Class 2: Fluctuating high users), and 19 (10.6%) decreased but returned to baseline levels by two years post-baseline (Class 3: U shaped). Few differences among treatment conditions were noted; within the "decreasing" group, adolescents in MI treatment showed a quicker decline in their substance use but a faster relapse compared to those receiving EBFT." *Conclusion*: "These findings suggest that CRA, EBFT and MI are viable treatments for runaway substance-abusing adolescents."
Tait, 2004 (24)
"At 4 months, a significantly greater proportion of the intervention group, both daily and "occasional" drug users, had attended treatment than the usual care group. Regardless of attendance at the treatment service the intervention group showed a greater improvement in GHQ-12 scores than the usual care group. Across groups, a greater proportion of those who attended treatment moved to "safer" drug use behaviour (non-hazardous alcohol consumption and/or non-injecting drug use (IDU)), and showed a greater decline on a composite total drug use score." *Conclusion*: "Adolescent attendance for treatment can be improved by brief intervention with harmful substance use behaviours reduced for both "occasional" and daily users. Improvements in psychosocial well-being is observed regardless of attendance at a treatment service."
Tait, 2005 (25)
"At 12 months, 87 (69%) were re-interviewed. Significantly more of the intervention than the usual care group (12 versus 4) had attended a treatment agency. Excluding the index presentations, there were 66 AOD hospital presentations post intervention, with the proportion of AOD events falling for the intervention group, whilst no change occurred for the usual care group. Irrespective of randomisation, those who attended for substance use treatment had a greater decline in total self-reported drug use than the remainder. Both intervention and usual care groups had improved GHQ-12 scores by 12 months, with reduction in GHQ scores correlated with reduced drug use." *Conclusion*: "while brief intervention in ED only has limited success in facilitating adolescents to attend for subsequent AOD treatment, it can significantly reduce the number of AOD related ED presentations."
Tait, 2016 (26)

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"Those who received the intervention had lower costs ($22 versus $227: z = 3.16, p = 0.002) and rates (0.03 versus 0.25: z = 2.57, p = 0.010) of ED mental health AOD presentations. However, the intervention did not significantly reduce overall mean health costs per patient (intervention $58746 versus control $64833, p = 0.800). Similarly, there was no significant difference in the costs associated with hospitalizations ($48920 versus $50911 p = 0.924), overall ED presentations ($4266 versus $4150, p = 0.916), out-patient mental health services ($4494 versus $7717, p = 0.282), or opiate pharmacotherapies ($1013 versus $2054, p = 0.209). Injecting drug use was a significant baseline predictor of subsequent costs in the cohort (z = 2.64, p = 0.008)." *Conclusion*: "An ED delivered intervention may reduce direct ED costs and subsequent ED AOD attendances. There was also some indication that overall costs may be impacted, with economically large but non-significant differences between the groups. The high costs and morbidity incurred by some of this cohort illustrate the importance of targeting high-risk adolescents."

Beskrivelse av de inkluderte kontrollerte før-og-etter studiene

Ni kontrollerte før-og-etter studier møtte inklusjonskriteriene. Vi gir fullstendig referanse og i noen tilfeller også sammendraget til hver av disse studiene i Vedlegg 3. Disse studiene vurderte effekten av følgende tiltak: motivasjonstiltak, Anonyme Alkoholikere 12-trinnsprogram, motiverende samtale / kognitiv atferdsterapi, 'Treatment Readiness and Induction Program', 'Seven Challenges', 'Residential Student Assistance Program' og et sammensatt tiltak gitt i institusjon.

Referanser

1. World Health Organization. Health topics: substance abuse [Internet]. Geneva: World Health Organization; 2016 [updated on 2016; cited 2016 August 26]. Available from: http://www.who.int/topics/substance_abuse/en/

2. United Nations Office on Drugs and Crime, World Drug Report 2016 (United Nations publication, Sales No. E.16.XI.7).

3. Norwegian Institute of Public Health. Public Health Report 2014 [Internet]. Oslo: Norwegian Institute of Public Health; 2016. Available from: https://www.fhi.no/en/op/public-health-report-2014/

4. Øia, T. Ung i Oslo 2012: nøkkeltall: Notat nr. 7/2012. Oslo: Norsk institutt for forskning om oppvekst, velferd og aldring; 2012.

5. Gjerde, H, Christophersen, AS, Normann, PT, Assum, T, Oiestad, EL et al. Norwegian roadside survey of alcohol and drug use by drivers (2008-2009). Traffic Inj Prev 2013; 14(5): 443-52.

6. Bogstrand, ST, Normann, PT, Rossow, I, Larsen, M, Morland, J et al. Prevalence of alcohol and other substances of abuse among injured patients in a Norwegian emergency department. Drug Alcohol Depend 2011b; 117(2-3):132-38.

7. Norge. Helsedirektoratet. Internasjonalt perspektiv på psykisk helse og helsetjenester til mennesker med psykiske lidelser. Publikasjonsnummer: IS-2314. Oslo: Helsedirektoratet; 2015.

8. Folkehelseinstituttet. Faktaark. Psykiske plager og lidelser hos voksne - hvordan forstå tallene for forekomst [Internet]. Oslo: Folkehelseinstituttet; 2016 [oppdatert 2015; cited November 2016]. Available from https://www.fhi.no/fp/psykiskhelse/psykiskhelse/psykiske-plager-og-lidelser-hos-vok/

9. Grenseløs omsorg. Barneombudet, 2015.

10. The World Bank. World Bank Country and Lending Groups. 2016. Available from: https://datahelpdesk.worldbank.org/knowledgebase/articles/906519#High_income (Accessed 29 August 2016).

11. Helsenorge. Rusbehandling [Internet]. Oslo: Helsenorge.no; 2014 [updated on 2014 September 10; cited 2016 August 31]. Available from: https://helsenorge.no/pasient-og-brukerombudet/rusbehandling

12. Tripodi JS. A Comprehensive review: Methodological rigor of studies on residential treatment centers for substance-abusing adolescents. J Evid Inf Soc Work. 2009; 6(3):288-299.

13. Brown, R. A., Abrantes, A. M., Minami, H., Prince, M. A., Bloom, E. L., Apodaca, T. R., Strong, D. R, et al. Motivational Interviewing to reduce substance use in adolescents with psychiatric comorbidity. J Subst Abuse Treat. 2015; 59:20-9.

14. Esposito-Smythers C, Spirito A, Kahler CW, Hunt J, Monti P. Treatment of co-occurring substance abuse and suicidality among adolescents: a randomized trial. J Consult Clin Psychol. 2011;79(6):728-39.

15. Friedman A S, Terras A, Glassman K. Multimodel substance use intervention program for male delinquents. Journal of Child & Adolescent Substance Abuse. 2002;11(4):43-65.

