

Motiverende samtale for å endre levevaner

Notat

Litteratursøk med sortering

Mai 2010

 kunnskapssenteret

Bakgrunn: Nasjonalt kunnskapssenter for helsetjenesten fikk i oppdrag fra Helsedirektoratet å utføre et systematisk litteratursøk med påfølgende sortering av mulig relevante publikasjoner. Oppdraget var å finne litteratur/forskning om motiverende samtale for å endre levevanene: fysisk aktivitet, kosthold, tobakksbruk og alkoholmisbruk. **Metode:** Vi utførte et systematisk litteratursøk 22. mars 2010. Vi søkte i følgende databaser: Cochrane Database of Systematic Reviews (CDSR) The Cochrane Library 2010 Issue 2, Database of Abstracts of Reviews of Effects (DARE) Center for Reviews and Dissemination (CRD), Health Technology Assessment Database (HTA) Center for Reviews and Dissemination (CRD), MEDLINE 1950 to March Week 2 2010 (Ovid), EMBASE 1980 to 2010 Week 11 (Ovid), PsycINFO 1806 to March Week 3 2010 (Ovid). • To forskere gikk uavhengig av hverandere gjennom identifiserte publikasjoner/referanser og vurderte relevans i forhold til inklusjonskriteriene. **Resultater:** 1189 publikasjoner ble identifisert totalt. Av disse ble 68 ansett som mulig relevante.

(fortsetter på baksiden)

Nasjonalt kunnskapssenter for helsetjenesten
Postboks 7004, St. Olavs plass
N-0130 Oslo
(+47) 23 25 50 00
www.kunnskapssenteret.no
Notat: ISBN: 978-82-8121-346-3

Mai 2010

kunnskapssenteret

(fortsettelsen fra forsiden) Referansene ble sortert i kategoriene: • Fysisk aktivitet (4 ref)
• Kosthold (4 ref) • Overvekt og diabetes (4 ref) • Tobakksbruk/Røyking (18 ref)
• Alkoholmisbruk (17 ref) • Kombinert misbruk (2 ref) • Endring i levevaner på flere områder (15 ref) • Helseøkonomisk analyse (2 ref) • Om motiverende samtale (2 ref).

Tittel	Motiverende samtale for å endre levevaner – Litteratursøk med sortering
Institusjon	Nasjonalt kunnskapssenter for helsetjenesten
Ansvarlig	John-Arne Røttingen, <i>direktør</i>
Forfattere	Elin Strømme Nilsen, <i>forsker</i> Vigdis Underland, <i>forsker</i> Marit Johansen, <i>bibliotekar</i>
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Nasjonalt kunnskapssenter for helsetjenesten fremskaffer og formidler kunnskap om effekt av metoder, virkemidler og tiltak og om kvalitet innen alle deler av helsetjenesten. Målet er å bidra til gode beslutninger slik at brukerne får best mulig helsetjenester. Senteret er formelt et forvaltningsorgan under Helsedirektoratet, uten myndighetsfunksjoner. Kunnskapssenteret kan ikke instrueres i faglige spørsmål.

Nasjonalt kunnskapssenter for helsetjenesten

Oslo, mai 2010

Sammendrag

Nasjonalt kunnskapssenter for helsetjenesten fikk i oppdrag fra Helsedirektoratet å utføre et systematisk litteratursøk med påfølgende sortering av mulig relevante publikasjoner. Oppdraget var å finne litteratur/forskning om motiverende samtale for å endre levevanene: fysisk aktivitet, kosthold, tobakksbruk og alkoholmisbruk.

Metode

Vi utførte et systematisk litteratursøk 22 mars 2010.

Vi søkte i følgende databaser:

- Cochrane Database of Systematic Reviews (CDSR) *The Cochrane Library* 2010 Issue 2
- Database of Abstracts of Reviews of Effects (DARE) Center for Reviews and Dissemination (CRD)
- Health Technology Assessment Database (HTA) Center for Reviews and Dissemination (CRD)
- MEDLINE 1950 to March Week 2 2010 (Ovid)
- EMBASE 1980 to 2010 Week 11 (Ovid)
- PsycINFO 1806 to March Week 3 2010 (Ovid)

To forskere gikk uavhengig av hverandere gjennom identifiserte publikasjoner/referanser og vurderte relevans i forhold til inklusjonskriteriene.

Resultater

- 1189 publikasjoner ble identifisert totalt. Av disse ble 68 ansett som mulig relevante.
- Referansene ble sortert i kategoriene
 - Fysisk aktivitet (4 ref)
 - Kosthold (4 ref)
 - Overvekt og diabetes (4 ref)
 - Tobakksbruk/Røyking (18 ref)
 - Alkoholmisbruk (17 ref)
 - Kombinert misbruk (2 ref)
 - Endring i levevaner på flere områder (15 ref)
 - Helseøkonomisk analyse (2 ref)
 - Om motiverende samtale (2 ref)

Motiverende samtale for å endre levevaner

Hva slags rapport er dette?

Notat - Litteratursøk med sortering

Litteratursøk med sortering er resultatet av å søke etter relevant litteratur ifølge en søkestrategi og sortere denne litteraturen i grupper

Hva er inkludert?

- 68 mulig relevante publikasjoner

Hva er ikke inkludert?

- Publikasjoner som ble vurdert som ikke relevante

Hvem står bak denne rapporten?

Nasjonalt kunnskapssenter for helsetjenesten på oppdrag fra Helsedirektoratet

Når ble den laget?

Søk etter studier ble avsluttet Mars 2010

Executive summary

The Norwegian Knowledge Centre for the Health Services was commissioned by the Norwegian Directorate of Health to perform a systematic search for and selection of relevant publications. The commission was to find literature and research on the effect on motivational interviewing for changing the following living habits: Physical activity, diet, smoking and drinking habits.

Methods

We performed systematic literature searches on March 22nd 2010. We searched in the following databases:

- Cochrane Database of Systematic Reviews (CDSR) *The Cochrane Library* 2010 Issue 2
- Database of Abstracts of Reviews of Effects (DARE) Center for Reviews and Dissemination (CRD)
- Health Technology Assessment Database (HTA) Center for Reviews and Dissemination (CRD)
- MEDLINE 1950 to March Week 2 2010 (Ovid)
- EMBASE 1980 to 2010 Week 11 (Ovid)
- PsycINFO 1806 to March Week 3 2010 (Ovid)

Two researchers independently read and identified publications/references and assessed their relevance according to the inclusion criterias.

Results

- A total of 1189 publications were identified. 68 of these were considered relevant.
- The references were sorted in the following categories:
 - Physical activity (4 ref)
 - Diet (4 ref)
 - Overweight and diabetes (4 ref)
 - Smoking (18 ref)
 - Drinking/alcohol abuse (17 ref)
 - Combined abuse (2 ref)
 - Change in living habits in several areas (15 ref)
 - Health economic evaluations (2 ref)
 - About motivational interviewing (2 ref)

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Referanser for alkoholmisbruk	52
Referanser for kombinert misbruk	72
Referanser for endring i levevaner på flere områder	75
Referanser for helseøkonomiske analyser	87
Referanser for motiverende samtale	89

Forord

Nasjonalt kunnskapssenter for helsetjenesten fikk i oppdrag fra Helsedirektoratet å utføre et systematisk litteratursøk med påfølgende sortering av mulig relevante publikasjoner. Oppdraget var å finne litteratur/forskning om motiverende samtale for å endre levevanene: fysisk aktivitet, kosthold, tobakksbruk og alkoholmisbruk.

Prosjektgruppen har bestått av:

- Prosjektleder: Elin S Nilsen, forsker, Kunnskapssenteret
- Vigdis Underland, forsker, Kunnskapssenteret
- Marit Johansen, bibliotekar, Kunnskapssenteret
- Atle Fretheim, forskningsleder, Kunnskapssenteret

Anne Karin Lindahl
Avdelingsdirektør

Atle Fretheim
Seksjonleder

Elin S. Nilsen
Prosjektleder

Innledning

Styrker og svakheter ved litteratursøk med sortering

Vi gjennomførte et systematisk litteratursøk for den gitte problemstillingen. Resultatene fra søket ble i sin helhet gjennomgått for å sortere ut ikke-relevante artikler. Dette ble gjort basert på tittel og sammendrag for hver referanse. Artiklene ble ikke innhentet i fulltekst. Manglende innhenting av artikler i fulltekst gjør at vi kan ha inkludert titler som vil vise seg ikke å være relevante ved full gjennomlesning. Vi benyttet kun databaser for identifisering av systematiske oversikter og meta-analyser. Andre måter å identifisere studier på, som søk i referanselister, kontakt med eksperter på fagfeltet og upublisert litteratur utførte vi ikke, og vi kan derfor ha gått glipp av potensielt relevante artikler eller rapporter. Vi gjennomførte ikke kvalitetsvurdering av artiklene.

Problemstilling

Hvilken effekt har motiverende samtale på endring av levevaner med fokus på fysisk aktivitet, kosthold, røyking og alkoholmisbruk.

Metode

Litteratursøk

Vi utførte et systematisk litteratursøk 22 mars 2010.

Vi søkte i følgende databaser:

- Cochrane Database of Systematic Reviews (CDSR) *The Cochrane Library* 2010 Issue 2
- Database of Abstracts of Reviews of Effects (DARE) Center for Reviews and Dissemination (CRD)
- Health Technology Assessment Database (HTA) Center for Reviews and Dissemination (CRD)
- MEDLINE 1950 to March Week 2 2010 (Ovid)
- EMBASE 1980 to 2010 Week 11 (Ovid)
- PsycINFO 1806 to March Week 3 2010 (Ovid)

Vi søkte i databaser som inneholder systematiske oversikter. Søket i MEDLINE, EMBASE og PsycInfo ble avgrenset til systematiske oversikter eller meta-analyser ved hjelp av filter for systematiske oversikter. I de tilfeller det var mulig valgte vi det filteret med høyest spesifisitet. Søket i MEDLINE, EMBASE ble i tillegg avgrenset til årene 2008-2010 fordi vi forutsatte at systematiske oversikter fra tidligere år fanges opp av CDSR og DARE.

Forskningsbibliotekar Marit Johansen planla og utførte samtlige søk. Den fullstendige søkestrategien er presentert i vedlegg 1.

Vi la bestillingen til grunn ved utarbeiding av litteratursøket og søkte etter oversikter som oppfylte våre inklusjonskriterier for populasjon og intervensjon.

Vi var også inne på nettstedet Motivational Interviewing Network of Trainers (MINT) <http://www.motivationalinterview.org/>. På deres hjemmeside presenteres en bibliografi på motivational interviewing for årene 1983-2009. (MI Bibliography 1983-2009. <http://www.motivationalinterview.org/library/biblio.html>).

Referansene på disse nettsidene ble ikke gjennomgått systematisk av oss da vi forutsatte at aktuelle systematiske oversikter ville bli fanget opp i de vanlige databasene.

Inklusjonskriterier

Studiedesign:	Systematiske oversikter
Populasjon:	Personer med helseatferd som gir økt risiko for sykdom/plager. Med eller uten etablerte medisinske risikofaktorer. Både voksne og barn.
Tiltak (intervensjon):	Motiverende samtale/endringsfokustert rådgivning. En samtaleteknikk for hjelp til endring av levevaner.
Sammenlikningstiltak:	Andre tiltak for å endre atferd. Muntlig råd uten spesifikk samtaleteknikk.
Utfall:	Endring av levevaner med spesielt fokus på: <ul style="list-style-type: none">• Fysisk aktivitetsnivå• Kosthold• Røyking• Alkoholmisbruk• Livskvalitet Vi tok også med helseøkonomiske analyser
Språk:	Ingen begrensninger

Artikkelutvelging

To forskere gikk gjennom alle titlene og sammendragene for å vurdere relevans i forhold til inklusjonskriteriene. Disse vurderingene ble gjort uavhengig av hverandre og ble sammenlignet i etterkant. Der det var uenighet om vurderingene, ble inklusjon eller eksklusjon avgjort ved konsensus.

Utvelgelse av litteratur ble kun gjort basert på tittel og sammendrag. Vi bestilte ikke fulltekst av artiklene.

Vi sorterte mulig relevante artikler i kategoriene

- fysisk aktivitet
- kosthold
- overvekt og diabetes
- tobakksbruk/røyking
- alkoholmisbruk
- kombinert misbruk
- endring i levevaner på flere områder
- helseøkonomiske analyser
- om motiverende samtale

Vi inkluderte en protokoll (prosjektplan) fra Cochrane Database of Systematic Reviews fra 2008 om motiverende samtale for å forebygge alkoholmisbruk hos ungdom (34). Dette fordi det er grunn til å håpe at denne ferdigstilles innen rimelig tid.

Resultat

Resultat av søk

Søket resulterte i 1189 referanser. Vi vurderte 68 av de identifiserte referansene til å være mulig relevante i forhold til inklusjonskriteriene.

Resultat av sorteringen

De mulig relevante referansene ble sortert i 9 kategorier ut fra utfall (se tab 1). I vedlegg 2 presenterer vi referansene fordelt i kategoriene og alfabetisk etter førsteforfatter. Vi oppgir forfattere, tittel på publikasjonen, publikasjonssted og sammendrag av artikkelen slik de fremkom i de elektroniske databasene.

Tabell 1: Antall oversiktsartikler sortert etter utfall (referansenummer i parentes).

Utfall	Antall referanser: 68
Fysisk aktivitet (1-4)	4
Kosthold (5-8)	4
Overvekt og diabetes (9-12)	4
Tobaksbruk/røyking (13-30)	18
Alkoholmisbruk (31-47)	17
Kombinert misbruk (48-49)	2
Endring i levevaner på flere områder (50-64)	15
Kostnader (65-66)	2
Om motiverende samtale (67-68)	2

Vedlegg 1 – søkestrategi

CDSR

- #1 MeSH descriptor Motivation, this term only
- #2 (motivat* or encourag*):ti,ab
- #3 (#1 OR #2)
- #4 MeSH descriptor Interviews as Topic, this term only
- #5 MeSH descriptor Interview, Psychological, this term only
- #6 (interview* or consult* or advice or conversation*):ti,ab
- #7 (#4 OR #5 OR #6)
- #8 (#3 AND #7)
- #9 motivat* NEXT intervention*:ti,ab
- #10 MeSH descriptor Counseling, this term only
- #11 MeSH descriptor Directive Counseling, this term only
- #12 (counseling or health NEXT coaching or psycholog* NEXT intervention*):ti,ab
- #13 (#8 OR #9 OR #10 OR #11 OR #12)
- #14 MeSH descriptor Alcoholism, this term only
- #15 MeSH descriptor Drinking Behavior, this term only
- #16 MeSH descriptor Alcohol Drinking, this term only
- #17 MeSH descriptor Smoking, this term only
- #18 MeSH descriptor Tobacco Use Cessation, this term only
- #19 MeSH descriptor Smoking Cessation, this term only
- #20 MeSH descriptor Tobacco Use Disorder, this term only
- #21 MeSH descriptor Exercise, this term only
- #22 MeSH descriptor Motor Activity, this term only
- #23 MeSH descriptor Physical Fitness, this term only
- #24 MeSH descriptor Sports explode all trees
- #25 MeSH descriptor Eating, this term only
- #26 MeSH descriptor Food Habits, this term only
- #27 MeSH descriptor Diet, this term only
- #28 MeSH descriptor Diet Therapy, this term only
- #29 MeSH descriptor Diet, Reducing, this term only
- #30 MeSH descriptor Nutrition Therapy, this term only
- #31 MeSH descriptor Obesity, this term only
- #32 MeSH descriptor Obesity, Morbid, this term only
- #33 MeSH descriptor Overweight, this term only
- #34 MeSH descriptor Weight Gain, this term only

- #35 MeSH descriptor Weight Loss, this term only
- #36 MeSH descriptor Health Promotion, this term only
- #37 MeSH descriptor Health Behavior, this term only
- #38 MeSH descriptor Life Style, this term only
- #39 alcohol NEAR/3 (use* or abus* or misus* or dependen* or addict* or habit* or consum* or drinking or withdraw* or reduc* or cessation):ti,ab
- #40 binge NEXT drinking:ti,ab
- #41 alcoholism:ti,ab
- #42 smoking:ti,ab
- #43 (tobacco or nicotine) NEAR/3 (use* or abus* or misus* or dependen* or addict* or cessation):ti,ab
- #44 (exercis* or physical* NEXT activ* or physical* NEXT fit* or physical* NEXT train* or active NEXT living or sport*):ti,ab
- #45 (eating or overeating or overfeeding or over NEXT feeding or food NEXT habit* or food NEXT intake or diet or diets or nutrition* or obese or obesity or overweight or weight NEXT gain or gain* NEXT weight or weight NEXT loss or lose NEXT weight or losing NEXT weight or reduc* NEXT weight or weight NEXT reduc*):ti,ab
- #46 healthy NEXT living:ti,ab
- #47 (lifestyle NEXT chang or life NEXT style NEXT chang* or lifestyle NEXT modification or life NEXT style NEXT modification):ti,ab
- #48 (health* NEAR/1 promot*):ti,ab
- #49 (#14 OR #15 OR #16 OR #17 OR #18 OR #19 OR #20 OR #21 OR #22 OR #23 OR #24 OR #25 OR #26 OR #27 OR #28 OR #29 OR #30 OR #31 OR #32 OR #33 OR #34 OR #35 OR #36 OR #37 OR #38 OR #39 OR #40 OR #41 OR #42 OR #43 OR #44 OR #45 OR #46 OR #47 OR #48)
- #50 (#13 AND #49)

DARE + HTA CRD

- # 1 MeSH Motivation
- # 2 motivat* OR encourag*
- # 3 #1 or #2
- # 4 MeSH Interviews as Topic
- # 5 MeSH Interview, Psychological
- # 6 interview* OR consult* OR advice OR conversation*
- # 7 #4 or #5 or #6
- # 8 #3 and #7
- # 9 motivat* NEAR intervention*
- # 10 MeSH Counseling
- # 11 MeSH Directive Counseling

- # 12 counseling OR "health coaching" OR psycholog* NEAR intervention*
- # 13 #8 or #9 or #10 or #11 or #12
- # 14 MeSH Alcoholism
- # 15 MeSH Drinking Behavior
- # 16 MeSH Alcohol Drinking
- # 17 MeSH Smoking
- # 18 MeSH Tobacco Use Cessation
- # 19 MeSH Smoking Cessation
- # 20 MeSH Tobacco Use Disorder
- # 21 MeSH Exercise
- # 22 MeSH Motor Activity
- # 23 MeSH Physical Fitness
- # 24 MeSH Sports EXPLODE 1
- # 25 MeSH Eating
- # 26 MeSH Food Habits
- # 27 MeSH Diet
- # 28 MeSH Diet Therapy
- # 29 MeSH Diet, Reducing
- # 30 MeSH Nutrition Therapy
- # 31 MeSH Obesity
- # 32 MeSH Obesity, Morbid
- # 33 MeSH Overweight
- # 34 MeSH Weight Gain
- # 35 MeSH Weight Loss
- # 36 MeSH Health Promotion
- # 37 MeSH Health Behavior
- # 38 MeSH Life Style
 - alcohol NEAR use* OR alcohol NEAR abus* OR alcohol NEAR misus* OR
 - alcohol NEAR dependen* OR alcohol NEAR addict* OR alcohol NEAR habit*
- # 39
 - OR alcohol NEAR consum* OR alcohol NEAR drinking OR alcohol NEAR
 - withdraw* OR alcohol NEAR reduc* OR alcohol NEAR cessation
- # 40 "binge drinking"
- # 41 alcoholism
- # 42 smoking
 - tobacco NEAR use* OR tobacco NEAR abus* OR tobacco NEAR misus* OR
- # 43
 - tobacco NEAR dependen* OR tobacco NEAR addict* OR tobacco NEAR
 - cessation
- # 44
 - nicotine NEAR use* OR nicotine NEAR abus* OR nicotine NEAR misus* OR

- nicotine NEAR dependen* OR nicotine NEAR addict* OR nicotine NEAR cessation
- # 45 exercis* OR physical* NEAR activ* OR physical* NEAR fit* OR physical* NEAR train* OR "active living" OR sport*
- eating OR overeating OR overfeeding OR "over feeding" OR food NEAR habit* OR "food intake" OR diet OR diets OR nutrition* OR obese OR obesity
- # 46 OR overweight OR "weight gain" OR gain* NEAR weight OR "weight loss" OR "lose weight" OR "losing weight" OR reduc* NEAR weight OR weight NEAR reduc*
- # 47 "healthy living"
- # 48 lifestyle NEAR chang* OR "lifestyle modification" OR "life style" NEAR chang* OR "life style modification"
- # 49 "health promotion" OR "promoting health" OR "promote health"
- # 50 #14 OR #15 OR #16 OR #17 OR #18 OR #19 OR #20 OR #21 OR #22 OR #23 OR #24 OR #25 OR #26 OR #27 OR #28 OR #29 OR #30 OR #31 OR #32 OR #33 OR #34 OR #35 OR #36 OR #37 OR #38 OR #39 OR #40 OR #41 OR #42 OR #43 OR #44 OR #45 OR #46 OR #47 OR #48 OR #49
- # 51 #13 and #50
- # 52 cochrane:ty
- # 53 #51 not #52

MEDLINE

1. Motivation/
2. (motivat* or encourag*).tw.
3. 1 or 2
4. Interviews as Topic/
5. Interview, Psychological/
6. (interview* or consult* or advice or conversation?).tw.
7. or/4-6
8. 3 and 7
9. motivat* intervention?.tw.
10. Counseling/
11. Directive Counseling/
12. (counseling or health coaching or psycholog* intervention?).tw.
13. or/8-12
14. Alcoholism/
15. Drinking Behavior/
16. Alcohol Drinking/
17. Smoking/

18. "Tobacco Use Cessation"/
19. Smoking Cessation/
20. "Tobacco Use Disorder"/
21. Exercise/
22. Motor Activity/
23. Physical Fitness/
24. exp Sports/
25. Eating/
26. Food Habits/
27. Diet/
28. Diet Therapy/
29. Diet, Reducing/
30. Nutrition Therapy/
31. Obesity/
32. Obesity, Abdominal/
33. Obesity, Morbid/
34. Overweight/
35. Weight Gain/
36. Weight Loss/
37. Health Promotion/
38. Health Behavior/
39. Life Style/
40. (alcohol adj3 (use* or abus* or misus* or dependen* or addict* or habit? or consum* or drinking or withdraw* or reduc* or cessation)).tw.
41. binge drinking.tw.
42. alcoholism.tw.
43. smoking.tw.
44. ((tobacco or nicotine) adj3 (use* or abus* or misus* or dependen* or addict* or cessation)).tw.
45. (exercis* or physical* activ* or physical* fit* or physical* train* or active living or sport?).tw.
46. (eating or overeating or overfeeding or over feeding or food habit? or food intake or diet? or nutrition* or obese or obesity or overweight or weight gain or gain* weight or weight loss or lose weight or losing weight or reduc* weight or weight reduc*).tw.
47. healthy living.tw.
48. ((lifestyle or life style) adj (chang* or modification)).tw.
49. (health* adj1 promot*).tw.
50. or/14-49
51. 13 and 50

52. (systematic review or meta analysis or metaanalysis or search*).tw.
53. review.pt.
54. meta-analysis.pt.
55. or/52-54
56. 51 and 55
57. "cochrane database of systematic reviews".jn.
58. 56 not 57
59. (2008* or 2009* or 2010*).ed,ep,yr.
60. 58 and 59

EMBASE

1. Motivation/
2. (motivat* or encourag*).tw.
3. 1 or 2
4. exp Interview/
5. (interview* or consult* or advice or conversation?).tw.
6. 4 or 5
7. 3 and 6
8. motivat* intervention?.tw.
9. Counseling/
10. Directive Counseling/
11. Patient Counseling/
12. Patient Guidance/
13. (counseling or health coaching or psycholog* intervention?).tw.
14. or/7-13
15. Alcoholism/
16. Alcohol Consumption/
17. Alcohol Abuse/
18. Alcohol Withdrawal/
19. Drinking Behavior/
20. Smoking/
21. Adolescent Smoking/
22. Cigarette Smoking/
23. Parental Smoking/
24. Smoking Habit/
25. Maternal Smoking/
26. Smoking Cessation/
27. Tobacco Dependence/
28. "Physical Activity, capacity and Performance"/

29. Physical Activity/
30. Exercise/
31. Training/
32. Motor Activity/
33. Fitness/
34. exp Sport/
35. Eating Habit/
36. Nutrition/
37. Child Nutrition/
38. Infant Nutrition/
39. Nutritional Health/
40. Food Intake/
41. Dietary Intake/
42. Diet/
43. Diet Therapy/
44. Eating/
45. Obesity/
46. Abdominal Obesity/
47. Morbid Obesity/
48. Diabetic Obesity/
49. Weight Gain/
50. Weight Reduction/
51. Lifestyle Modification/
52. Health Behavior/
53. Health Promotion/
54. (alcohol adj3 (use* or abus* or misus* or dependen* or addict* or habit? or consum* or drinking or withdraw* or reduc* or cessation)).tw.
55. binge drinking.tw.
56. alcoholism.tw.
57. smoking.tw.
58. ((tobacco or nicotine) adj3 (use* or abus* or misus* or dependen* or addict* or cessation)).tw.
59. (exercis* or physical* activ* or physical* fit* or physical* train* or active living or sport?).tw.
60. (eating or overeating or overfeeding or over feeding or food habit? or food intake or diet? or nutrition* or obese or obesity or overweight or weight gain or gain* weight or weight loss or lose weight or losing weight or reduc* weight or weight reduc*).tw.
61. healthy living.tw.
62. ((lifestyle or life style) adj (chang* or modification)).tw.

63. (health* adj1 promot*).tw.
64. or/15-63
65. 14 and 64
66. Nutritional Counseling/
67. 65 or 66
68. Systematic Review/
69. Meta Analysis/
70. (systematic review or meta analysis or metaanalysis or search*).tw.
71. or/68-70
72. 67 and 71
73. "cochrane database of systematic reviews".jn.
74. 72 not 73
75. (2008* or 2009* or 2010*).em,yr.
76. 74 and 75

PsycINFO

1. Motivational Interviewing/
2. (motivat* adj2 interview*).ti,ab.
3. 1 or 2
4. (systematic review or meta analysis or metaanalysis or search*).ti,ab.
5. 3 and 4
6. limit 3 to ("0800 literature review" or "0830 systematic review" or 1200 meta analysis)
7. 5 or 6

Vedlegg 2 – sorterte referanser

Referanser for fysisk aktivitet

1. Eden KB, Orleans CT, Mulrow CD, Pender NJ, Teutsch SM. Clinician counseling to promote physical activity. Report 2002;34.
Abstract: RECORD STATUS: This record is a structured abstract written by CRD reviewers. The original has met a set of quality criteria. Since September 1996 abstracts have been sent to authors for comment. Additional factual information is incorporated into the record. Noted as [A:.....]
AUTHOR'S OBJECTIVES: To determine whether counselling adults in primary care settings improves and maintains activity levels
STUDY SELECTION - SPECIFIC INTERVENTIONS: Studies of counselling interventions were eligible for inclusion if they aimed to increase physical activity and the patient's primary care clinician (nurse practitioner, physician or physician assistant) performed some components of the intervention (e.g. assessment, counselling or referral). The majority of the included studies were of brief (3 to 5 minutes) counselling interventions conducted in typical primary care practices. In most studies the clinician advised regular, moderate-intensity physical activity; in some trials clinicians advised vigorous activity as an option. The included studies compared counselling interventions with other interventions or with usual care. The studies were of interventions with combinations of the following elements: interventions delivered by trained nurses or physicians; written prescription; behaviour counselling; extended phone call support; follow-up discussion; goal setting; preventative clinical screening; mailed booklet; educational material; interactive assistance group; and group counselling. The studies targeted physical activity, either alone or in combination with other behavioural targets (diet change or smoking cessation)
STUDY SELECTION - PARTICIPANTS: Studies of general primary care patients were eligible for inclusion. The included studies were of sedentary or minimally active adult or senior men and women. In the individual studies, clinicians excluded patients with contraindications to physical activity
STUDY SELECTION - OUTCOMES: Studies that reported behavioural outcomes (physical activity) were eligible for inclusion. The included studies assessed physical activity using a

brief self-report completed by the patient or using a clinical or researcher interview. The self-report measures used in the individual studies were: Physical Activity for the Elderly; Physical-based Assessment and Counselling on Exercise; Patient-centered Assessment and Counselling on Exercise plus Nutrition; College Alumni Questionnaire; 7-day Physical Activity Recall; Current Physical Activity; Risk Factor Prevalence Survey No. 3 (Australian Heart Foundation); and the Allied Dunbar National Fit Survey

STUDY SELECTION - STUDY DESIGNS: Randomised controlled trials (RCTs), controlled clinical trials, case-control studies, observational studies and systematic reviews were eligible for inclusion if they were assessed as being of "good" or "fair" quality on the U.S. Preventive Services Task Force (USPSTF) scale (see Other Publications of Related Interest no.1). RCTs and non-randomised controlled trials were included. Only studies published since 1994 were included

SEARCHING: Searches were conducted in the Cochrane Database of Systematic Reviews and the Cochrane Controlled Trials Register (April 2000 and February 2001), and in MEDLINE and HealthSTAR from 1994 to June 2001; the Best Evidence database was also searched. The search terms were stated. Trials published before 1994 were identified from the last USPSTF review (see Other Publications of Related Interest no.2). Experts were contacted for additional references and the reference lists of pertinent articles were reviewed

VALIDITY ASSESSMENT: Validity was assessed using criteria developed by the current USPSTF (see Other Publications of Related Interest no.1). The studies were rated as "good" (met all criteria and likely to be valid), "fair" (possibly or probably valid) or "poor" (fatal flaws rendering the results invalid). At least two reviewers assessed study validity

STUDY SELECTION - HOW WERE DECISIONS ON THE RELEVANCE OF PRIMARY STUDIES MADE?: The authors did not state how the papers were selected for the review, or how many reviewers performed the selection

DATA EXTRACTION: A single reviewer abstracted the data using a special data extraction tool designed by the Behavioural Counselling Working Group of the USPSTF. The specific elements extracted were the study design, setting, patient participants, providers, intervention details and outcomes

METHODS OF SYNTHESIS - HOW WERE THE STUDIES COMBINED?: The studies were summarised with respect to study characteristics and quality, then grouped according to the comparator intervention (usual care versus other active intervention). A narrative synthesis was then undertaken

METHODS OF SYNTHESIS - HOW WERE DIFFERENCES BETWEEN STUDIES

INVESTIGATED?: Differences between the studies were discussed in the text of the review with respect to study characteristics such as quality