16. Godley SH, Garner BR, Passetti LL, Funk RR, Dennis ML, Godley MD. Adolescent outpatient treatment and continuing care: main findings from a randomized clinical trial. Drug Alcohol Depend. 2010;110(1-2):44-54.

17. Godley, M. D., Godley, S. H., Dennis, M., L., Funk, R. R., Passetti, L. L., Petry, N. M. A randomized trial of assertive continuing care and contingency management for adolescents with substance use disorders. J Consult Clin Psychol. 2014;82(1):40-51.

18. Goti J, Diaz R, Serrano L, Gonzalez L, Calvo R, Gual A, Castro J. Brief intervention in substance-use among adolescent psychiatric patients: a randomized controlled trial. Eur Child Adolesc Psychiatry. 2010;19(6):503-11.

19. Hendriks VM, van der Schee E, Blanken P. [Multidimensional family therapy and cognitive behavioral therapy in adolescents with a cannabis use disorder: a randomised controlled study]. [Article in Dutch] Tijdschr Psychiatr. 2013;55(10):747-59.

20. Kelly, J. F., Cristello, J., Yeterian, J. D., Kaminer, Y, Kahler, C. W., Timko, C. Findings from the first randomized controlled trial of adolescent twelve-step facilitation. Alcoholism: Clinical and Experimental Research. 2016; 40:307A.

21. Palm A, Olofsson N, Danielsson I, Skalkidou A, Wennberg P, Högberg U. Motivational interviewing does not affect risk drinking among young women: A randomised, controlled intervention study in Swedish youth health centres. Scand J Public Health. 2016;44(6):611-8.

22. Robbins MS, Feaster DJ, Horigian VE, Rohrbaugh M, Shoham V, Bachrach K, et al. Brief strategic family therapy versus treatment as usual: results of a multisite randomized trial for substance using adolescents. J Consult Clin Psychol. 2011;79(6):713-27.

23. Slesnick N, Erdem G, Bartle-Haring S, Brigham GS. Intervention with substance-abusing runaway adolescents and their families: results of a randomized clinical trial. J Consult Clin Psychol. 2013;81(4):600-14.

24. Tait, R.J., Hulse, G. K., Robertson, S. I. Effectiveness of a brief intervention and continuity of care in enhancing attendance for treatment by adolescent substance users. Drug & Alcohol Dependence, 2004; 74:289-296.

25. Tait RJ, Hulse GK, Robertson SI, Sprivulis PC. Emergency department-based intervention with adolescent substance users: 12-month outcomes. Drug Alcohol Depend. 2005;79(3):359-63.

26. Tait, R. J., Teoh, L., Kelty, E., Geelhoed, E., Mountain, D., Hulse, G. K. Emergency department based intervention with adolescent substance users: 10 year economic and health outcomes. Drug & Alcohol Dependence. 2016; 165:168-74.

Vedlegg

Vedlegg 1 – Søkestrategi

Database: Epub Ahead of Print, In-Process & Other Non-Indexed Citations, Ovid MEDLINE(R) Daily and Ovid MEDLINE(R) 1946 to Present
Dato: 04.09.2016
Treff: 1630

#	Searches	Results
1	Adolescent/	1773279
2	Minors/	2361
3	Young Adult/	537739
4	or/1-3	2018498
5	exp Child Welfare/ [incl. Child Advocacy/ Child Care/ Child Custody/]	29249
6	Child Protective Services/	57
7	Custodial Care/	184
8	exp Social Work/ [incl. Social Work, Psychiatric/]	16359
9	Foster Home Care/	3251
10	Orphanages/	380
11	Halfway houses/	1047
12	Group Homes/	898
13	Mental Health Services/	28504
14	Community Mental Health Services/	17517
15	Ambulatory Care/	38794
16	Hospitals, Psychiatric/	23973
17	Institutionalization/	5018
18	Inpatients/	15941
19	Outpatients/	12083
20	Rehabilitation Centers/	7470
21	Residential Facilities/	4933
22	Substance Abuse Treatment Centers/	4941
23	or/5-22	192145
24	4 and 23	35914
25	Adolescent, Institutionalized/	114
26	Adolescent, Hospitalized/	410
27	24 or 25 or 26	36339
28	exp Substance-Related Disorders/ [exp incl. all types of "drug" abuses or "drug"-related disorders]	247337
29	exp Street Drugs/ [incl. Crack Cocaine/]	10511
30	Alcoholism/	70554
31	Marijuana Smoking/	3500

32 Heroin/ 5156
33 Designer Drugs/ 1250
34 Amphetamine/ 12128
35 Cannabis/ 7406
36 Inhalants/ 1228
37 Cocaine/ 22634
38 or/28-37 283550
39 27 and 38 3618
40 exp Therapeutics/ [exp incl. all types of therapies] 3751958
41 exp Rehabilitation/ [exp incl. all types of rehabilitation] 170614
42 Treatment Outcome/ 759083
43 (th or dt or dh or rh or pc).fs. [th=therapy dt=drug therapy dh=diet therapy rh=rehabliitation pc=prevention &control] 4490548
44 or/40-43 6633055
45 39 and 44 2951
46 (adolescent* or boy? or fosterchild* or girl? or juvenile? or kid? or minor? or pubescent? or teen? or teenager? or underage* or under-age* or youngster? or youth or (young adj (adult? or m?n or wom?n or people or person?))).ti,ab. 758846
47 ((child* adj (custody or protect* or welfare)) or social work* or out of home or (foster adj (home? or car* or child*))).ti,ab. 19620
48 (((mental or psychiatric*) adj2 (institution? or hospital? or patient?)) or (residential* adj3 (care or institution* or facilit* or treatment* or therap* or program*)) or institutionali* or psychiatric hospital* or ((rehabilitation or treatment) adj (cent* or facilit*))).ti,ab. 72396
49 (ambulatory care* or inpatient* or in-patient* or outpatient* or out-patient*).ti,ab. 1532829
50 or/47-49 1606894
51 (((alcohol* or angel dust? or amphetamin* or amfetamin* or benzodiazepine* or benzos or cannabis or cocain* or ecstasy or glue or hashish or heroin? or khat or LSD or mari?uana or methamphetamin* or metamfetamin* or methadon* or morphin* or morfin* or opioid? or nonopioid? or non-opioid? or opiate? or phencyclidine or polydrug? or poly-drug? or polysubstance? or poly-substance? or substance*) adj3 (abuse* or addict* or depend* or misuse* or related disorder* or use*)) or (drug? adj1 (abuse* or addict* or depend* or misuse*))).ti,ab. 182759
52 (prevent* or program? or programme? or rehab* or therap* or treat*).ti,ab. 6640460
53 46 and 50 and 51 and 52 1477
54 45 or 53 4160
55 Meta-Analysis/ 72924
56 Meta-Analysis as Topic/ 15341
57 ((systematic* adj2 (review* or overview*)) or overview* of overview* or umbrella review* or meta-analy* or metaanaly*).ti,ab. 166979
58 Review.pt. and (pubmed or medline).ti,ab. 85952
59 Randomized Controlled Trial/ 429552
60 Non-randomized controlled trials as topic/ 79
61 Controlled Clinical Trial/ 91634
62 Multicenter Study/ 210337
63 Pragmatic Clinical Trial/ 410
64 Interrupted Time Series Analysis/ 213
65 Controlled Before-After Studies/ 182
66 (randomis* or randomiz* or randomly or trial or intervention? or effect? or impact? or multicenter or multi center or multicentre or multi centre or controlled

or (before adj5 after) or (pre adj5 post) or ((pretest or pre test) and (posttest or post test)) or quasiexperiment* or quasi experiment* or evaluat* or time series or time point? or repeated measur* or ((control* or compar*) adj (group* or area* or site*)) or nonexperimental or non-experimental or cluster* or parallel design or comparative stud* or correlational stud*).ti,ab. 8229771
67 or/55-66 8393551
68 54 and 67 2181
69 exp Animals/ 20591811
70 Humans/ 16285768
71 69 not (69 and 70) 4306043
72 (news or editorial or comment).pt. 1138153
73 68 not (71 or 72) 2176
74 limit 73 to yr="2000-Current" 1728
75 remove duplicates from 74 1630

Database: PsycINFO 1806 to July Week 4 2016
Dato: 04.09.2016
Treff: 1705

Searches Results
1 ("200" or "320").ag. 660879
2 Child Welfare/ 6895
3 Child Custody/ 2737
4 Protective Services/ 2357
5 Social Casework/ 15439
6 Foster Care/ 4667
7 Group Homes/ 1037
8 Halfway Houses/ 289
9 Orphanages/ 312
10 Psychiatric Hospitals/ 7275
11 Institutionalization/ 3478
12 Psychiatric Hospitalization/ 6512
13 Mental Health Services/ 29882
14 Mental Health Programs/ 4361
15 Rehabilitation Centers/ 572
16 Residential Care Institutions/ 9390
17 Treatment Facilities/ 1502
18 Therapeutic Camps/ 263
19 Community Mental Health Services/ 6973
20 Community Mental Health Centers/ 2639
21 or/2-20 95966
22 1 and 21 18002
23 "substance use disorder"/ 4426
24 drug abuse/ 41068
25 drug addiction/ 10315
26 drug dependency/ 11540
27 alcohol abuse/ 15704
28 polydrug abuse/ 642
29 inhalant abuse/ 528
30 opiates/ or heroin/ or morphine/ 18301
31 narcotic drugs/ or methadone/ or opiates/ 12509
32 cocaine/ or crack cocaine/ 12404
33 marijuana/ or hashish/ or marijuana usage/ 4549
34 glue sniffing/ 65

35 or/23-34 95658
36 22 and 35 844
37 exp treatment/ 657106
38 exp rehabilitation/ 65618
39 exp drug therapy/ 126811
40 exp drug rehabilitation/ 27495
41 or/37-40 657106
42 36 and 41 576
43 (adolescent* or boy? or fosterchild* or girl? or juvenile? or kid? or minor? or pubescent? or teen? or teenager? or underage* or under-age* or youngster? or youth or (young adj (adult? or m?n or wom?n or people or person?))).ti,ab. 363995
44 ((child* adj (custody or protect* or welfare)) or social work* or out of home or (foster adj (home? or car* or child*))).ti,ab. 50087
45 (((mental or psychiatric*) adj2 (institution? or hospital? or patient?)) or (residential* adj3 (care or institution* or facilit* or treatment* or therap* or program*)) or institutionali* or psychiatric hospital* or ((rehabilitation or treatment) adj (cent* or facilit*))).ti,ab. 69444
46 (ambulatory care* or inpatient* or in-patient* or outpatient* or out-patient*).ti,ab. 163608
47 or/44-46 266828
48 (((alcohol* or angel dust? or amphetamin* or amfetamin* or benzodiazepine* or benzos or cannabis or cocain* or ecstasy or glue or hashish or heroin? or khat or LSD or mari?uana or methamphetamin* or metamfetamin* or methadon* or morphin* or morfin* or opioid? or nonopioid? or non-opioid? or opiate? or phencyclidine or polydrug? or poly-drug? or polysubstance? or poly-substance? or substance*) adj3 (abuse* or addict* or depend* or misuse* or related disorder* or use*)) or (drug? adj1 (abuse* or addict* or depend* or misuse*))).ti,ab. 133204
49 (prevent* or program? or programme? or rehab* or therap* or treat*).ti,ab. 1104785
50 43 and 47 and 48 and 49 1998
51 42 or 50 2458
52 ("0400" or "1800" or "2000").md. [empirical study/ quantitative study/ treatment outcome/ clinical trial/] 2019250
53 Experimental Design/ 10227
54 Between Groups Design/ 106
55 Quantitative Methods/ 2821
56 Quasi Experimental Methods/ 142
57 (randomis* or randomiz* or randomly or trial or intervention? or effect? or impact? or multicenter or multi center or multicentre or multi centre or controlled or (before adj5 after) or (pre adj5 post) or ((pretest or pre test) and (posttest or post test)) or quasiexperiment* or quasi experiment* or evaluat* or time series or time point? or repeated measur* or ((control* or compar*) adj (group* or area* or site*)) or nonexperimental or non-experimental or cluster* or parallel design or comparative stud* or correlational stud*).ti,ab. 1659653
58 (trial or effect? or impact? or intervention?).ti. 386912
59 Experiment Controls/ 856
60 Pretesting/ 233
61 Posttesting/ 135
62 Time Series/ 1658
63 Repeated Measures/ 625
64 Meta Analysis/ 3837
65 Systematic Review.md. 14295

66 Meta Analysis.md. 14871
67 ((systematic* adj2 (review* or overview*)) or overview* of overview* or umbrella review* or meta-analy* or metaanaly*).ti,ab. 38371
68 (review and (pubmed or medline)).ti,ab. 10701
69 or/52-68 2667792
70 51 and 69 2130
71 limit 70 to yr="2000-Current" 1708
72 remove duplicates from 71 1705