RESULTS OF THE REVIEW: Ten trials (9,320 adults) were included: 9 RCTs and 1 non-randomised controlled trial. Two trials were rated as "good" quality and the other 7 trials were rated as "fair" quality. The methodological problems included: inadequate description of the counselling intervention; the lack of generalisability due to the use of highly motivated providers; baseline differences in physical activity; uncertain or low provider adherence; inadequate power to detect differences due to the high level of baseline activity; small numbers of participants (providers and patients); and the inclusion of advice in usual care groups. Interventions compared with a usual care control (5 RCTs and 1 non-randomised

controlled trial). The results were mixed. Only one of the 3 trials reporting short-term (less than 6 months) outcomes found that the intervention significantly increased activity in comparison with usual care. Neither of the studies reported a significant interaction. Two of the 6 trials reporting long-term (greater than 6 months) outcomes found that the intervention significantly increased activity in comparison with usual care. None of the other 4 studies found any association. Interventions compared with each other (3 RCTs). One RCT found that advice plus agreeing a goal plus written prescription significantly increased activity at 6 weeks, compared with advice alone. One RCT found that specific goal setting significantly increased activity at 6 weeks in comparison with no specifically set goals. One RCT that compared advice, advice plus educational materials and both combined plus counselling found no significant difference in energy expenditure or fitness for men, but found that the combined intervention significantly increased self-reported physical activity in women at 6 months compared with advice plus educational materials. One study (148 healthy adolescents, 74% met recommendations for vigorous exercise at baseline) found that behavioural-change counselling for diet and exercise, which incorporated goal setting, increased the number of days on which moderate exercise was performed from 3.09 days per week at baseline to 4.52 days per week at 4 months follow-up. Adverse effects. The only trial that reported adverse effects found musculoskeletal injuries in 30% of the patients annually. There was no usual care control group for comparison

AUTHOR'S CONCLUSION: The evidence of whether counselling adults in primary care settings is effective in increasing physical activity was inconclusive

CRD COMMENTARY: The review question was clear in terms of the intervention, participants, study design and outcomes. Several relevant databases were searched, but it was not stated whether any language restrictions were applied and the methods used to select the studies were not explicitly described. Some studies may have been missed since the searches only went back to 1994 (the date of earlier overview), and the earlier overview itself may have missed some studies since it was not a systematic review. Validity was formally assessed using defined criteria and only those studies meeting the minimal quality criteria were included in the review. The methods used to assess validity were described. Relevant data were extracted and tabulated, but since only one reviewer extracted the data there is the potential for errors. The results were appropriately grouped by control intervention type and combined in a narrative synthesis in which attention was drawn to evidence from better quality studies. The evidence presented supports the authors conclusion

IMPLICATIONS OF THE REVIEW FOR PRACTICE AND RESEARCH: Practice: The authors did not state any implications for practice. Research: The authors stated that large prospective studies that report the type of intervention, including the recommended intensity of physical activity, and long-term (greater than 2 years) injuries are required. They recommended that such studies should document the reasons for patients dropping out

OTHER PUBLICATIONS OF RELATED INTEREST: 1. Harris RP, Helfand M, Woolf SH, Lohr KN, Mulrow CD, Teutsch SM, et al. Current methods of the US Preventive Services Task Force: a review of the process. *Am J Prev Med.* 2001;20:21-35. 2. U.S. Preventive Services Task Force. Counselling to promote physical activity. Guide to clinical preventative services. 2nd ed. Baltimore (MD): Williams and Wilkins; 1996. 3. Eden KB, Orleans T, Mulrow CD, Pender NJ, Teutsch SM. Does counseling by clinicians improve physical activity? A summary

of the evidence for the U.S. Preventive Services Task Force. Ann Intern Med 2002;137:208-15

FUNDING: Agency for Healthcare Research and Quality, contract number 290-97-0018

Notes: Accession number: 12002008767

English

DARE

2. Morgan O. Approaches to increase physical activity: reviewing the evidence for exercise-referral schemes. Public Health 2005;119:361-70.

Abstract: RECORD STATUS: This record is a structured abstract written by CRD reviewers. The original has met a set of quality criteria. Since September 1996 abstracts have been sent to authors for comment. Additional factual information is incorporated into the record. Noted as [A:....]

AUTHOR'S OBJECTIVES: To review the effectiveness of exercise-referral schemes

STUDY SELECTION - SPECIFIC INTERVENTIONS: Studies with interventions based in a primary care setting that aimed to provide access to exercise activities and/or facilities were eligible for inclusion. No inclusion criteria for the control intervention were stated. The included studies involved a range of interventions, such as financial incentives to attend leisure facilities, personalised exercise programmes, access to exercise groups, group- or home-based exercise programmes or classes, motivational interventions and prescribed exercise instructions. The control interventions included written information or other advice, and some exercise interventions in those studies where the intervention group received additional motivation or reinforcement methods

STUDY SELECTION - PARTICIPANTS: No inclusion criteria for the participants were stated. All of the included participants were adults, ranging from a mean age of 34 years to older than 80 years. Most studies included healthy, sedentary participants, but one study included those who were hypertensive, overweight or smokers

STUDY SELECTION - OUTCOMES: Studies that assessed physical activity or adherence were eligible for inclusion. The included studies used the following outcomes: self-reported physical activity levels, adherence to allocated physical activity, or attendance at allocated sessions. Some studies also reported on fitness levels, lipid or cholesterol levels, weight and blood-pressure

STUDY SELECTION - STUDY DESIGNS: Controlled studies that were experimental or quasi-experimental were eligible for the review. The included studies were both randomised and non-randomised

SEARCHING: MEDLINE (1966 to 2002), EMBASE (1980 to 2002) and CINAHL (1982 to 2002) were searched for English language papers. Some of the keywords used were listed in the review. The reference lists of the identified studies were checked

VALIDITY ASSESSMENT: The author did not state that they assessed validity. The Scottish Intercollegiate Guidelines Network (SIGN) framework was used to assess the level of evidence provided by each study, based on the likely level of bias. The author did not state how this assessment was performed

STUDY SELECTION - HOW WERE DECISIONS ON THE RELEVANCE OF PRIMARY STUDIES MADE?: The author did not state how the papers were selected for the review, or

how many reviewers performed the selection

DATA EXTRACTION: The author did not state how the data were extracted for the review, or how many reviewers performed the data extraction

METHODS OF SYNTHESIS - HOW WERE THE STUDIES COMBINED?: Each study was described individually, but the results were not synthesised

METHODS OF SYNTHESIS - HOW WERE DIFFERENCES BETWEEN STUDIES

INVESTIGATED?: The studies were described according to whether they were UK-based or not

RESULTS OF THE REVIEW: Nine studies (3,162 participants) were included in the review. Four studies (1,886 participants) were UK-based. An additional two studies appeared to meet the inclusion criteria but were excluded because of insufficient quality and insufficient information about the control group. Six studies scored low on the SIGN scale (high risk of bias), two scored in the middle (low risk of bias) and for one study no level was reported. In three of the four UK-based studies, significant benefits were seen in the intervention compared with the control group at the first point of follow-up but, in general, these benefits were not sustained long term. One of the five non-UK-based studies reported a significant benefit of the intervention compared with the control

AUTHOR'S CONCLUSION: Exercise-referral schemes appeared to increase physical activity levels in certain populations, but this increase may not persist over time

CRD COMMENTARY: This review answered an identified research question which was defined in terms of the intervention and outcomes; the criteria for study design and participants were not defined. However, two studies that fulfilled the inclusion criteria appear to have been excluded for other reasons. The reviewers searched several literature sources for published data, but do not appear to have sought unpublished studies, and restricted the search to studies published in English; the chance of publication and language biases is therefore high. The author did not report whether appropriate steps were taken to reduce the risk of bias and errors during the study selection, validity assessment and data extraction processes. Quality was not assessed in detail: the studies were rated according to study design and risk of bias, but there were no details on how the assessment of risk of bias was achieved. In addition, minimal details of individual study quality were reported, making it difficult for the reader to assess the reliability of the findings. The results of each of the individual studies were summarised, but there was no attempt to synthesise the results across studies. Although the studies were heterogeneous in terms of the population studied and interventions assessed, some attempt to synthesise the results would have improved this review. Given the concerns about the methodology of the review and the quality of the included studies, the results are unlikely to be reliable

IMPLICATIONS OF THE REVIEW FOR PRACTICE AND RESEARCH: Practice: The author did not state any implications for practice. Research: Further studies in different populations and for different activities are required, as are methods to increase long-term adherence to recommended physical activity levels

Notes: Accession number: 12005003633

English

DARE

3. Petrella RJ, Lattanzio CN. Does counseling help patients get active: systematic review of the literature. *Can.Fam.Physician* 2002;48:72-80.

Abstract: RECORD STATUS: This record is a structured abstract written by CRD reviewers. The original has met a set of quality criteria. Since September 1996 abstracts have been sent to authors for comment. Additional factual information is incorporated into the record. Noted as [A:....]

AUTHOR'S OBJECTIVES: To determine the effect of counselling patients to become more physically active

STUDY SELECTION - SPECIFIC INTERVENTIONS: The review sought reports of interventions to promote physical activity to patients by physicians, by primary care clinics or offices, and in secondary or tertiary care. The included interventions were physical activity counselling of various types, the nature of which was unclear from the review. Many of the interventions were part of multi-component programmes. The duration of counselling, where measured, was 5 to 12 minutes. One study used written exercise prescription

STUDY SELECTION - PARTICIPANTS: The inclusion criteria for the participants were not defined. The studies included in the review were of adult patients, but no details of any underlying illness or the reason for consulting a doctor were given. The sample size in the studies ranged from 63 to greater than 4,000 patients. Three studies included only older patients

STUDY SELECTION - OUTCOMES: Studies that included the outcome measures of physical activity or cardio respiratory fitness were eligible

STUDY SELECTION - STUDY DESIGNS: Randomised controlled trials (RCTs) or controlled studies that were not randomised

SEARCHING: PubMed and PsycINFO were searched over the last 30 years using the following MeSH terms: family practice, primary care, physician, physical activity, exercise, counselling and behavioural change. The bibliographies of the identified articles were examined for additional references and experts in the field were consulted

VALIDITY ASSESSMENT: The validity of the identified trials was not assessed

STUDY SELECTION - HOW WERE DECISIONS ON THE RELEVANCE OF PRIMARY STUDIES MADE?: The authors do not state how the papers were selected for the review, or how many of the reviewers performed the selection

DATA EXTRACTION: The authors do not state how the data were extracted for the review, or how many of the reviewers performed the data extraction. The categories of data extracted were: bibliographic details; design; exercise-type, frequency, duration and intensity; intervention type and length; measurement methods; and outcome data reported

METHODS OF SYNTHESIS - HOW WERE THE STUDIES COMBINED?: A narrative approach was used, but the studies were discussed individually with little attempt to pool the results

METHODS OF SYNTHESIS - HOW WERE DIFFERENCES BETWEEN STUDIES INVESTIGATED?: Differences between the studies were not discussed; they can only be evaluated by reference to the individual descriptions and the tables

RESULTS OF THE REVIEW: Thirteen reports of 11 studies were identified: 6 RCTs and 5 quasi-RCTs. Most studies found positive relationships between counselling and the outcomes of adopting physical activity, stages of change and change in physical activity level. No

reliable evaluation instruments were found, and the long-term effect of the interventions was not established. Six of the studies had a follow-up of four months or less

AUTHOR'S CONCLUSION: Family physicians can facilitate improved physical activity levels and aerobic fitness among their patients. To date, interventions have primarily targeted behaviour-change strategies. The addition of written exercise prescriptions could further improve the effect of these interventions. Further investigation should address the long-term effects of interventions and whether the results can be generalised to patient subgroups. Barriers to interventions appear to be the time and skills required, the need for adequate reimbursement, and the lack of evidence supporting outcomes

CRD COMMENTARY: This review addressed an appropriate question using fairly well-defined criteria. More information on the participants included in the review would have been helpful. The literature search was probably adequate, having included two main databases and some hand searching. The quality of the studies was not assessed, and in its synthesis of the findings, the review did not differentiate between the RCTs and the quasi-RCTs. The level of detail of the individual studies presented in the review was rather poor, particularly in terms of the outcome measures and results. It is impossible to determine the contribution of physician counselling alone since some studies were of multi-component interventions. The synthesis of the findings was limited, consisting almost entirely of a description of the findings from the individual studies. The findings overall are synthesised only in the report's conclusions. Overall, the authors' conclusions are supported by the information presented in the review. However, these conclusions are very general in nature due to the diversity of the studies

IMPLICATIONS OF THE REVIEW FOR PRACTICE AND RESEARCH: Practice: The authors did not state any implications for practice. Research: The authors state: More investigation is needed into the long-term effects of interventions and whether results can be generalised to patient subgroups.

Notes: Accession number: 12002000470

English

DARE

4. U.S.Preventive Services Task Force. Behavioural counseling in primary care to promote physical activity: recommendations and rationale. Rockville, MD: Agency for Healthcare Research and Quality (AHRQ) 2002.

Abstract: RECORD STATUS: This is a bibliographic record of a published health technology assessment from a member of INAHTA. No evaluation of the quality of this assessment has been made for the HTA database

AUTHOR'S OBJECTIVES: The aim of this report is to examine the role of behavioural counseling in primary care in promoting physical activity

TYPE OF INTERVENTION: Counselling

STUDY SELECTION - STUDY DESIGNS: Review

CO1: United States

Notes: Accession number: 32005001193

English

HTA

Referanser for kosthold

5. Ammerman A, Pignone M, Fernandez L, Lohr K, Driscoll JA, Nester C *et al.* Counseling to promote a healthy diet. Report 2002;145.

Abstract: RECORD STATUS: This record is a structured abstract written by CRD reviewers. The original has met a set of quality criteria. Since September 1996 abstracts have been sent to authors for comment. Additional factual information is incorporated into the record. Noted as [A:....]