Database: Embase 1974 to 2016 September 02
Dato: 04.09.2016
Treff: 837

Searches Results
1 Adolescent/ 1375953
2 Minors/ 346
3 Young Adult/ 154097
4 or/1-3 1467278
5 Child Welfare/ 16694
6 Child Custody/ 83
7 Social Work/ 22096
8 Foster Care/ 4004
9 Custodial Care/ 155
10 Residential Home/ 6212
11 Halfway House/ 1064
12 Orphanage/ 752
13 Mental Hospital/ 28701
14 Institutionalization/ 7694
15 Hospital Patient/ 114358
16 Mental Health Service/ 49104
17 Mental Health Care/ 22831
18 Residential Care/ 10366
19 Health Care Facility/ 60313
20 Rehabilitation Center/ 11172
21 or/5-20 328814
22 4 and 21 27968
23 Adolescent, Institutionalized/ 1375953
24 Hospitalized Adolescent/ 415
25 or/22-24 1377138
26 alcoholism/ 111659
27 drug dependence/ 43077
28 street drug/ 3249
29 cannabis/ 27562
30 diamorphine/ 20992
31 designer drug/ 1254
32 amphetamine/ 32107
33 cocaine/ 49060
34 cocaine dependence/ 10711
35 drug abuse/ 47455
36 alcohol/ 215421
37 alcohol abuse/ 23654
38 substance abuse/ 46887
39 opiate addiction/ 12424
40 inhalant abuse/ 443

41 or/26-40 486027
42 25 and 41 31745
43 treatment outcome/ 737519
44 drug dependence treatment/ 7474
45 therapy/ 1272833
46 rehabilitation/ 68742
47 (dt or rh or th).fs. 4416919
48 or/43-47 6018326
49 42 and 48 5910
50 (adolescent* or boy? or fosterchild* or girl? or juvenile? or kid? or minor? or pubescent? or teen? or teenager? or underage* or under-age* or youngster? or youth or (young adj (adult? or m?n or wom?n or people or person?))).ti,ab. 935687
51 ((child* adj (custody or protect* or welfare)) or social work* or out of home or (foster adj (home? or car* or child*))).ti,ab. 25118
52 (((mental or psychiatric*) adj2 (institution? or hospital? or patient?)) or (residential* adj3 (care or institution* or facilit* or treatment* or therap* or program*)) or institutionali* or psychiatric hospital* or ((rehabilitation or treatment) adj (cent* or facilit*))).ti,ab. 95567
53 (ambulatory care* or inpatient* or in-patient* or outpatient* or out-patient*).ti,ab. 2193212
54 or/51-53 2287309
55 (((alcohol* or angel dust? or amphetamin* or amfetamin* or benzodiazepine* or benzos or cannabis or cocain* or ecstasy or glue or hashish or heroin? or khat or LSD or mari?uana or methamphetamin* or metamfetamin* or methadon* or morphin* or morfin* or opioid? or nonopioid? or non-opioid? or opiate? or phencyclidine or polydrug? or poly-drug? or polysubstance? or poly-substance? or substance*) adj3 (abuse* or addict* or depend* or misuse* or related disorder* or use*)) or (drug? adj1 (abuse* or addict* or depend* or misuse*))).ti,ab. 236935
56 (prevent* or program? or programme? or rehab* or therap* or treat*).ti,ab. 8549643
57 50 and 54 and 55 and 56 2108
58 49 or 57 7655
59 Randomized Controlled Trial/ 418791
60 Controlled Clinical Trial/ 397734
61 Quasi Experimental Study/ 3104
62 Pretest Posttest Control Group Design/ 268
63 Pretest Posttest Design/ 1122
64 Time Series Analysis/ 17405
65 Experimental Design/ 12748
66 Multicenter Study/ 143341
67 (randomis* or randomiz* or randomly or trial or intervention? or effect? or impact? or multicenter or multi center or multicentre or multi centre or controlled or (before adj5 after) or (pre adj5 post) or ((pretest or pre test) and (posttest or post test)) or quasiexperiment* or quasi experiment* or evaluat* or time series or time point? or repeated measur* or ((control* or compar*) adj (group* or area* or site*)) or nonexperimental or non-experimental or cluster* or parallel design or comparative stud* or correlational stud*).ti,ab. 10182962
68 Meta Analysis/ or Systematic Review/ 183554
69 ((systematic* adj2 (review* or overview*)) or overview* of overview* or umbrella review* or meta-analy* or metaanaly*).ti,ab. 203274
70 (review and (pubmed or medline)).ti,ab. 100359
71 or/59-70 10374955

72 58 and 71 4032
73 exp animals/ or exp invertebrate/ or animal experiment/ or animal model/ or animal tissue/ or animal cell/ or nonhuman/ 23580011
74 human/ or normal human/ or human cell/ 17632176
75 73 not (73 and 74) 5994599
76 (news or editorial or comment).pt. 520715
77 72 not (75 or 76) 3989
78 limit 77 to exclude medline journals 400
79 (abstract or conference or conference paper or conference proceeding or conference proceeding article or conference proceeding conference paper or conference proceeding editorial or conference proceeding note).pt. 3075574
80 77 and 79 563
81 78 or 80 889
82 limit 81 to embase 884
83 limit 82 to yr="2000-Current" 846
84 remove duplicates from 83 837

Database: Cochrane Library (CDSR, DARE, HTA)
Dato: 04.09.2016
Treff: 800

ID Search Hits
#1 [mh ^Adolescent] 86589
#2 [mh ^Minors] 9
#3 [mh ^"Young Adult"] 216
#4 {or #1-#3} 86672
#5 [mh "Child Welfare"] 421
#6 [mh ^"Child Protective Services"] 3
#7 [mh ^"Custodial Care"] 0
#8 [mh ^"Social Work"] 197
#9 [mh ^"Foster Home Care"] 109
#10 [mh ^"Halfway houses"] 18
#11 [mh ^"Group Homes"] 47
#12 [mh ^Orphanages] 8
#13 [mh ^"Mental Health Services"] 684
#14 [mh ^"Community Mental Health Services"] 712
#15 [mh ^"Ambulatory Care"] 3230
#16 [mh ^"Hospitals, Psychiatric"] 249
#17 [mh ^Institutionalization] 190
#18 [mh ^Inpatients] 863
#19 [mh ^Outpatients] 1055
#20 [mh ^"Rehabilitation Centers"] 291
#21 [mh ^"Residential Facilities"] 171
#22 [mh ^"Substance Abuse Treatment Centers"] 366
#23 {or #5-#22} 7975
#24 #4 and #23 1379
#25 [mh ^"Adolescent, Institutionalized"] 1
#26 [mh ^"Adolescent, Hospitalized"] 6
#27 {or #24-#26} 1386
#28 [mh "Substance-Related Disorders"] 10782
#29 [mh "Street Drugs"] 255
#30 [mh ^Alcoholism] 2675
#31 [mh ^"Marijuana Smoking"] 216