AUTHOR'S OBJECTIVES: To examine the effectiveness of counselling in the primary care setting to promote a healthy diet. This review question was one of seven questions investigating the relationship between health and diet and the effects of dietary change interventions

STUDY SELECTION - SPECIFIC INTERVENTIONS: Any nutritional counselling intervention delivered to a primary care population was eligible for inclusion in the review. Studies evaluating a physician training programme to improve counselling practices were included if there was a control group and if the approach was tested in primary care. The included studies were of the effects of counselling on reducing the intake of total and saturated fat, increasing the intake of fruit and vegetables, and increasing the intake of fibre

STUDY SELECTION - PARTICIPANTS: Studies conducted in populations similar to those encountered in primary care were eligible for inclusion. Those at risk from chronic disease, such as those with elevated cholesterol, were included in the review. Populations with illnesses that might directly affect dietary intake (e.g. cancer) or require a specialised diet (e.g. diabetes), or who were studied immediately following a life-threatening illness, were not included in the review

STUDY SELECTION - OUTCOMES: Studies reporting dietary behaviour change were eligible for inclusion. These did not include biochemical markers with no measure of dietary change. The outcomes reported in the review were the percentage of calories from fat, the number of servings of fruit and vegetables, intake in grams and the change in specific dietary behaviour scores

STUDY SELECTION - STUDY DESIGNS: Only randomised controlled trials were reviewed to address the question on the effectiveness of counselling on dietary behaviour. To be included, the retention rate had to be at least 50% and the follow-up period at least 3 months long

SEARCHING: The review was based on the 1996 Guide to Clinical Preventive Services. To supplement the references included in that publication, MEDLINE (1966 to 2000) and the Cochrane Database of Systematic Reviews were searched. The searches were limited to the English language. Various bibliographies were also checked and experts in the field were consulted

VALIDITY ASSESSMENT: The quality of the included studies was assessed according to the concealment of allocation, blinding of the outcome assessments and the completeness of follow-up. The external validity of each study was also assessed in terms of providers, population and the feasibility of implementing the intervention in primary care. The authors did not state how many reviewers performed the validity assessment

STUDY SELECTION - HOW WERE DECISIONS ON THE RELEVANCE OF PRIMARY STUDIES MADE?: Senior reviewers examined titles and abstracts and made the final decisions on inclusion

DATA EXTRACTION: A team of reviewers extracted the data and discussed any disagreements, with senior reviewers making the final decision. Two senior reviewers classified each intervention as low, medium or high intensity. The effect size from each study was also classified as large, medium or small. Details of these classifications were given in the review

METHODS OF SYNTHESIS - HOW WERE THE STUDIES COMBINED?: The data were tabulated and summarised narratively, by nutrient or food group and also by aspects of the intervention, particularly the setting

METHODS OF SYNTHESIS - HOW WERE DIFFERENCES BETWEEN STUDIES

INVESTIGATED?: Differences between the studies were discussed within groupings by food group and intervention setting

RESULTS OF THE REVIEW: Twenty-nine studies were included. There were 17 studies of dietary fat, 10 of fruit and vegetable intake, 7 of dietary fibre, and 12 of more than one nutrient or food group. All the studies were of good or fair quality. Effect of counselling on dietary fat intake: 6 studies reported large effects, 5 had medium effects and 6 had small effects. Effect of counselling on fruit and vegetable intake: 2 studies reported large effects, 5 had medium effects and 3 had small effects. Effect of counselling on dietary fibre intake: 4 had medium effects and 3 had small effects. The dietary counselling interventions tended to be more effective in high-risk status populations and high-intensity interventions were more effective: the interventions used in high-risk populations tended to be of a higher intensity and, hence, were more effective. Interventions employing more of the effective counselling elements produced larger changes in behaviour. Insufficient studies were found to determine the individual effect of specific counselling techniques. There were no studies of the adverse effects of counselling to alter dietary habits

AUTHOR'S CONCLUSION: Counselling patients can improve dietary habits. More intensive counselling, particularly that aimed at higher risk patients, has generally produced larger changes in behaviour

CRD COMMENTARY: This review utilised well-defined inclusion and exclusion criteria to address its main effectiveness question. The search strategy included only English language publications and it is possible that relevant studies may have been overlooked. The review was conducted by a team and efforts to minimise review bias were implemented, although these were not well reported in the review. The results of the included studies were distilled into large, medium or small effect sizes as the result of high, medium or low intensity interventions. Whilst this approach is useful in reducing complex information, it does risk losing a significant amount of important detail and is susceptible to bias. Overall, the review synthesised a large amount of information and the authors' rather general conclusions appear to be supported by the data presented

IMPLICATIONS OF THE REVIEW FOR PRACTICE AND RESEARCH: Practice: The authors did not state any implications for practice. Research: In relation to dietary counselling, the authors indicate that further research is needed. In particular, research comparing individual- or population-based dietary advice with assessment-based counselling; more in-depth

examination of the effectiveness of specific components and intensities of the interventions;
studies of primary care physicians referring to health professionals outside their clinic setting;
and studies of the role and impact of primary care providers in stimulating or reinforcing
environmental and policy-level interventions

OTHER PUBLICATIONS OF RELATED INTEREST: Pignone MP, Ammerman A, Fernandez L, Orleans T, Pender N, Woolf S, et al. Counseling to promote a healthy diet in adults. A summary of the evidence for the U.S. Preventive Services Task Force. *Am J Prev Med* 2003;24:75-92

FUNDING: Agency for Healthcare Research and Quality, contract number 290-97-0011

Notes: Accession number: 12003008501

English

DARE

6. Fletcher A., Rake C. Effectiveness of interventions to promote healthy eating in elderly people living in the community: a review. *Health Promotion Effectiveness Reviews* 1998;78.
Abstract: RECORD STATUS: This record is a structured abstract written by CRD reviewers. The original has met a set of quality criteria. Since September 1996 abstracts have been sent to authors for comment. Additional factual information is incorporated into the record. Noted as [A:....]
AUTHOR'S OBJECTIVES: To establish which interventions are effective in promoting healthy eating among elderly people living in the community
STUDY SELECTION - SPECIFIC INTERVENTIONS: Any intervention to promote healthy eating was included, with the exception of interventions designed to prevent hypertension through healthy eating. The interventions included: nutrition education targeted at the individual or the community; individual counselling; and policies to facilitate healthy eating behaviour, but not the provision of a meal
STUDY SELECTION - PARTICIPANTS: Free living (i.e. not institutionalised) elderly people above the age of 65 years. Studies with lower age cut-off points were also included if a substantial proportion of the participants were aged above 65 years. Specifically selected medical disease groups were excluded, as were individuals selected for being at raised risk of disease, such as hypertension, hypercholesterolemia, obesity or a family history of disease
STUDY SELECTION - OUTCOMES: Studies presenting outcomes relating to dietary behaviour or diet- related physiological measures were included, as were outcomes measuring dietary knowledge, attitudes and beliefs
STUDY SELECTION - STUDY DESIGNS: Randomised controlled trials (RCTs), controlled non-randomised experimental studies and uncontrolled studies with pre- and post-intervention measures were included. Two studies with post- intervention data only were also included
SEARCHING: MEDLINE, EMBASE, the Science Citation Index, the Social Sciences Citation Index, CINAHL, PsycLIT, Unicorn database (internal library management system), ASSIA and SIGLE were searched from 1985 to the end of 1996. A detailed overview of the search terms and strategies used are presented in an appendix of the review. The reference lists of identified research and review articles were checked. Key journals were hand searched for the last six months of 1996. Grey literature was sought by approaching key organisations and

individuals, and using electronic mail base lists. Only studies from developed countries and English language papers were included in the review

VALIDITY ASSESSMENT: The authors state that quality was judged on the basis of study design, sample size, measurement tools validity, statistical techniques, response and withdrawal rates, major outcomes, generalisability and feasibility. The authors do not state who performed the quality assessment

STUDY SELECTION - HOW WERE DECISIONS ON THE RELEVANCE OF PRIMARY STUDIES MADE?: The authors do not state how the papers were selected for the review, or how many of the reviewers performed the selection

DATA EXTRACTION: Data were extracted using a specially designed form. For each study the following data were extracted: publication information, study design, unit and method of allocation, setting, geographical location, effect size, sample size, measurement tool validity, statistical techniques used, response and withdrawal rates, generalisability, feasibility and cost-effectiveness (where possible) of major outcomes. Where the original paper did not report effect sizes, these were calculated if there was sufficient information to do so

METHODS OF SYNTHESIS - HOW WERE THE STUDIES COMBINED?: A narrative synthesis was provided. The studies were summarised within the following categories: nutrition interventions in elderly people in the community meal setting; nutrition interventions in elderly people in communal settings; nutrition interventions in the elderly population living in the community; and nutrition interventions as part of health promotion interventions

METHODS OF SYNTHESIS - HOW WERE DIFFERENCES BETWEEN STUDIES INVESTIGATED?: Differences between the studies were discussed. Within each section the authors discussed differences in design, participants, setting and intervention

RESULTS OF THE REVIEW: Twenty-three studies were included in the review: 8 RCTs, 8 controlled non-randomised studies, 5 pre-test post-test studies, one cross-sectional study and one prospective cohort study. Nutrition interventions in elderly people in the community meal setting. Only one study out of three found short-term benefits of the programme. Success was related to focusing on high-risk individuals, use of a motivational group-led model, and the emphasis on improving vitamin, protein and mineral intakes. Nutrition interventions in elderly people in communal settings. None of the studies demonstrated adequate evidence for a benefit of intervention, although conversely, none provided adequate evidence for no benefit. Nutrition interventions in the elderly population living in the community. Evidence for the effect of nutrition interventions targeting elderly people in the general community was poor. Nutrition interventions as part of health promotion interventions. The results of three RCTs suggest that a feedback/goal-setting type intervention may lead to improved eating behaviours in elderly people

AUTHOR'S CONCLUSION: There was limited evidence for the effectiveness of healthy eating interventions in elderly people. A strategy of individual feedback and goal-setting tended to be associated with a positive intervention. Two large trials that included nutrition as part of a general health promotion showed some benefits, but the setting was US-based and may not be easily applied in the UK

CRD COMMENTARY: The review commenced with a clear question and stated inclusion criteria. The literature search was relatively comprehensive, although only studies from developed countries and English language papers were retrieved. Details on some aspects of

the review methodology were given, but there were limited details on the methods and results of the quality assessment. A narrative synthesis was appropriate given the nature of the data. The authors' conclusions appear to follow the results

IMPLICATIONS OF THE REVIEW FOR PRACTICE AND RESEARCH: Practice: The authors state that the review does not provide proof of efficacy for any individual technique. However, it did show that individual feedback and goal-setting offer the best way of delivering the interventions. Research: The authors state that there is a need for adequately sized RCTs addressing elderly people in UK settings, to test the efficacy of community-based nutrition interventions. Reviewer's comment: As noted by the authors, the lack of generalisability to the UK setting is problematic, as is the fact that the studies were predominately conducted on white females. There is also a need to address the elderly from ethnic minority groups

FUNDING: Health Education Authority

Notes: Accession number: 12000008123

English

DARE

7. Vanwormer JJ, Boucher JL. Motivational interviewing and diet modification: a review of the evidence. *Diabetes Educ.* 2004;30:404-16.
Abstract: RECORD STATUS: This review has been evaluated by a CRD Reviewer as potentially meeting the CRD quality criteria and a structured abstract is in the process of being written. This provisional record is for information, before the full abstract is loaded
Notes: Accession number: 12004001639
English
DARE

8. Vanwormer JJ, Boucher JL, Pronk NP. Telephone-based counseling improves dietary fat, fruit, and vegetable consumption: a best-evidence synthesis. *J.Am.Diet.Assoc.* 2006;106:1434-44.
Abstract: RECORD STATUS: This record is a structured abstract written by CRD reviewers. The original has met a set of quality criteria. Since September 1996 abstracts have been sent to authors for comment. Additional factual information is incorporated into the record. Noted as [A:....]
AUTHOR'S OBJECTIVES: To evaluate the effects of telephone-based counselling interventions on increasing fruit and vegetable consumption and decreasing dietary fat consumption
STUDY SELECTION - SPECIFIC INTERVENTIONS: Studies where at least one treatment arm comprised standard telephone-based counselling (live interventionist without a video stream) as the primary component were eligible for inclusion. In the included studies, telephone counselling was delivered by registered dietitians, registered nurses, counsellors, psychologists, health educators, information specialists and health students. Counselling was based on Social Cognitive Theory, themes from the Transtheoretical Model, and Motivational Interviewing. Interventions were supplemented with written nutrition information, personalised feedback letters, meal replacements, computerised assessments, group meetings, clinical follow-ups and e-counselling. Where reported, the average number of sessions was 3.4 (range: 1 to 7) over 23.4 weeks (range: 7 to 52), with an average call length of 16.5 minutes (range: 8 to 25). Control conditions included a nutrition assessment, advice and written

information

STUDY SELECTION - PARTICIPANTS: Studies of adults were eligible for inclusion. The majority of included participants were white, middle-aged women and many were reported to have existing cancer, diabetes or heart disease. Most of the studies were conducted in the USA

STUDY SELECTION - OUTCOMES: Studies that reported direct assessments of fruit/vegetable or dietary fat consumption were eligible for inclusion. The secondary outcomes of interest were clinical end points such as blood-pressure, lipid profiles, weight loss and behavioural biomarkers. Dietary outcome measures were assessed by validated self-report instruments, while serum biomarkers were used as proxy measures in some studies. The outcome measures for dietary fat intake were varied

STUDY SELECTION - STUDY DESIGNS: Randomised controlled trials (RCTs) were eligible for inclusion in the review

SEARCHING: Relevant studies published in English from 1 January 2000 to 31 December 2004 were sought from PubMed and PsycINFO; the search terms were reported. The reference lists of selected studies were checked to identify additional studies

VALIDITY ASSESSMENT: The authors did not state that they assessed validity

STUDY SELECTION - HOW WERE DECISIONS ON THE RELEVANCE OF PRIMARY STUDIES MADE?: The authors did not state how the papers were selected for the review, or how many reviewers performed the selection

DATA EXTRACTION: The authors did not state how the data were extracted for the review, or how many reviewers performed the data extraction. For the primary outcomes of interest, effect sizes were calculated for each study using the standardised mean differences between intervention and control groups at the last follow-up. Study authors were contacted where information was missing; where this was unsuccessful, follow-up standard deviations were imputed using baseline values. For secondary outcomes, between-group differences in change scores were reported, where possible

METHODS OF SYNTHESIS - HOW WERE THE STUDIES COMBINED?: The studies were combined in a narrative

METHODS OF SYNTHESIS - HOW WERE DIFFERENCES BETWEEN STUDIES

INVESTIGATED?: Study differences were presented in tabular format and discussed within the text

RESULTS OF THE REVIEW: Nine RCTs (n=8,573) were included in the review. The sample sizes ranged from 56 to 2,970. Study attrition ranged from 1 to 40%. Fruit and vegetable consumption. In studies of participants receiving telephone-based counselling interventions relative to usual care, statistically significant (p-values and significance level not reported) favourable effect sizes (median 0.41, range: 0.08 to 2.47) were reported across 6 studies (n=7,311) for improved fruit and vegetable consumption up to a 12-month follow-up assessment. Greater improvements were noted where the intervention was exclusively focused on fruit and vegetable consumption and in studies containing women diagnosed with early stage breast cancer or at high risk for developing cervical cancer. Dietary fat intake. In studies of participants receiving telephone-based counselling interventions relative to usual care, statistically significant (p-values and significance level not reported) favourable effect sizes (median 0.22, range: 0.20 to 0.92) were reported in 5 studies (n=5,987) for reductions in

dietary fat intake, with follow-up assessment ranging from 7 weeks to 12 months. The rate of decrease was around 5% higher in the intervention group compared with controls. One study reported equivocal results for dietary fat intake, although clinical outcomes were positive (see below). Clinical outcomes. Significant reductions in total cholesterol, low-density lipoprotein cholesterol, body mass index, along with favourable blood-pressure results, were reported in 2 studies (n=3,762) where telephone counselling was compared with participants receiving usual care. Another study (n=320) reported significant improvements in ratios of total to high-density lipoprotein levels at 12 months in the telephone-based counselling group compared with controls, despite equivocal results for dietary improvement (see above)

AUTHOR'S CONCLUSION: Telephone-based counselling interventions are effective in promoting improvements in dietary fat intake and fruit and vegetable consumption in adults. These interventions may be particularly relevant to women at high risk of developing cancer.

Such interventions are also associated with improvements in blood lipids and weight

CRD COMMENTARY: The review question was clear and the inclusion criteria were specific.