#32 [mh ^Heroin] 272
#33 [mh ^"Designer Drugs"] 6
#34 [mh ^Amphetamine] 203
#35 [mh ^Cannabis] 274
#36 [mh ^Inhalants] 0
#37 [mh ^Cocaine] 566
#38 {or #28-#37} 11604
#39 #27 and #38 216
#40 [mh Therapeutics] 271680
#41 [mh Rehabilitation] 19003
#42 [mh "Treatment Outcome"] 114077
#43 Any MeSH descriptor with qualifier(s): [Diet therapy - DH, Drug therapy - DT, Prevention & control - PC, Rehabilitation - RH, Therapy - TH] 334135
#44 {or #40-#43} 422626
#45 #39 and #44 211
#46 (adolescent* or boy or boys or fosterchild* or girl or girls or juvenile* or kid or kids or minor or minors or pubescent* or teen or teens or teenager* or underage* or under-age* or youngster* or youth or (young next (adult* or man or men or woman or women or people or person or persons))):ti,ab,kw 145536
#47 ((child* next (custody or protect* or welfare)) or "social work*" or "out of home" or (foster next (home* or car* or child*))):ti,ab,kw 1454
#48 (((mental or psychiatric*) near/2 (institution* or hospital* or patient*)) or (residential* near/3 (care or institution* or facilit* or treatment* or therap* or program*)) or institutionali* or "psychiatric hospital*" or ((rehabilitation or treatment) next (cent* or facilit*)) or "ambulatory care*" or inpatient* or in-patient* or outpatient* or out-patient*):ti,ab,kw 212396
#49 (#47 or #48) 213582
#50 ((alcohol* or "angel dust*" or amphetamin* or amfetamin* or benzodiazepine* or benzos or cannabis or cocain* or ecstasy or glue or hashish or heroin* or khat or LSD or marijuana or marihuana or methamphetamin* or metamfetamin* or methadon* or morphin* or morfin* or opioid* or nonopioid* or non-opioid* or opiate* or phencyclidine or polydrug* or poly-drug* or polysubstance* or poly-substance* or substance*) near/3 (abuse* or addict* or depend* or misuse* or "related disorder*" or use*) or ((drug og drugs) near/1 (abuse* or addict* or depend* or misuse*))):ti,ab,kw 17490
#51 (prevent* or program or programs or programme or programmes or rehab* or therap* or treat*):ti,ab,kw 633752
#52 #46 and #49 and #50 and #51 838
#53 #45 or #52 Publication Year from 2000 to 2016, in Cochrane Reviews (Reviews and Protocols) and Trials 726
#54 (adolescent* or boy or boys or fosterchild* or girl or girls or juvenile* or kid or kids or minor or minors or pubescent* or teen or teens or teenager* or underage* or under-age* or youngster* or youth or (young next (adult* or man or men or woman or women or people or person or persons))) 152038
#55 ((child* next (custody or protect* or welfare)) or "social work*" or "out of home" or (foster next (home* or car* or child*))) 2537
#56 (((mental or psychiatric*) near/2 (institution* or hospital* or patient*)) or (residential* near/3 (care or institution* or facilit* or treatment* or therap* or program*)) or institutionali* or "psychiatric hospital*" or ((rehabilitation or treatment) next (cent* or facilit*)) or "ambulatory care*" or inpatient* or in-patient* or outpatient* or out-patient*) 227689
#57 #55 or #56 229400
#58 (alcohol* or "angel dust*" or amphetamin* or amfetamin* or benzodiazepine* or benzos or cannabis or cocain* or ecstasy or glue or hashish or heroin* or khat

or LSD or marijuana or marihuana or methamphetamin* or metamfetamin* or methadon* or morphin* or morfin* or opioid* or nonopioid* or non-opioid* or opiate* or phencyclidine or polydrug* or poly-drug* or polysubstance* or poly-substance* or substance*) near/3 (abuse* or addict* or depend* or misuse* or "related disorder*" or use*) or ((drug og drugs) near/1 (abuse* or addict* or depend* or misuse*)) 22708

#59 (prevent* or program or programs or programme or programmes or rehab* or therap* or treat*) 720052

#60 #54 and #57 and #58 and #59 Publication Year from 2000 to 2016, in Other Reviews and Technology Assessments 74

#61 #53 or #60 800

Database: CINAHL (EBSCO)
Dato: 04.09.2016
Treff: 250

S52 S50 AND S51 Limiters - Exclude MEDLINE records; Published Date: 20000101-20160931 (250)

S51 S36 OR S43 (1,108)

S50 S44 OR S45 OR S46 OR S47 OR S48 OR S49 (1,297,062)

S49 TI (((systematic* N1 (review* or overview*)) or overview* of overview* or "umbrella review*" or "metaanaly*" or meta-analy*)) OR AB (((systematic* N1 (review* or overview*)) or overview* of overview* or "umbrella review*" or "metaanaly*" or meta-analy*)) (63,720)

S48 (MH systematic review) OR (MH meta analysis) (37,690)

S47 PT systematic review (38,823)

S46 TI ((randomis* or randomiz* or randomly or trial or intervention# or effect# or impact# or multicenter or "multi center" or multicentre or "multi centre" or controlled or (before N4 after) or (pre N4 post) or ((pretest or "pre test") and (posttest or "post test")) or quasiexperiment* or "quasi experiment*" or evaluat* or "time series" or "time point#" or "repeated measur*" or ((control* or compar*) W0 (group* or area* or site*)) or nonexperimental or "non-experimental" OR cluster* OR parallel d ... (741,764)

S45 ((MH randomized controlled trials) OR (MH clinical trials) OR (MH intervention trials) OR (MH nonrandomized trials) OR (MH experimental studies) OR (MH pretest-posttest design+) OR (MH quasi-experimental studies+) OR (MH multicenter studies) OR (MH “Repeated Measures”) OR (MH Controlled Before-After Studies) OR (MH Quantitative Studies) OR (MH Control Group) (206,408)

S44 (PT randomized controlled trial) OR (PT clinical trial) OR (PT research) (986,951)

S43 S37 AND S40 AND S41 AND S42 (696)

S42 TI ((prevent* or program# or programme# or rehab* or therap* or treat*)) OR AB ((prevent* or program# or programme# or rehab* or therap* or treat*)) (738,757)

S41 TI (((((alcohol* or angel dust# or amphetamin* or amfetamin* or benzodiazepine* or benzos or cannabis or cocain* or ecstasy or glue or hashish or heroin or khat or LSD or mari?uana or metamphetamin* or metamfetamin* or methadon* or morphin* or morfin* or opioid# or nonopioid# or non-opioid# or opiate# or phencyclidine or polydrug# or poly-drug# or polysubstance# or poly-substance# or substance*) N2 (abuse* or addict* or depend* or misuse* or related disorder* or use*)) or (drug# N0 (abuse* or ... (38,507)