The search strategy was centred on study retrieval from two electronic databases and there was no apparent attempt to retrieve unpublished material. This, along with the restriction to English language papers, means that relevant studies might have been missed and publication and language biases cannot be ruled out. Methods used to select the studies and extract the data were not described. Although levels of evidence were reported based on a hierarchy of study designs, there was no formal quality assessment of the included studies. Together, these represent further indications of potential bias and error. Sufficient details of the primary studies were reported. Given the differences between the studies, a narrative synthesis was appropriate. The authors appropriately acknowledged some of the difficulties associated with evaluating heterogeneous studies in this topic area and offered some useful directions for research and practice. The authors' conclusions reflect the evidence presented; however, owing to potential weaknesses arising from a limited search, along with the lack of a detailed quality assessment and transparency in the review process, their reliability is unclear

IMPLICATIONS OF THE REVIEW FOR PRACTICE AND RESEARCH: Practice: The authors stated that telephone-based counselling may be best used to complement clinical care for high-risk individuals, and should be delivered by practitioners who are well trained in the theory of dietary behaviour change. Research: The authors stated that future research should address long-term follow-up (beyond 1 year) of various intensities of interventions, and more diverse populations

Notes: Accession number: 12006004063

English

DARE

Referanser for overvekt og diabetes

9. Leyva-Moral JM. [Motivational interviewing as an instrument to promote physical activity and dietary adherence among people with diabetes: literature review]. Nure Investigacion 2007;6.

Abstract: RECORD STATUS: This review has been evaluated by a CRD Reviewer as potentially meeting the CRD quality criteria and a structured abstract is in the process of being written. This provisional record is for information, before the full abstract is loaded
Notes: Accession number: 12007009256
Spanish
DARE

10. Limbers CA, Turner EA, Varni JW. Promoting healthy lifestyles: Behaviour modification and motivational interviewing in the treatment of childhood obesity. *Journal of Clinical Lipidology* 2008;2:169-78.

Abstract: Childhood obesity has increased dramatically during the past two decades. The growing incidence of childhood obesity is alarming, given the significant short- and long-term health consequences associated with obesity and the strong tracking of obesity from childhood to adulthood. Lifestyle plays an important role in the development and maintenance of obesity. Behaviour modification programs targeting eating, exercise, and diet behaviours continue to be the mainstay for treating obese children. Although family-based behavioural weight management programs have resulted in significant improvements in weight status, maintaining improvements in weight status continues to be a challenge, with many interventions resulting in considerable relapse. Motivational interviewing is one innovative approach, used alone or in conjunction with standard behavioural modification programs, which has been proposed to have the potential to enhance motivation for change and therefore improve long-term treatment outcomes for obese children. A broad literature search using two electronic databases, Medline and PsycINFO, to identify studies that used an intervention with a motivational interviewing component to modify diet and/or physical activity in the prevention or treatment of childhood obesity identified two studies that targeted weight as a primary outcome. The studies reviewed indicate that, although initial findings are encouraging, further research is needed to determine the effectiveness of motivational interviewing for prevention and treatment of childhood obesity. Concerted efforts are clearly needed to elucidate the mechanisms for maintenance of initial treatment gains, as well as the ultimate achievement of more ideal weight once formal treatment ceases. copyright 2008
National Lipid Association

Notes: 2008238309

English

Journal: Review

11. Motivational interviewing embedded in planned diabetes care for Type 2 patients: effectiveness and efficiency in general practice especially to improve guideline recommendations on diet and exercise (project). The Netherlands Organisation for Health Research and Development (ZonMw) 2000.

Abstract: RECORD STATUS: This is a bibliographic record of an ongoing health technology assessment being undertaken by a member of INAHTA. Links to the published report and any other relevant documentation will be added when available

CO1: Netherlands

Notes: Accession number: 32005001338

HTA

12. Van Dorsten B. The use of motivational interviewing in weight loss. *Curr Diab.Rep* 2007;7:386-90.

Abstract: Within the past two decades, motivational interviewing has emerged as a useful strategy to help individuals develop motivation to change health behaviour and sustain those efforts. This article reviews the preliminary but burgeoning literature that supports the effectiveness of motivational interviewing strategies in promoting positive changes in a variety of health behaviours, including dietary change, activity increases, and regimen adherence. A variety of adaptations of the motivational interviewing process are discussed as relevant to making this treatment strategy increasingly applicable to a variety of health care settings.

[References: 47]

Notes: 18173973

Current diabetes reports

101093791

IM

Journal Article. Review

English

Referanser for tobakksbruk/røyking

13. Andersen S, Keller C, McGowan N. Smoking cessation: the state of the science. The utility of the transtheoretical model in guiding interventions in smoking cessation. *Online Journal of Knowledge Synthesis for Nursing* 1999;6.

Abstract: RECORD STATUS: This record is a structured abstract written by CRD reviewers. The original has met a set of quality criteria. Since September 1996 abstracts have been sent to authors for comment. Additional factual information is incorporated into the record. Noted as [A:....]

AUTHOR'S OBJECTIVES: To evaluate the use of the Transtheoretical Model (TTM) used in smoking cessation interventions and to discuss the efficacy of this theoretical framework interventions in smoking cessation interventions

STUDY SELECTION - SPECIFIC INTERVENTIONS: Interventions incorporated a clear specification of the use of a theoretical framework and a specified treatment (intervention) directed towards changing smoking behaviour. The TTM model identifies five stages of change (pre-contemplation, contemplation, preparation, action and maintenance). TTM was used in the following behavioural interventions aimed at changing smoking behaviour: American Care Society/American Lung Association materials; TM manual; TM manual plus with feedback with or without phone calls from counsellor; variable numbers of stage-tailored letters; self-help guide; no materials provided; counselling sessions, brochures and phone calls according to stage; TTM conditions; action orientated conditions; Quit and Win contest; provision of Quit Kit; support group with game playing, provision of self-help information, teaching of coping and problem solving skills, and offer of nicotine replacement therapy; ALA plus standardised self-help manual; individualised manual matched to stage; interactive

experts systems computer reports; personalised intervention with counsellor calls, stage manuals and computer reports; use of bonus prizes; church based self help intervention, counselling and community activities; doctor provided information, strong recommendation to quit, and a cessation pamphlet at first visit; and a population based intervention comparing intensive culturally specific intervention and self help. Co-interventions included financial rewards for participation in study

STUDY SELECTION - PARTICIPANTS: Participants in interventions included the following groups: white female smokers recruited by ads; smokers with low readiness to change recruited via newspaper ads; smokers from alcohol treatment centres; adolescents (average age 16.5 years) enrolled in smoking cessation program; volunteer smokers; self-changing smokers; low-income pregnant women; African Americans; and African American church attenders. Participants in surveys and cohort studies included cardiac inpatients who smoked, volunteer smokers, and smokers who were or were not planning to quit within 6 months

STUDY SELECTION - OUTCOMES: Specified outcomes of smoking behaviour change included the following: stage transition; intention to quit; quit rate including self reported and verified by cotinine testing; 24-hour attempt to quit; average number of cigarettes per day; prolonged abstinence defined as those who reported not smoking at two consecutive follow-ups (follow-ups at 1,6, 12 and 18 months); and factors associated with alterations in change state

STUDY SELECTION - STUDY DESIGNS: Randomised controlled trials (RCTs), pre-test post-test studies, surveys and cohort studies appear to be included. Seminal and contemporary investigations using structured and correlational models were retained. Research reports consisting of letters, theoretical discourse, instrumentation, comments and editorials were excluded

SEARCHING: Searches were conducted of the MEDLINE database, Cumulative Index to Nursing and Allied Health Literature, Psychological Abstracts, relevant citations in published articles, and the Internet between 1995 and 1999. Citations from reviews and synthesis reports were searched and searches specific to investigators in the area of smoking cessation were conducted. Search terms were smoking cessation and models, theoretical. No language restrictions were reported

VALIDITY ASSESSMENT: Validity was assessed using the strength of the treatment and the integrity of the treatment as described by Sechrest et al. (see Other Publications of Related Interest no.1). The authors do not state how the papers were assessed for validity, or how many of the reviewers performed the validity assessment

STUDY SELECTION - HOW WERE DECISIONS ON THE RELEVANCE OF PRIMARY STUDIES MADE?: Reports were examined for the following: use of TTM theoretical framework; measurement scale; method; samples; outcome measures; and effect size. The authors do not state how the papers were selected for the review, or how many reviewers performed the selection

DATA EXTRACTION: The following data were presented in tables: author; date of publication; subjects; intervention and results. The authors do not state how data were extracted for the review, or how many of the reviewers performed the data extraction

METHODS OF SYNTHESIS - HOW WERE THE STUDIES COMBINED?: The studies were combined in a narrative review

METHODS OF SYNTHESIS - HOW WERE DIFFERENCES BETWEEN STUDIES

INVESTIGATED?: The authors do not state how differences between the studies were investigated

RESULTS OF THE REVIEW: The authors state that 16 reports were included in the review, though details of twenty two studies (including correlation studies) were presented in tabular format. The authors do not state the design of studies design but from the data extraction tables the following types of studies appear to be included: Four RCTs where the unit of randomisation was the individual (1921 participants). One RCT where the unit of randomisation was a church (22 churches participated). Two controlled trials (one study compared interventions in two populations, and the other involved 820 participants). Three pre-test post-test studies (1466 participants). Eight surveys (30,556 participants). Four cohort studies (5359 participants). Across all the intervention studies both the treatment strength (the dose and amount of treatment) and integrity (discrimination between two treatments) was weak. Problems in primary studies included: no independent contribution for stages of change and indicators of addiction level; and the possibility that the intervention may not have been delivered as designed. Only results from the RCTs are reported below. One RCT allocated smokers with low readiness to change to three tailored letters, one tailored letter, self-help guide, or no materials and reported that at 6 months both tailored letters led to greater stage transition among immotives, and that three tailored letters led to significantly greater intention to quit. One RCT compared TTM and action oriented conditions in 135 adolescents enrolled on a two year smoking cessation programme and reported no statistically significant difference between conditions. One RCT allocated volunteer smokers recruited by newspaper ads to standardised self-help manuals (ALA) individualised manuals matched to stage (TTT), interactive expert systems computer reports (ITT), or personalised with four counsellor calls, stage manuals, and computer reports (PITT) and found that, at 18 months, ITT produced more significantly more prolonged abstinence, TTT group were significantly better than ALA, and ITT was significantly better than both ALA and TTT. One RCT allocated 521 low-income pregnant women to usual care or physician provided information, cessation pamphlet and advice to quit and found there to be no significant differences in stages of change between second and 36th week in either group. One RCT allocated 22 African American churches either to intensive culturally specific intervention or self-help and found that after 18 months there were no significant differences in quit rates between the groups, though there was significantly more progress along stages of changes and more awareness of and contact with cessation programmes in intervention groups. Further analysis was reported in the paper, including factors associated with stages of change

AUTHOR'S CONCLUSION: The assessment of the research reviewed indicated that TTM has not been fully tested in smoking cessation interventions, nor have the process mediators been used to determine the mechanism of smoking behaviour change

CRD COMMENTARY: The aims were stated and unpublished data sought from experts in the field. Some relevant details of the included studies were presented in tabular format. Given the heterogeneity among primary studies with respect to study design, interventions, and participants, a narrative review was appropriate. Inclusion criteria were stated but did not include any reference to study design. Language restrictions on included studies were not mentioned. Details of correlation studies were not presented separately from intervention

studies. Methods used to select primary studies or extract data were not reported. There was a discrepancy in the number of studies listed in the text and the number presented in the tables. Study design was not clearly stated in many cases. No formal assessment of validity was undertaken and validity was not apparently considered when reporting results from the review. Studies were grouped according to aspect of TTM addressed without consideration of study design, validity, or objectivity of outcomes reported. Heterogeneity was not assessed. The review was not at all easy to follow or comprehend and the synthesis of results was not clear. Insufficient information was provided about the methods used to assess outcomes and validity of included studies to comment on the quality of the evidence

IMPLICATIONS OF THE REVIEW FOR PRACTICE AND RESEARCH: Practice: The authors state that the utility of TTM in clinical practice is limited but that clinicians can use strategies targeted towards enhancement of self-efficacy and facilitation of social support to support smoking behaviour decision-making. Research: The authors state that research is needed to demonstrate that interventions can modify theoretical variables that mediate the effects of programmes and to test this intervention in populations other than white adults

OTHER PUBLICATIONS OF RELATED INTEREST: 1. Sechrest L, West SG, Phillips M, Redner W, Yeaton W. Some neglected problems in evaluation research: Strength and integrity of treatment. *Evaluation Studies Review Annual* 1979;4:15-35

Notes: Accession number: 11999005633

English

DARE

14. Barth J, Critchley JA, Bengel J. Psychosocial interventions for smoking cessation in patients with coronary heart disease. *Cochrane Database of Systematic Reviews* 2008;CD006886.

Abstract: BACKGROUND: Quitting smoking improves prognosis after a cardiac event, but many patients continue to smoke, and improved cessation aids are urgently required.

OBJECTIVES: To assess the effectiveness of psychosocial interventions such as behavioural therapeutic intervention, telephone support and self-help interventions in helping people with coronary heart disease (CHD) to quit smoking. SEARCH STRATEGY: The Cochrane Central Register of Controlled Trials (issue 2 2003), MEDLINE, EMBASE, PsycINFO and PSYINDEX were searched from the start of the database to August 2003. Results were supplemented by cross-checking references, and hand searches in selected journals and systematic reviews.

SELECTION CRITERIA: Randomised controlled studies (RCTs) in patients with CHD with a minimum follow-up of 6 months. After initial selection of the studies three trials with

methodological flaws (e.g. high drop out) were excluded. DATA COLLECTION AND

ANALYSIS: Abstinence rates were computed according to an intention to treat analysis if

possible, or if not on follow-up results only. MAIN RESULTS: We found 16 RCTs meeting

inclusion criteria. Interventions consist of behavioural therapeutic approaches, telephone

support and self-help material and were either focused on smoking cessation alone or

addressed several risk factors. The trials mostly included older male patients with CHD,

predominantly myocardial infarction. Overall there was a positive effect of interventions on

abstinence after 6 to 12 months (odds ratio (OR) 1.66, 95% confidence interval (CI) 1.25 to

2.22), but substantial heterogeneity between trials. Studies with validated assessment of

smoking status at follow-up had lower efficacy (OR 1.44, 95% CI 0.99 to 2.11) than non-

validated trials (OR 1.92, 95% CI 1.26 to 2.93). Studies were clustered by intervention strategy and intensity of the intervention. Clustering reduced heterogeneity, although many trials used more than one type of intervention. The ORs for different strategies were similar (behavioural therapies OR 1.69, 95% CI 1.33 to 2.14; telephone support OR 1.58, 95% CI 1.28 to 1.97; self-help OR 1.48, 95% CI 1.11 to 1.96). More intense interventions showed increased quit rates (OR 1.98, 95% CI 1.49 to 2.65) whereas brief interventions did not appear effective (OR 0.92, 95% CI 0.70 to 1.22). Two trials had longer term follow-up, and did not show any benefits after 5 years. **AUTHORS' CONCLUSIONS:** Psychosocial smoking cessation interventions are effective in promoting abstinence at 1 year, provided they are of sufficient duration. Further studies, with longer follow-up, should compare different psychosocial intervention strategies, or the addition of a psychosocial intervention strategy to pharmacological therapy (e.g. nicotine replacement therapy) compared with pharmacological treatment alone. **PSYCHOSOCIAL SMOKING CESSATION INTERVENTIONS SUCH AS BEHAVIOURAL COUNSELLING, TELEPHONE SUPPORT AND SELF-HELP INTERVENTIONS ARE EFFECTIVE IN HELPING PEOPLE WITH CORONARY HEART DISEASE STOP SMOKING:** Smoking is a risk factor for coronary heart disease and stopping smoking lowers that risk. Psychosocial smoking cessation interventions such as behavioural therapy, telephone support and self-help materials are effective in helping coronary heart disease patients to stop smoking, if they are provided for over 1 month. We found evidence that psychosocial interventions increased quit rates after 6 months. Most trials used a mixture of different intervention strategies, therefore no single strategy showed superior efficacy
 Notes: HM-VASC DOI: 10.1002/14651858.CD006886

15. Carr A, Ebbert J. Interventions for tobacco cessation in the dental setting. Cochrane Database of Systematic Reviews 2006;CD005084.

Abstract: **BACKGROUND:** Tobacco use has significant adverse effects on oral health. Oral health professionals in the dental office or community setting have a unique opportunity to increase tobacco abstinence rates among tobacco users. **OBJECTIVES:** This review assesses the effectiveness of interventions for tobacco cessation offered to cigarette smokers and smokeless tobacco users in the dental office or community setting. **SEARCH STRATEGY:** We searched the Cochrane Tobacco Addiction group Specialized Register (CENTRAL), MEDLINE (1966-April 2006), EMBASE (1988-April 2006), CINAHL (1982-April 2006), Healthstar (1975-April 2006), ERIC (1967-April 2006), PsycINFO (1984-April 2006), National Technical Information Service database (NTIS, 1964-April 2006), Dissertation Abstracts Online (1861-April 2006), Database of Abstract of Reviews of Effectiveness (DARE, 1995-April April 2006), and Web of Science (1993-April 2006). **SELECTION CRITERIA:** We included randomized and pseudo-randomized clinical trials assessing tobacco cessation interventions conducted by oral health professionals in the dental office or community setting with at least six months of follow up. **DATA COLLECTION AND ANALYSIS:** Two authors independently reviewed abstracts for potential inclusion and abstracted data from included trials. Disagreements were resolved by consensus. **MAIN RESULTS:** Six clinical trials met the criteria for inclusion in this review. Included studies assessed the efficacy of interventions in the dental office or a school community setting. All studies assessed the efficacy of interventions for smokeless tobacco users, one of which included cigarettes smokers. All

studies employed behavioural interventions and only one offered pharmacotherapy as an interventional component. All studies included an oral examination component. Pooling of the studies suggested that interventions conducted by oral health professionals increase tobacco abstinence rates (odds ratio [OR] 1.44; 95% confidence interval [CI]: 1.16 to 1.78) at 12 months or longer. Heterogeneity was evident ($I^2 = 75\%$) and could not be adequately explained through subgroup or sensitivity analyses. **AUTHORS' CONCLUSIONS:** Available evidence suggests that behavioural interventions for tobacco use conducted by oral health professionals incorporating an oral examination component in the dental office and community setting may increase tobacco abstinence rates among smokeless tobacco users. Differences between the studies limit the ability to make conclusive recommendations regarding the intervention components that should be incorporated into clinical practice. **CAN INTERVENTIONS DELIVERED BY DENTAL PROFESSIONALS HELP TOBACCO USERS TO QUIT:** As well as the well-known harmful effects of smoking on respiratory and cardiovascular systems, tobacco use is associated with an increased risk for oral disease, including oral cancer and periodontal disease. Dental professionals are in a unique position to help tobacco users who present for dental care by providing cessation assistance. We identified and pooled six studies that showed a benefit of tobacco cessation counseling by dental professionals. The odds ratio was 1.44 (95% confidence interval 1.16 to 1.78) at 12 months, in favour of counseling, compared with usual care or no contact. The major implications of these findings are for smokeless tobacco users in the dental settings, as we found limited evidence for the effectiveness of similar interventions for cigarette smokers
Notes: HM-TOBACCO DOI: 10.1002/14651858.CD005084.pub2

16. Christakis DA, Garrison MM, Ebel BE, Wiehe SE, Rivara FP. Pediatric smoking prevention interventions delivered by care providers: a systematic review. *Am.J.Prev.Med.* 2003;25:358-62.

Abstract: RECORD STATUS: This record is a structured abstract written by CRD reviewers. The original has met a set of quality criteria. Since September 1996 abstracts have been sent to authors for comment. Additional factual information is incorporated into the record. Noted as [A:....]

AUTHOR'S OBJECTIVES: To summarise the evidence of smoking prevention interventions for young people that were delivered in the settings of medical or dental care providers

STUDY SELECTION - SPECIFIC INTERVENTIONS: The inclusion criteria specified smoking initiation prevention interventions delivered via medical or dental providers. The included trials used a variety of interventions, including one or more of the following: brief counselling or motivational teaching, the provision of written materials at the consultation, regular follow-up postal newsletters or other materials and phone calls. The control interventions included usual care and safety interventions where reported. Follow-up lasted between 12 and 36 months

STUDY SELECTION - PARTICIPANTS: An inclusion criterion was studies of people aged under 21 years. The included patients were aged 10 to 19 years. Little socioeconomic data were presented

STUDY SELECTION - OUTCOMES: The primary outcome was self-reported initiation of smoking in the follow-up period, or prevalence of smoking at the end of follow-up. The number of cigarettes smoked per week was also reported. Actual definitions of smoking initiation

varied among the studies and included, where reported, ever-smoked and 30 day recall

STUDY SELECTION - STUDY DESIGNS: Controlled trials based in a health care setting were eligible for inclusion. All of the included trials were randomised controlled trials (RCTs)

SEARCHING: MEDLINE, the Cochrane Controlled Trials Register and PsycINFO were searched up to July 2002; the search terms were listed. Bibliographies of relevant articles, including review articles and meta-analyses, were checked. Subject experts were contacted to supplement the search. An attempt to locate unpublished trials was made through the Medical Editors Trials Amnesty. Only trials published in English were eligible for inclusion

VALIDITY ASSESSMENT: The authors did not state that they assessed validity, but did state that the studies were assessed for blinding of the intervention. The authors did not state how this assessment was performed

STUDY SELECTION - HOW WERE DECISIONS ON THE RELEVANCE OF PRIMARY STUDIES MADE?: The authors did not state how the papers were selected for the review, or how many reviewers performed the selection

DATA EXTRACTION: The authors did not state how the data were extracted for the review, or how many reviewers performed the data extraction

METHODS OF SYNTHESIS - HOW WERE THE STUDIES COMBINED?: The authors of the review presented a narrative summary of each trial. They stated that the clinical heterogeneity of the included trials precluded a meta-analysis

METHODS OF SYNTHESIS - HOW WERE DIFFERENCES BETWEEN STUDIES INVESTIGATED?: Differences between the studies were commented on within the report

RESULTS OF THE REVIEW: Four RCTs (21,522 participants) were included. There was a high loss to follow-up in the included studies, between 7 and 41%. Of the four studies, one reported a statistically significant reduction in smoking prevalence at the 1-year follow-up (odds ratio 0.63, 95% confidence interval: 0.44, 0.91), whereas none of the other three reported a significant effect at either two (n=2) or three (n=1) years. The study with a 3-year follow-up also reported no significant effect of the intervention on smoking initiation at one or two years

AUTHOR'S CONCLUSION: There was limited evidence on the efficacy of smoking prevention interventions for adolescents in the health care setting. There was no evidence of the long-term effectiveness of these interventions

CRD COMMENTARY: The review question was clear in terms of the study design, intervention and participants' age. The authors did not define smoking initiation, and there was variation in the definitions used in the included studies (such as ever smoked and 30-day recall). Several relevant sources were searched but, since the search strategy was restricted to trials published in English, some relevant studies might have been omitted. A limited effort was made to locate unpublished studies. There was no assessment of validity, other than to assess the included trials for blinding of the intervention. In addition, the included studies were limited by the use of self-reported outcomes and short duration of follow-up. It does not appear that any attempts were made to minimise bias, e.g. in the data extraction and study selection processes. Insufficient description of the participants and interventions used and the lack of information on the control interventions mean that it was difficult to interpret the results. There was also insufficient information on the number of practices involved in each of the included trials. The authors noted that only one of the included trials accounted for practice-

level clustering in the analysis. The review did not provide sufficient information on the context of the included studies (e.g. whether a median income of \$40 to \$50,000 relates to a low or high socioeconomic position), which limits the understanding of the generalisability of the results. The authors' conclusions about there being a lack of evidence to support smoking prevention interventions at health care practices follow on from the results of the review

IMPLICATIONS OF THE REVIEW FOR PRACTICE AND RESEARCH: Practice: The authors did not state any implications for practice, although they noted that patient counselling for tobacco smoking prevention is not unreasonable and is at the discretion of the provider.

Research: The authors did not state any implications for research

Notes: Accession number: 12003006738

English

DARE

17. Crawford JT, Tolosa JE, Goldenberg RL. Smoking cessation in pregnancy: why, how, and what next. Clin.Obstet.Gynecol. 2008;51:419-35.

Abstract: Smoking cessation in pregnancy has been shown to reduce low birth weight, preterm birth, and infant morbidities. The effectiveness and safety profile of current cessation approaches in pregnancy are presented. The highest cessation rates are associated with counseling and behavioural interventions. Further studies are needed to evaluate the safety and efficacy of pharmacotherapy in pregnancy including nicotine replacement therapy, bupropion and the recently approved drug Varenicline. The risks and benefits of nicotine replacement therapy in heavy smokers and bupropion are discussed. Data on fetal risk are not yet available for Varenicline. [References: 65]

Notes: 18463471

Clinical obstetrics and gynecology

df, 0070014

IM

Journal Article. Review

English

18. Garrison MM, Christakis DA, Ebel BE, Wiehe SE, Rivara FP. Smoking cessation interventions for adolescents: a systematic review. Am.J.Prev.Med. 2003;25:363-7.

Abstract: RECORD STATUS: This record is a structured abstract produced by CRD. The original has met a set of quality criteria. Since September 1996 abstracts have been sent to authors for comment. Additional factual information is incorporated into the record. Noted as [A:....]

AUTHOR'S OBJECTIVES: To assess the effectiveness of smoking cessation interventions for adolescents

SEARCHING: MEDLINE (from 1966), Cochrane Central Register of Controlled Trials and PsycINFO were searched to June 2002. Search terms were reported. Medical Editors Trial Amnesty register reference lists of studies retrieved and reference lists of relevant reviews and meta-analyses were hand searched. Experts in the field were consulted. The search was limited to studies in English

VALIDITY ASSESSMENT: The authors stated that the methodology of all retrieved articles was evaluated, but did not specify the criteria used to evaluate the included studies. The

authors did not state how the assessment was performed

DATA EXTRACTION: Odds ratios (ORs) or risk ratios (RRs) were reported (based on the numbers of events in the control and intervention groups of each study), with 95% confidence intervals (CIs). The authors stated neither how the data were extracted for the review nor how many reviewers performed the data extraction. The authors of primary studies were contacted for further information as necessary

RESULTS OF THE REVIEW: Six studies were included in the review (n=1,490, range 40 to 627). Four were randomised controlled trials (RCTs, n=528). A fifth RCT (n=335) had methodological flaws and was regarded in the review as non-randomised. The sixth study was non-randomised and had a matched control school (n=627). Only one study was double-blinded. Drop-out rates ranged from 5% to 51%. Only two of the studies analysed data by intention to treat. School-based educational/motivational sessions (three studies): The one relevant RCT reported that at four weeks post intervention the likelihood of being smoke-free for five days was significantly higher in the intervention group (RR 2.51, 95% CI 1.25 to 5.03) analysed by intention to treat. Two non-randomised studies reported a significant impact on cessation rates in the intervention group. One of the non-randomised studies stratified the analysis by gender and reported that the intervention significantly benefited female but not male students. Other interventions (three studies): No statistically significant difference in cessation rates was found between pregnant adolescents who received educational sessions with peer support and those who received educational sessions alone or usual care (one RCT). Neither was there any statistically significant difference in smoking outcomes between hospital-recruited adolescents who received a motivational interview and those who received a pamphlet (one RCT) nor between adolescents who received laser versus sham acupuncture (one RCT)

AUTHOR'S CONCLUSION: There was little evidence to support the effectiveness of smoking cessation interventions in adolescents, and none of the available evidence was long term

CRD COMMENTARY: The objectives and inclusion criteria of the review were clear. Relevant sources were searched for studies. The authors acknowledged that the restriction by language and the limited search for unpublished articles meant that some studies may have been missed. It was unclear whether steps were taken to minimise the risk of reviewer bias and error by having more than one reviewer independently undertake study selection, validity assessment and data extraction. Relevant aspects of study validity were considered, but criteria used for the assessment were not reported specifically. The higher-quality studies were appropriately given prominence in the narrative synthesis. The authors explored potential biases in the primary studies, such as lack of intention to treat analysis, variability of outcome measures and short follow-up times. The poor reporting of review methods mean that the authors' conclusions may need to be interpreted with a degree of caution.

IMPLICATIONS OF THE REVIEW FOR PRACTICE AND RESEARCH: Practice: The authors did not state any implications for practice. Research: The authors stated that rigorous RCTs with well-defined outcomes and long-term follow up were needed on smoking cessation interventions in adolescents. Strategies effective in adults should be tested among adolescents. Results should be stratified by variables such as gender, nicotine addiction and level of motivation

FUNDING: The Robert Wood Johnson Foundation

Notes: Accession number: 12003006737

English

DARE

19. Gorin SS, Heck JE. Meta-analysis of the efficacy of tobacco counseling by health care providers. *Cancer Epidemiol. Biomarkers Prev.* 2004;13:2012-22.

Abstract: RECORD STATUS: This review has been evaluated by a CRD Reviewer as potentially meeting the CRD quality criteria and a structured abstract is in the process of being written. This provisional record is for information, before the full abstract is loaded

Notes: Accession number: 12005003372

English

DARE

20. Hannover W, Roske K, Thyrian JR, Grempler J, Rumpf HJ, Hapke U *et al.* [Interventions for smoking cessation in pregnancy and postpartum. *Z. Geburtshilfe Neonatol.* 2008;212:87-93.

Abstract: BACKGROUND: Interventions for smoking cessation in pregnancy are effective. But the effects are small. Cognitive-behavioural approaches and social support are more efficacious. Interventions for relapse prevention postpone relapse for six months. METHODS: Motivational interviewing serves as a practical basis for interventions. Social-cognitive models serve as basis to plan interventions. RESULTS: Our own results may be summarised as follows: 1) smoking in pregnancy and postpartum has a high priority with paediatricians and midwives; 2) also after delivery women express an interest in being counselled; 3) interventions increase the proportions of newly abstinent women and postpone relapse. CONCLUSIONS: The effects of such interventions are small and diminish between six and twelve months postpartum. With respect to population impact, it may be assumed that implementation in routine care will show sustained effects at the population level.

[References: 40]

Notes: 18709627

Zeitschrift fur Geburtshilfe und Neonatologie
ced, 9508901

IM

English Abstract. Journal Article. Review

German

21. Hitsman B, Moss TG, Montoya ID, George TP. Treatment of tobacco dependence in mental health and addictive disorders. *Can J Psychiatry* 2009;54:368-78.