S40 S38 OR S39 (689,231)

S39 TI ((((mental or psychiatric*) N1 (institution# or hospital# or patient#)) or (residential* N2 (care or institution* or facilit* or treatment* or therap* or program*)) or institutionali* or psychiatric hospital* or ((rehabilitation or treatment) W0 (cent* or facilit*)) or "ambulatory care*" or inpatient* or in-patient* or outpatient* or out-patient*)) OR AB ((((mental or psychiatric*) N1 (institution# or hospital# or patient#)) or (residential* N2 (care or institution* or facilit* or treatmen ... (670,356)

S38 TI (((child* W0 (custody or protect* or welfare)) or social work* or out of home or (foster W0 (home# or car* or child*)))) OR AB (((child* W0 (custody or protect* or welfare)) or social work* or out of home or (foster W0 (home# or car* or child*)))) (22,379)

S37 TI ((adolescent* or boy# or fosterchild* or girl# or juvenile# or kid# or minor# or pubescent# or teen# or teenager# or underage* or underage* or youngster# or youth or (young W0 (adult# or m#n or wom#n or people or person#)))) OR AB ((adolescent* or boy# or fosterchild* or girl# or juvenile# or kid# or minor# or pubescent# or teen# or teenager# or underage* or underage* or youngster# or youth or (young W0 (adult# or m#n or wom#n or people or person#)))) (116,651)

S36 S31 AND S35 (468)

S35 S32 OR S33 OR S34 (1,030,446)

S34 MW therap* or rehab* or prevent* (988,179)

S33 (MH "Rehabilitation") OR (MH "Substance Use Rehabilitation Programs+") OR (MH "Drug Rehabilitation Programs+") OR (MH "Alcohol Rehabilitation Programs+") (17,879)

S32 (MH "Treatment Outcomes+") (140,412)

S31 S22 AND S30 (817)

S30 S23 OR S24 OR S25 OR S26 OR S27 OR S28 OR S29 (86,019)

S29 (MH "Cocaine") (2,415)

S28 (MH "Amphetamines") (724)

S27 (MH "Designer Drugs") (185)

S26 (MH "Heroin") (1,612)

S25 (MH "Cannabis") (3,910)

S24 (MH "Street Drugs+") (2,883)

S23 (MH "Substance Use Disorders+") (82,094)

S22 S19 OR S20 OR S21 (11,926)

S21 (MH "Child, Institutionalized") (238)

S20 (MH "Adolescent, Hospitalized") (236)

S19 S17 AND S18 (11,561)

S18 S3 OR S4 OR S5 OR S6 OR S7 OR S8 OR S9 OR S10 OR S11 OR S12 OR S13 OR S14 OR S15 OR S16 (113,534)

S17 S1 OR S2 (257,888)

S16 MH Residential Facilities (2,902)

S15 MH Residential Care (4,252)

S14 (MH "Community Mental Health Services") (6,330)

S13 MH Mental Health Services (19,528)

S12 MH Inpatients (60,328)

S11 MH Institutionalization (1,499)

S10 MH Hospitals, Psychiatric (3,491)

S9 MH "Orphans and Orphanages" (720)

S8 MH Halfway Houses (102)

S7 MH Social Work, Psychiatric (643)

S6 MH Social Work (11,084)

S5 MH Foster Home Care (2,952)

S4 MH Child Health Services (5,167)

S3 Mh Child Custody (829)
S2 (MH "Minors (Legal)" (416)
S1 (MH "Adolescence+") or (MH "Young Adult") (257,749)

Database: Web of Science Core Collection
Dato: 04.09.2016
Treff: 1208

1 TOPIC: ((adolescent* or boy$ or fosterchild* or girl$ or juvenile$ or kid$ or minor$ or pubescent$ or teen$ or teenager$ or underage* or under-age* or youngster$ or youth or "young adult*" or "young m?n" or "young wom?n" or "young people" or "young person*")) 709,751

2 TOPIC: (("child* custody" or "child* protect*" or "child welfare" or "social work*" or "out of home" or "foster home*" or "foster car*" or "foster child*")) 23,094

3 TOPIC: ((((mental or psychiatric*) NEAR/1 (institution$ or hospital$ or patient$)) or (residential* NEAR/2 (care or institution* or facilit* or treatment* or therap* or program*)) or institutionali* or "psychiatric hospital*" or "rehabilitation cent*" or "treatment cent*" or "rehabilitation facilit*" or "treatment cent*" or "ambulatory care*" or inpatient* or in-patient* or outpatient* or out-patient*)) 1,091,883

4 #3 OR #2 1,113,658

5 #4 AND #1 49,291

6 TS=((((alcohol* or "angel dust*" or amphetamin* or amfetamin* or benzodiazepine* or "benzos" or "cannabis" or cocain* or "ecstasy" or "glue" or "hashish" or heroin$ or "khat" or "LSD" or mari$uana or metamphetamin* or metamfetamin* or methadon* or morphin$ or morfin$ or opioid$ or nonopioid$ or non-opioid$ or opiate$ or phencyclidine or polydrug$ or poly-drug$ or polysubstance$ or poly-substance$ or substance*) NEAR/2 (abuse* or addict* or depend* or misuse* or "related disorder*" or use*)) or (drug$ NEAR/0 (abuse* or addict* or depend* or misuse*)))) 179,612

7 TS=((prevent* or program$ or programme$ or rehab* or therap* or treat*)) 5,099,199

8 #7 AND #6 AND #5 1,773

9 TS=(("randomised" or "randomized" or "randomly" or "trial" or "multicenter" or "multi center" or "multi centre" or "multicentre" or intervention$ or "controlled" or ((control* or compar*) NEAR/0 (group* or area* or site*)) or "before and after" or "pre and post" or (("pretest" or "pre test") and ("posttest" or "post test")) or quasiexperiment* or "quasi experiment*" or pseudoexperiment* or "pseudo experiment*" or evaluat* or effect$ or impact$ or "time series" or "time point*" or "repeated measure*" or cluster* or "comparative stud*" or "correlational stud*" or experiment* or "non-experimental" or "nonexperimental" or (systematic* NEAR/1 (review* or overview*)) or metaanaly* or "meta-analy*" or "overview* of overview*" or "umbrella review*")) 10,001,629

10 #9 AND #8 [Limiters: Indexes=SCI-EXPANDED, SSCI Timespan=2000-2016] 1,208

Database: Sociological Abstracts & Social Services Abstracts (ProQuest)
Dato: 04.09.2016
Treff: 359

(((SU.EXACT("Adolescents") OR SU.EXACT("Youth") OR SU.EXACT("Young Adults")) AND (SU.EXACT("Child Welfare Services") OR SU.EXACT("Child Custody") OR SU.EXACT("Foster Care") OR SU.EXACT("Clinical Social Work") OR SU.EXACT("Social Work Cases") OR SU.EXACT("Social Work") OR SU.EXACT("Mental Hospitals") OR SU.EXACT("Hospitalization") OR SU.EXACT("Mental Health Services") OR SU.EXACT("Residential Institutions") OR SU.EXACT("Institutionalization (Persons)") OR SU.EXACT("Residential Institutions")) AND (SU.EXACT("Alcohol Abuse" OR "Drug Abuse" OR "Drug Addiction" OR "Substance Abuse") OR SU.EXACT("Alcoholism") OR SU.EXACT("Marijuana") OR SU.EXACT("Cocaine") OR SU.EXACT("Heroin" OR "Opiates")) AND (SU.EXACT("Treatment") OR SU.EXACT("Crosscultural Treatment") OR SU.EXACT("Treatment Outcomes") OR SU.EXACT("Rehabilitation") OR SU.EXACT("Treatment Programs") OR SU.EXACT("After Care"))) OR (ti,ab,su(adolescent* OR boy[*1] OR fosterchild* OR girl[*1] OR juvenile[*1] OR kid[*1] OR minor[*1] OR pubescent[*1] OR teen[*1] OR teenager[*1] OR underage* OR under-age* OR youngster[*1] OR youth OR "young adult*" OR "young m$1n" OR "young wom$1n" OR "young people" OR "young person*") AND (ti,ab,su("child* custody" OR "child* protect*" OR "child welfare" OR "social work*" OR "out of home" OR "foster home*" OR "foster car*" OR "foster child*") OR ti,ab,su(((mental OR psychiatric*) NEAR/1 (institution[*1] OR hospital[*1] OR patient[*1])) OR (residential* NEAR/2 (care OR institution* OR facilit* OR treatment* OR therap* OR program*)) OR institutionali* OR "psychiatric hospital*" OR "rehabilitation cent*" OR "treatment cent*" OR "rehabilitation facilit*" OR "treatment cent*" OR "ambulatory care*" OR inpatient* OR in-patient* OR outpatient* OR out-patient*)) AND ti,ab,su(((alcohol* OR "angel dust*" OR amphetamin* OR amfetamin* OR benzodiazepine* OR benzos OR cannabis OR cocain* OR ecstasy OR glue OR hashish OR heroin* OR khat OR LSD OR mari?uana OR metamphetamin* or metamfetamin* OR methadon* OR morphin[*1] OR morfin[*1] OR opioid[*1] OR nonopioid[*1] OR non-opioid[*1] OR opiate* OR phencyclidine OR polydrug* or poly-drug* OR polysubstance[*1] OR polysubstance[*1] OR substance*) NEAR/2 (abuse* OR addict* OR depend* OR misuse* OR "related disorder*" OR use*)) OR (drug[*1] NEAR/0 (abuse* OR addict* OR depend* OR misuse*))) AND ti,ab,su(prevent* OR program[*1] OR programme[*1] OR rehab* OR therap* OR treat*))) AND (SU.EXACT("time series analysis" OR experiments) OR DType("Systematic review") OR TI,AB,SU(randomis* OR randomiz* OR randomly OR trial OR multicenter OR "multi center" OR "multi centre" OR multicentre OR intervention[*1] OR controlled OR ((control* OR compar*) NEXT/0 (group* OR area* OR site*)) OR "before and after" OR "pre and post" OR ((pretest OR "pre test") AND (posttest OR "post test")) OR quasiexperiment* OR "quasi experiment*" OR pseudoexperiment* OR "pseudo experiment*" OR effect[*1] OR impact* OR "time series" OR "time point*" OR "repeated measure*" OR cluster* OR "comparative stud*" OR "evaluation stud*" OR ex-

periment* OR "parallel design" OR nonexperimental OR "non-experimental" OR (systematic* NEAR/1 (review* OR overview)) OR metaanaly* OR "meta-analy*" OR "overview* of overview*" OR "umbrella review*")) AND pd(>20000101)

Database: Epistemonikos
Dato: 04.09.2016
Treff: 49

[Title/Abstract:] ((youth OR teen* OR adolescen*) AND ("substance related disorder" OR "drug dependence" OR "drug addicition" OR heroin OR crack OR cocaine OR cannabis OR marijuana OR khat OR alcohol* OR amphetamine) AND (rehabilit* OR therap* OR treatment*))

[Limiters: year: 2000-2016]

Database: Campbell Library
Dato: 04.09.2016
Treff: 0

Håndsøk av JM i alle utgaver

Database: PubMed
Dato: 04.09.2016
Treff: 68

((youth OR teen* OR adolescen*) AND ("substance related disorder" OR "drug dependence" OR "drug addicition" OR heroin OR crack OR cocaine OR cannabis OR marijuana OR khat OR alcohol* OR amphetamine) AND (rehabilit* OR therap* OR treatment*)) AND pubstatusaheadofprint

Vedlegg 2 – Kvalitetsvurdering av den inkluderte systematiske oversikten

Kvalitetsvurdering av den inkluderte systematiske oversikten:

Forfatter, år	1	2	3	4	5	6	7	8	9	Kvalitet
Tripodi, 2009 (11)	Ja	Nei	Nei	Nei	Ja	Uklar	Nei	Uklar	Uklar	Lav

Tallene 1-9 i tabellen henviser til de ni kriteriene for metodisk kvalitetsvurdering av systematiske oversikter:

1. Beskriver forfatterne klart hvilke metoder de brukte for å finne primærstudiene?
2. Ble det utført et tilfredsstillende litteratursøk?
3. Beskriver forfatterne hvilke kriterier som ble brukt for å bestemme hvilke studier som skulle inkluderes (studiedesign, deltakere, tiltak, ev. endepunkter)?
4. Ble det sikret som systematiske skjevheter (bias) ved seleksjon av studier (eksplisitte seleksjonskriterier brukt, vurdering gjort av flere personer uavhengig av hverandre)?
5. Er det klart beskrevet et sett av kriterier for å vurdere intern validitet?
6. Er validiteten til studiene vurdert (enten ved inklusjon av primærstudier eller i analysen av primærstudier) ved bruk av relevante kriterier?
7. Er metodene som ble brukt da resultatene ble sammenfattet, klar beskrevet?
8. Ble resultatene fra studiene sammenfattet på forsvarlig måte?
9. Er forfatternes konklusjoner støttet av data og/eller analysen som er rapportert i oversikten?