Abstract: People with mental health and addictive (MHA) disorders smoke at high rates and require tobacco treatment as a part of their comprehensive psychiatric care. Psychiatric care providers often do not address tobacco use among people with mental illness, possibly owing to the belief that their patients will not be able to quit successfully or that even short-term abstinence will adversely influence psychiatric status. Progress in the development of treatments has been slow in part because smokers with current MHA disorders have been excluded from most smoking cessation trials. There are several smoking cessation treatment options, including psychological and pharmacological interventions, that should be offered to people with an MHA disorder who smoke. Building motivation and readiness to quit smoking is

a major challenge, and therefore motivational interventions are essential. We review the treatment options for people with tobacco dependence and MHA disorders, offer recommendations on tobacco assessment and tailored treatment strategies, and provide suggestions for future research. Treatment efficacy could be enhanced through promoting smoking reduction as an initial treatment goal, extending duration of treatment, and delivering it within an integrated care model that also aims to reduce the availability of tobacco in MHA treatment settings and in the community. [References: 95]

Notes: 19527557

Canadian journal of psychiatry. Revue canadienne de psychiatrie
clr, 7904187

IM

Journal Article. Research Support, N.I.H., Extramural. Research Support, Non-U.S. Gov't.

Review

English

22. Lai Douglas TC, Cahill K, Qin Y, Tang J. Motivational interviewing for smoking cessation.

Cochrane Database of Systematic Reviews 2010;CD006936.

Abstract: BACKGROUND: Motivational Interviewing (MI) is a directive patient-centred style of counselling, designed to help people to explore and resolve ambivalence about behaviour change. It was developed as a treatment for alcohol abuse, but may help smokers to make a successful attempt to quit. OBJECTIVES: To determine the effects of motivational interviewing in promoting smoking cessation. SEARCH STRATEGY: We searched the Cochrane Tobacco Addiction Group Specialized Register for studies with terms (motivational OR motivation OR motivating OR motivate OR behavi* OR motivat*) and (interview* OR session* OR counsel* OR practi*) in the title or abstract, or as keywords. Date of the most recent search: April 2009. SELECTION CRITERIA: Randomized controlled trials in which motivational interviewing or its variants were offered to smokers to assist smoking cessation. DATA COLLECTION AND ANALYSIS: We extracted data in duplicate. The main outcome measure was abstinence from smoking after at least six months follow up. We used the most rigorous definition of abstinence in each trial, and biochemically validated rates where available. Subjects lost to follow up were treated as continuing smokers. We performed meta-analysis using a fixed-effect Mantel-Haenszel model. MAIN RESULTS: We identified 14 studies published between 1997 and 2008, involving over 10,000 smokers. Trials were conducted in one to four sessions, with the duration of each session ranging from 15 to 45 minutes. All but two of the trials used supportive telephone contacts, and supplemented the counselling with self-help materials. MI was generally compared with brief advice or usual care in the trials. Interventions were delivered by primary care physicians, hospital clinicians, nurses or counsellors. Our meta-analysis of MI versus brief advice or usual care yielded a modest but significant increase in quitting (RR 1.27; 95% CI 1.14 to 1.42). Subgroup analyses suggested that MI was effective when delivered by primary care physicians (RR 3.49; 95% CI 1.53 to 7.94) and by counsellors (RR 1.27; 95% CI 1.12 to 1.43), and when it was conducted in longer sessions (more than 20 minutes per session) (RR 1.31; 95% CI 1.16 to 1.49). Multiple session treatments may be slightly more effective than single sessions, but both regimens produced positive outcomes. Evidence is unclear at present on the optimal number

of follow-up calls. There was variation across the trials in treatment fidelity. All trials used some variant of motivational interviewing. Critical details in how it was modified for the particular study population, the training of therapists and the content of the counselling were sometimes lacking from trial reports. **AUTHORS' CONCLUSIONS:** Motivational interviewing may assist smokers to quit. However, the results should be interpreted with caution due to variations in study quality, treatment fidelity and the possibility of publication or selective reporting bias. **DOES MOTIVATIONAL INTERVIEWING HELP PEOPLE WHO SMOKE TO QUIT?:** Motivational interviewing or its variants are widely used to help people stop smoking. It is a counselling technique for helping people to explore and resolve their uncertainties about changing their behaviour. It seeks to avoid an aggressive or confrontational approach. It tries to steer people towards choosing to change their behaviour, and to encourage their self-belief. Our review found that motivational interviewing seems to be effective when given by general practitioners and by trained counsellors. Longer sessions (more than 20 minutes per session) were more effective than shorter ones. Two or more sessions of treatment appeared to be marginally more successful than a single session treatment, but both delivered successful outcomes. The evidence for the value of follow-up telephone support was unclear. Our results should be interpreted with caution, due to variations in how the treatment was delivered, what it included and the completeness of the evidence

Notes: HM-TOBACCO DOI: 10.1002/14651858.CD006936.pub2

23. Mottillo S, Filion KB, Belisle P, Joseph L, Gervais A, O'Loughlin J *et al.* Behavioural interventions for smoking cessation: a meta-analysis of randomized controlled trials. *Eur.Heart J.* 2009;30:718-30.

Abstract: RECORD STATUS: This record is a structured abstract produced by CRD. The original has met a set of quality criteria. Since September 1996 abstracts have been sent to authors for comment. Additional factual information is incorporated into the record. Noted as [A:....]

AUTHOR'S OBJECTIVES: To assess the efficacy of behavioural interventions for smoking cessation

SEARCHING: EMBASE, MEDLINE, PsycINFO, the Cochrane Library, and the CDC Tobacco Information and Prevention databases were searched up to August 2007 for articles published in English. Search terms were reported. In addition, reference lists of relevant articles were also searched

VALIDITY ASSESSMENT: Included trials were assessed on quality using a modified Jadad scale for criteria on randomisation and patient withdrawals/drop-outs. The maximum score was 3 points, with 3 denoting low probability of bias. The authors did not state how many reviewers assessed quality of the studies

DATA EXTRACTION: Two reviewers independently extracted outcome data on an intention-to-treat basis to calculate odds ratios and 95% credible intervals (CrIs). Disagreements were resolved through discussion with a third reviewer

RESULTS OF THE REVIEW: Fifty RCTs, including 64 comparisons (n=26,927 participants), were included in the review. Sample sizes ranged between 29 and 3,102 participants. The average quality score was 2.14, indicating that the majority of RCTs had medium to low probability of bias. The minimal clinical intervention was not statistically significantly effective

in reducing smoking (nine RCTs), but the remaining three interventions did significantly increase smoking abstinence compared with control groups: individual counselling (OR 1.49, 95% CrI 1.08 to 2.07, 23 RCTs), group counselling (OR 1.76, 95% CrI 1.11 to 2.93, 12 RCTs), and telephone counselling (OR 1.58, 95% CrI 1.15 to 2.29, 10 RCTs)

AUTHOR'S CONCLUSION: Intensive behavioural interventions, including individual, group, and telephone counselling, significantly increased smoking abstinence in people motivated to stop smoking. Minimal clinical intervention may increase smoking cessation, but the evidence was insufficient to draw firm conclusions regarding its efficacy

CRD COMMENTARY: The review question was supported by clear inclusion criteria. Several appropriate databases were searched, but this was limited to publications in English, so language bias may have been introduced. There was no apparent search for unpublished papers, so other potentially relevant papers may have been missed. Publication bias was reported to have been assessed, but the results were not reported. The quality of trials was assessed using reliable measurement tools. The mean quality score across all included RCTs suggested that the overall quality was medium to high, but quality scores for individual RCTs were not provided, which made it difficult to assess the accuracy of the results for each intervention type. The authors undertook data extraction in duplicate, but did not state whether similar steps were taken for study selection and validity assessment, so reviewer error and bias cannot be ruled out. A random-effects model was used in an attempt to account for potential heterogeneity. The authors acknowledged certain limitations with the included trials, such as clinical and methodological heterogeneity, and wide credible intervals for each intervention. The authors' conclusions appear to reflect the evidence, but given limitations with the potential for review bias and the quality of the included studies, they should be interpreted with caution

IMPLICATIONS OF THE REVIEW FOR PRACTICE AND RESEARCH: Practice:

The authors stated that healthcare workers should advise smokers to use more intensive individual, group, or telephone counselling for smoking cessation. Research: The authors did not state any implications for further research

OTHER PUBLICATIONS OF RELATED INTEREST: Stead LF, Bergson G, Lancaster T.

Physician advice for smoking cessation. Cochrane Database of Systematic Reviews 2008, Issue 2. Art. No.: CD000165. DOI: 10.1002/14651858.CD000165.pub3. Lancaster T, Stead LF.

Individual behavioural counselling for smoking cessation. Cochrane Database of Systematic Reviews 2005, Issue 2. Art. No.: CD001292. DOI:

10.1002/14651858.CD001292.pub2. Rice VH, Stead LF. Nursing interventions for smoking cessation. Cochrane Database of Systematic Reviews 2008, Issue 1. Art. No.: CD001188.

DOI: 10.1002/14651858.CD001188.pub3. Stead LF, Lancaster T. Group behaviour therapy programmes for smoking cessation. Cochrane Database of Systematic Reviews 2005, Issue 2. Art. No.: CD001007. DOI: 10.1002/14651858.CD001007.pub2. Stead LF, Perera R,

Lancaster T. Telephone counselling for smoking cessation. Cochrane Database of Systematic Reviews 2006, Issue 3. Art. No.: CD002850. DOI: 10.1002/14651858.CD002850.pub2

FUNDING: The Canadian Institutes of Health Research (CIHR grant number 81257);

Canadian Cardiovascular Outcomes Research Team grant

Notes: Accession number: 12009104926

English

DARE

24. Poulsen PB, Dollerup J, Moller AM. Is a percentage a percentage? Systematic review of the effectiveness of Scandinavian behavioural modification smoking cessation programmes. *Clinical Respiratory Journal* 2010;4:3-12.
- Abstract:** Introduction: Tobacco smoke is the leading preventable cause of death in the world. A total of 50% of all smokers will die from a smoking-related disease with a major impact upon quality of life and health-care costs. Tobacco-controlling policies, including smoking cessation, have increasingly been implemented across European countries. Reported effectiveness data on smoking cessation interventions are important for decision making. Objective: This study aimed to conduct a literature review on how the effectiveness (quit rates) of behavioural modification smoking cessation programmes (BMSCPs) - counselling, quitlines and quit-and-win contests - were analysed in Denmark, Sweden and Norway. Methods: A systematic review was carried out by using the search engines Medline (U.S. National Library of Medicine, Bethesda, MD, USA), Cinahl (CINAHL Information Systems, EBSCO Industries, Ipswich, MA, USA), Embase (Elsevier, New York, NY, USA) and the grey literature. Following the Russell Standards, studies were selected according to design, analysis of data [intention-to-treat (ITT)/per protocol (PP)], documentation of abstinence and length of follow-up. Cochrane reviews of pharmacological studies were used as the benchmark. Results: Although ITT analysis is the standard scientific approach advocated, most studies of BMSCPs reviewed were analysed by using the PP approach and were based on self-reported point prevalence estimates. This resulted in the reported 1-year quit rates between 16%-45% (PP) and 9%-23% (ITT). In contrast, pharmacological studies are conservative, as they are randomised, use ITT analysis and have continuous quit rates with biochemical verification of abstinence. Conclusion: This literature review reveals that quit rates of smoking cessation interventions are not always comparable. Scandinavian BMSCPs reported optimistic quit rates, confirmed by Cochrane literature review criteria. Care should be exercised when comparing smoking cessation interventions. copyright 2009 Blackwell Publishing Ltd
- Notes: 2010025534
- English
- Journal: Review

25. Reus VI, Smith BJ. Multimodal techniques for smoking cessation: A review of their efficacy and utilisation and clinical practice guidelines. *Int.J.Clin.Pract.* 2008;62:1753-68.
- Abstract:** Aims: Nicotine addiction is a complex, chronic condition with physiological and psychological/behavioural aspects that make smoking cessation extremely difficult. This paper reviews current recommendations for smoking cessation and the efficacy of pharmacotherapy and behavioural modification techniques, used either alone or in combination, for smoking cessation. Results: Abstinence rates for pharmacotherapies range from [similar to]16% to [similar to]30% at 1-year follow-up, with efficacy odds ratios (ORs) compared with placebo of [similar to]1.7 for nicotine replacement therapy (NRT), [similar to]1.9 for bupropion sustained release and [similar to]3.0 for varenicline. Behaviour modification therapies have achieved quit rates of between 8% and 43% for up to 1 year, with ORs in comparison to no treatment of

between [similar to]1.2 and [similar to]2.2. No direct comparisons have been made between pharmacotherapy alone and psychological behaviour strategies alone. However, combining physiological approaches with counselling significantly increases the odds of quitting compared with either technique alone. Conclusions: Applying multimodal techniques for the treatment of nicotine addiction is the recommended approach and has demonstrated the potential to improve rates of permanent abstinence in smokers attempting cessation. While the numbers of patients receiving help and advice regarding smoking cessation is increasing, the multimodal approach appears to be currently underutilised by clinicians and therefore smoking cessation strategies are not being optimised. copyright 2008 The Authors

Notes: 2008489158

English

Journal: Review

26. Riemsma RP, Pattenden J, Bridle C, Sowden A, Mather L, Watt IS *et al.* Systematic review of the effectiveness of stage based interventions to promote smoking cessation. *BMJ* 2003;326:1175.

Abstract: RECORD STATUS: This record is a structured abstract written by CRD reviewers. It is based on the paper *BMJ* and the additional information available on the *BMJ* website. The original has met a set of quality criteria. Since September 1996 abstracts have been sent to authors for comment. Additional factual information is incorporated into the record. Noted as [A:....]

AUTHOR'S OBJECTIVES: To evaluate the effectiveness of interventions using a stage-based approach in bringing about positive changes in smoking behaviour

STUDY SELECTION - SPECIFIC INTERVENTIONS: Studies of stage-based interventions (interventions that take the current stage of the individual into account, e.g. pre-contemplation, contemplation, preparation, action and maintenance) were eligible for inclusion. The interventions included in the review were: preventive health programmes, motivational approaches, educational programmes, transtheoretical model of change-based interventions, self-help interventions, computer-based programmes, school- and office-based interventions, minimal contact behavioural programmes, Smoke Free Families programme, interactive expert systems, nurse practitioner interventions, kick-it guide and video, pharmaceutical interventions, health care practitioner training, counselling and advice

STUDY SELECTION - PARTICIPANTS: Studies of smokers were eligible for inclusion. Where reported, the mean age of the participants ranged from 16.5 to 60.1 years and the proportion of women from 4.3 to 100%

STUDY SELECTION - OUTCOMES: Studies reporting changes in smoking behaviour were eligible for inclusion. For the majority of studies, the review reported whether differences between the groups were statistically significant or not, rather than individual results

STUDY SELECTION - STUDY DESIGNS: Randomised controlled trials (RCTs) were eligible for inclusion. Where reported, the duration of follow-up ranged from 6 months to 2 years

SEARCHING: Thirty-five (unnamed) electronic databases were searched from inception to July 2002; no language restrictions were applied. The bibliographies of retrieved papers were screened and the authors of abstracts in conference proceedings were contacted for information

VALIDITY ASSESSMENT: Study quality was assessed in relation to the following: randomisation, allocation concealment, blinding, comparability at baseline, adjustment for baseline differences, completeness of follow-up, reporting of inclusion criteria, reporting of point estimates and variability, use of an intention-to-treat analysis, use of sample size calculations, description of statistical methods, comparability of treatments, validation of stage of change instrument, its use at baseline and quality of implementation, tailoring of the intervention, and reporting of training details. The maximum possible score was 13. One reviewer assessed the quality of the studies and a second reviewer checked the assessment. Any disagreements were resolved by consensus

STUDY SELECTION - HOW WERE DECISIONS ON THE RELEVANCE OF PRIMARY

STUDIES MADE?: Two reviewers independently selected studies for inclusion in the review

DATA EXTRACTION: One reviewer extracted the data and a second reviewer checked them.