Vedlegg 3 – Kontrollerte før-og-etter studier

I tabellen nedenfor oppgir vi referansen til studien. I de tilfellene studien er publisert som open access gjengir vi i tillegg sammendrag av artikkelen slik det fremkommer i de elektroniske databasene eller i selve dokumentet (dette er i henhold til lov om opphavsrett til åndsverk).

Tabell 4: *Liste over kontrollerte før-og-etter studier (n=9)*

Referanse
Hoeppner BB, Hoeppner SS, Kelly JF. Do young people benefit from AA as much, and in the same ways, as adult aged 30+? A moderated multiple mediation analysis. Drug Alcohol Depend. 2014;143:181-8.
Hunter SB, Ramchand R, Griffin BA, Suttorp MJ, McCaffrey D, Morral A. The effectiveness of community-based delivery of an evidence-based treatment for adolescent substance use. J Subst Abuse Treat. 2012;43(2):211-20. Sammendrag: This study evaluates the effectiveness of motivational enhancement therapy/cognitive behavioral therapy-5 (MET/CBT-5) when delivered in community practice settings relative to standard community-based adolescent treatment. A quasi-experimental strategy was used to adjust for pretreatment differences between the MET/CBT-5 sample (n = 2,293) and those who received standard care (n = 458). Results suggest that youth who received MET/CBT-5 fared better than comparable youth in the control group on five of six 12-month outcomes. A low follow-up rate (54%) in the MET/CBT-5 sample raised concerns about nonresponse bias in the treatment effect estimates. Sensitivity analyses suggest that although modest differences in outcomes between the MET/CBT-5 nonrespondents and respondents would yield no significant differences between the two groups on two of the six outcomes, very large differences in outcomes between responders and nonresponders would be required for youth receiving MET/CBT-5 to have fared better had they received standard outpatient care.
Knight DK, Dansereau DF, Becan JE, Rowan GA, Flynn PM. Effectiveness of a theoretically-based judgment and decision making intervention for adolescents. J Youth Adolesc. 2015;44(5):1024-38. Sammendrag: Although adolescents demonstrate capacity for rational decision making, their tendency to be impulsive, place emphasis on peers, and ignore potential consequences of their actions often translates into higher risk-taking including drug use, illegal activity, and physical harm. Problems with judgment and decision making contribute to risky behavior and are core issues for youth in treatment. Based on theoretical and empirical advances in cognitive science, the Treatment Readiness and Induction Program (TRIP) represents a curriculum-based decision making intervention that

can be easily inserted into a variety of content-oriented modalities as well as administered as a separate therapeutic course. The current study examined the effectiveness of TRIP for promoting better judgment among 519 adolescents (37 % female; primarily Hispanic and Caucasian) in residential substance abuse treatment. Change over time in decision making and premeditation (i.e., thinking before acting) was compared among youth receiving standard operating practice (n = 281) versus those receiving standard practice plus TRIP (n = 238). Change in TRIP-specific content knowledge was examined among clients receiving TRIP. Premeditation improved among youth in both groups; TRIP clients showed greater improvement in decision making. TRIP clients also reported significant increases over time in self-awareness, positive-focused thinking (e.g., positive self-talk, goal setting), and recognition of the negative effects of drug use. While both genders showed significant improvement, males showed greater gains in metacognitive strategies (i.e., awareness of one's own cognitive process) and recognition of the negative effects of drug use. These results suggest that efforts to teach core thinking strategies and apply/practice them through independent intervention modules may benefit adolescents when used in conjunction with content-based programs designed to change problematic behaviors.

Knight DK, Joe GW, Crawley RD, Becan JE, Dansereau DF, Flynn PM. The effectiveness of the Treatment Readiness and Induction Program (TRIP) for improving during-treatment outcomes. J Subst Abuse Treat. 2016;62:20-7.

Lindeman CA. Adolescent substance abuse: The seven challenges treatment modality versus cognitive behavioral therapy. Dissertation Abstracts International: Section B: The Sciences and Engineering. 2010; 70(8): 5146.

Morehouse E, Tobler NS. Preventing and reducing substance use among institutionalized adolescents. Adolescence. 2000;35(137):1-28.

Ramchand R, Griffin BA, Hunter SB, Booth MS, McCaffrey DF. Provision of mental health services as a quality indicator for adolescent substance abuse treatment facilities. Psychiatric Services 2015; 66:41–48.

Sammendrag: Objective: The study tested whether adolescents receiving substance abuse treatment at facilities offering full (can treat all psychiatric conditions) or partial (cannot treat severe or persistent mental illness) mental health services have better 12-month substance use and mental health outcomes than youths at facilities with no mental health services. Methods: Data were collected from 3,235 adolescents who were assessed at baseline and at 12 months at one of 50 adolescent treatment facilities. Propensity scores were applied to compare client outcomes from three types of facilities (full, partial, or no mental health services); weighted linear models were estimated to examine outcomes. Results: Youths attending facilities offering full or partial mental health services had better substance abuse treatment outcomes than youths attending facilities offering no such services. There was no evidence of a difference in substance use outcomes between facilities offering full versus partial services, nor was

there evidence of differences in mental health outcomes. Conclusions: These preliminary findings suggest that the availability of mental health services may be a useful quality indicator for adolescent substance abuse treatment facilities. More research is needed to examine specific types of mental health services offered at different facilities.

Spooner C, Mattick RP, Noffs W. Outcomes of a comprehensive treatment program for adolescents with a substance-use disorder. J Subst Abuse Treat. 2001;20(3):205-13.

Winters KC, Stinchfield RD, Opland E, Weller C, Latimer WW. The effectiveness of the Minnesota Model approach in the treatment of adolescent drug abusers. Addiction. 2000;95(4):601-12.

Sammendrag: Compares drug use outcome data at 6 and 12 mo post-treatment among 3 groups of adolescents: those who completed treatment, those who did not and those on a waiting list. The authors also compared residential and outpatient samples on outcome among treatment completers. 245 drug clinic-referred adolescents (aged 12-18 yrs), all of whom met at least one Diagnostic and Statistical Manual of Mental Disorders-III-Revised (DSM-III-R) substance dependence disorder. 179 Ss received either complete or incomplete, Minnesota Model treatment principles combining 12-step and psychotherapy approaches). There were 66 waiting list Ss. In addition to demographics and clinical background variables the authors measures included treatment involvement, treatment setting and drug use frequency at intake and follow-up. The results indicated that completing treatment was associated with far superior outcome compared to those who did not complete treatment or receive any at all. Favorable treatment outcome for drug abuse was about 2 to 3 times more likely if treatment was completed. Additionally, there were no outcome differences between residential and outpatient group.

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