Data on smoking behaviour, movement through stages, adverse effects and cost-effectiveness were extracted. The overall responses to the interventions were classified as significant, mixed or not significant for each study

METHODS OF SYNTHESIS - HOW WERE THE STUDIES COMBINED?: The studies were combined in a narrative

METHODS OF SYNTHESIS - HOW WERE DIFFERENCES BETWEEN STUDIES

INVESTIGATED?: Summary results, and the rating for each quality criterion for each study, were tabulated. Differences between the studies were discussed in the text

RESULTS OF THE REVIEW: Twenty-three RCTs (n=20,793) were included in the review.

The quality score ranged from 3 to 12. Eleven studies reported appropriate randomisation and six allocation concealment. Only one study reported blinding the patients, outcome assessors and care providers; another study reported blinding outcome assessors and three studies blinded patients. Seven RCTs reported the use of a sample size calculation. Stage-based versus non stage-based interventions (11 RCTs). One RCT reported mainly significant results in favour of the stage-based intervention, two reported mixed results, and eight reported no significant difference between groups. Stage-based versus no intervention (15 RCTs). Seven RCTs reported mainly significant results in favour of the stage-based intervention, two reported mixed results, and six reported no significant difference between groups

PRODUCTIVITY COSTS: One RCT estimated the marginal cost per person who quit as £450.65, which could fall to an extreme of £265 with increased use. A second study reported an incremental cost-effectiveness ratio for the intervention as £300 per person who quit

AUTHOR'S CONCLUSION: There is limited evidence for the effectiveness of stage-based interventions aimed at changing smoking behaviour

CRD COMMENTARY: The review question was clear with inclusion criteria clearly defined.

The authors undertook a comprehensive search without language restrictions, thereby reducing the potential for language and publication bias. Methods were employed to reduce the risk of error and bias. The use of a narrative synthesis was appropriate given the clinical heterogeneity between the studies. Details of the studies were available online. A thorough assessment of methodological rigour was undertaken, and the results for each criterion were reported along with the overall quality score. This was a well-conducted review and the conclusion should be reliable

IMPLICATIONS OF THE REVIEW FOR PRACTICE AND RESEARCH: Practice: The authors did not state any implications for practice. Research: The authors stated that there is a need for well-designed and appropriately implemented RCTs based on appropriately staged and theoretically consistent interventions. They also stated that further systematic reviews are required to evaluate the effectiveness of interventions based on other theoretical approaches

FUNDING: NHS R&D Health Technology Assessment programme

Notes: Accession number: 12003008382

English

DARE

27. Schmelzle J, Rosser WW, Birtwhistle R. Update on pharmacologic and nonpharmacologic therapies for smoking cessation. *Can.Fam.Physician* 2008;54:994-9.

Abstract: OBJECTIVE: To review the evidence on the efficacy and safety of pharmacologic and nonpharmacologic therapies for smoking cessation. QUALITY OF EVIDENCE: MEDLINE, EMBASE, and the Cochrane Database of Systematic Reviews were searched for randomized controlled trials, meta-analyses, and systematic reviews (level I evidence) pertinent to pharmacologic and nonpharmacologic smoking cessation therapies. MAIN MESSAGE: Pharmacologic smoking cessation aids are recommended for all smokers trying to quit, unless contraindicated. A new pharmacologic smoking cessation aid, varenicline, is now available in Canada. Level I evidence at 1-year follow-up indicates that it is effective for smoking cessation. Adverse effects include nausea, insomnia, and abnormal dreaming. Nausea is mild or moderate and decreases over time. Varenicline is more effective than placebo or bupropion. Counseling also increases the likelihood of achieving cessation. CONCLUSION: Preliminary data indicate that varenicline is more effective than other available pharmacologic smoking cessation aids. Pharmacologic therapy should be combined with nonpharmacologic therapy. [References: 42]

Notes: 18625823

Canadian family physician Medecin de famille canadien

blo, 0120300

IM

Journal Article. Research Support, Non-U.S. Gov't. Review

English

28. Stead LF, Perera R, Lancaster T. Telephone counselling for smoking cessation. *Cochrane Database of Systematic Reviews* 2006;CD002850.

Abstract: BACKGROUND: Telephone services can provide information and support for smokers. Counselling may be provided proactively or offered reactively to callers to smoking cessation helplines. OBJECTIVES: To evaluate the effect of proactive and reactive telephone support via helplines and in other settings to help smokers quit. SEARCH STRATEGY: We searched the Cochrane Tobacco Addiction Group trials register for studies using free text term 'telephone*' or the keywords 'telephone counselling' or 'Hotlines' or 'Telephone' . Date of the most recent search: March 2009. SELECTION CRITERIA: Randomized or quasi-randomized controlled trials in which proactive or reactive telephone counselling to assist smoking cessation was offered to smokers or recent quitters. DATA COLLECTION AND ANALYSIS: Trials were identified and data extracted by one person (LS) and checked by a

second (TL). The main outcome measure was the risk ratio for abstinence from smoking after at least six months follow up. We selected the strictest measure of abstinence, using biochemically validated rates where available. We considered participants lost to follow up to be continuing smokers. Where trials had more than one arm with a less intensive intervention we used only the most similar intervention without the telephone component as the control group in the primary analysis. We assessed statistical heterogeneity amongst subgroups of clinically comparable studies using the I² statistic. Where appropriate, we pooled studies using a fixed-effect model. A meta-regression was used to investigate the effect of differences in planned number of calls. MAIN RESULTS: Sixty-five trials met the inclusion criteria. Among smokers who contacted helplines, quit rates were higher for groups randomized to receive multiple sessions of proactive counselling (nine studies, >24,000 participants, risk ratio (RR) for cessation at longest follow up 1.37, 95% confidence interval (CI) 1.26 to 1.50). There was mixed evidence about whether increasing the number of calls altered quit rates but most trials used more than two calls. Two studies comparing different counselling approaches during a single quitline contact did not detect significant differences. Of three studies that provided access to a hotline two detected a significant benefit and one did not. Telephone counselling not initiated by calls to helplines also increased quitting (44 studies, >24,000 participants, RR 1.29, 95% CI 1.20 to 1.38). In the subgroup of studies offering 1-2 calls the effect was small and not significant. A further seven studies were too diverse to contribute to meta-analyses and are discussed separately. AUTHORS' CONCLUSIONS: Proactive telephone counselling helps smokers interested in quitting. There is some evidence of a dose response; one or two brief calls are less likely to provide a measurable benefit. Three or more calls increase the chances of quitting compared to a minimal intervention such as providing standard self-help materials, brief advice, or compared to pharmacotherapy alone. Telephone quitlines provide an important route of access to support for smokers, and call-back counselling enhances their usefulness. IS TELEPHONE COUNSELLING EFFECTIVE AS PART OF A PROGRAMME HELP PEOPLE STOP SMOKING: Smoking contributes to many health problems including cancers and heart and lung diseases. People trying to quit smoking can be helped with medication or through behavioural support such as specialist counselling and group therapy. Support, information and counselling are offered either face-to-face or by telephone. Counselling via telephone hotlines can be provided as part of a programme or separately, and can potentially reach large numbers of people. Our review of trials found telephone counselling to be effective; multiple sessions are likely to be most helpful

Notes: HM-TOBACCO DOI: 10.1002/14651858.CD002850.pub2

29. Strassmann R, Bausch B, Spaar A, Kleijnen J, Braendli O, Puhan MA. Smoking cessation interventions in COPD: a network meta-analysis of randomised trials. *Eur.Respir.J.* 2009;34:634-40.

Abstract: The aim of this study was to rank order the effectiveness of smoking cessation interventions for chronic obstructive pulmonary disease (COPD) patients. We searched 10 databases to identify randomised trials of smoking cessation counselling (SCC) with or without pharmacotherapy or nicotine replacement therapy (NRT). We conducted a network meta-analysis using logistic regression analyses to assess the comparative effectiveness of

smoking cessation interventions while preserving randomisation of each trial. The analysis of 7,372 COPD patients from six out of eight identified trials showed that SCC in combination with NRT had the greatest effect on prolonged abstinence rates versus usual care (OR 5.08, $p < 0.0001$) versus SCC alone (2.80, $p = 0.001$) and versus SCC combined with an antidepressant (1.53, $p = 0.28$). The second most effective intervention was SCC combined with an antidepressant (3.32, $p = 0.002$) versus SCC alone (1.83, $p = 0.007$), with no difference between antidepressants. SCC alone was of borderline superiority compared with usual care (1.81, $p = 0.07$). A small body of evidence suggests that SCC combined with NRT is more effective than other combinations and single smoking cessation treatments in COPD, but substantially more research is needed for this most important COPD treatment

Notes: 19357145

The European respiratory journal : official journal of the European Society for Clinical Respiratory Physiology

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Journal Article. Meta-Analysis

English

30. Tonnesen P. Smoking cessation: How compelling is the evidence? A review. *Health Policy* 2009;91:S15-S25.

Abstract: Objectives: To provide a short review of the evidence base supporting smoking cessation interventions, including behavioral therapy and pharmacological treatment options.

Methods: Published meta-analysis was mainly used supplemented with a limited literature search. Results: Effective smoking cessation consists of pharmacotherapy and behavioral support. Counseling increases abstinence rates parallel to the intensity of support. First-line pharmacological drugs for smoking cessation are nicotine replacement products (patch, gum, inhaler, nasal spray, lozenge/tablets), varenicline and bupropion SR with scientific well-documented efficacy when used for 2-3 months and mostly mild side effects. Alternative therapies such as hypnosis and acupuncture have no scientifically proven effects.

Conclusions: With the most optimal drugs and counseling today a 1-year abstinence rate of approximately 25% can be expected in smoking cessation. On-going research is examining the potential effects of nicotine vaccination as relapse prevention. copyright 2009 Elsevier Ltd.

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Notes: 2009466984

English

Journal: Article

Referanser for alkoholmisbruk

31. Barnett NP, Read JP. Mandatory alcohol intervention for alcohol-abusing college students: a systematic review. *J.Subst.Abuse Treat.* 2005;29:147-58.

Abstract: RECORD STATUS: This record is a structured abstract written by CRD reviewers. The original has met a set of quality criteria. Since September 1996 abstracts have been sent to authors for comment. Additional factual information is incorporated into the record. Noted as [A:.....]

AUTHOR'S OBJECTIVES: To review intervention programmes for mandatory alcohol education or counselling for college or university students

STUDY SELECTION - SPECIFIC INTERVENTIONS: Studies of any intervention for an alcohol-related infraction were eligible for inclusion. The interventions in the review included alcohol education classes, alcohol awareness workshops and counselling

STUDY SELECTION - PARTICIPANTS: It appeared that studies with university or college students were eligible for inclusion. Participation was mandatory for the students in most studies. No further details of the participants included in the review were reported

STUDY SELECTION - OUTCOMES: Studies that reported any post intervention outcomes were eligible. The included studies measured the opinions of the programmes, changes in knowledge and awareness, changes in alcohol consumption, and the tendency to relapse into prior behaviour patterns

STUDY SELECTION - STUDY DESIGNS: Studies that included some form of evaluation of an intervention were eligible for the review

SEARCHING: MEDLINE, PsycINFO and ERIC were searched until 2004. The search terms were reported, although it was unclear whether any language restrictions were applied. The citation lists of studies were also checked

VALIDITY ASSESSMENT: The authors did not state that they formally assessed validity. Some features were reported; these included length of follow-up, completeness of follow-up, sample size, adherence to intervention and assessment of intervention integrity

STUDY SELECTION - HOW WERE DECISIONS ON THE RELEVANCE OF PRIMARY STUDIES MADE?: The authors did not state how the papers were selected for the review, or how many reviewers performed the selection

DATA EXTRACTION: The authors did not state how the data were extracted for the review, or how many reviewers performed the data extraction. The effect sizes were extracted as reported, or calculated where possible using the means and standard deviations or percentages reported

METHODS OF SYNTHESIS - HOW WERE THE STUDIES COMBINED?: The studies were grouped into three categories according to study design (single-group, post-test data only; single-group with follow-up; RCTs) and combined in a narrative

METHODS OF SYNTHESIS - HOW WERE DIFFERENCES BETWEEN STUDIES INVESTIGATED?: Differences between the studies were described in the data tables and discussed in the text of the review

RESULTS OF THE REVIEW: Sixteen studies were identified: 3 randomised controlled trials (RCTs; n=213), 7 single-group studies with post-test data (n at least 466 at baseline) and 6 single-group studies with follow-up data (n=662 at baseline). The authors also stated that two dissertations were not included as the number of other studies was so low. Single-group, post-test data only. Most of the studies were group programmes lasting for a median of 6 hours. Half of them included additional sessions with counsellors. The evaluation of the interventions in the studies was generally minimal, although 2 studies reported that students

stated that they had reduced their alcohol consumption, a third study reported no change in consumption rates, and three reported low rates of recidivism. The length of follow-up was often unclear and sample sizes were usually small (less than 45 participants). Single-group with follow-up data. Most of the studies used group programmes and typically lasted for 3 hours; the follow-up periods tended to be short (2 weeks to 3 months). Overall, the within-group effect sizes ranged from 0.09 to 1.59, although most were in the moderate range of 0.2 to 0.8. Two studies reported that consumption of alcohol was significantly reduced, but neither used validated measures of alcohol consumption. No other study suggested any statistically significant results in any of the outcomes. RCTs. Overall, the between-group effect sizes of the 3 trials were generally small to moderate for all outcomes reported. The exception was one study that found a large, statistically significant effect size, suggesting that the control group had a greater alcohol knowledge than the intervention group. However, this study was only based on 25 participants

AUTHOR'S CONCLUSION: The findings suggested that targeted interventions designed to address the motivation of students, which are mandatory rather than voluntary, may be effective at reducing student drinking. Although, the authors concluded that overall there is a paucity of good research, the studies identified had a number of flaws. For example, not including a control or comparison group; small or selective sample size; lack of behavioural measures of alcohol consumption; no follow-up or low follow-up rates, or short follow-up intervals. Further research into interventions designed to reduce heavy drinking in college students is necessary

CRD COMMENTARY: This review addressed a very broad question and some inclusion criteria were not explicitly defined. Electronic databases were searched using the search terms provided, although it was unclear whether any unpublished studies were sought and whether any language restrictions were applied; thus, it was not possible to assess whether any relevant studies might have been missed. The review authors also mentioned that two dissertations were not included in the review, and the reasons for this were not clear; this highlights a potential selection bias. The methods used to select studies and extract the data were not described, so it is not known whether any efforts were made to reduce reviewer errors and bias during these processes. The validity of the included studies was not formally assessed, although the authors did acknowledge the limitations of the studies in the text of the review and conclusion. Given the diversity of the included studies, a narrative synthesis was appropriate. Various potential sources of bias in the review process meant it was difficult to assess the reliability of the authors' conclusions. However, overall, the conclusions appear reasonable and the need for further research seems appropriate

IMPLICATIONS OF THE REVIEW FOR PRACTICE AND RESEARCH: Practice: The authors did not state any implications for practice. Research: The authors stated that further research to evaluate different modes and types of interventions and sanctions (in particular mandatory, rather than voluntary interventions), long-term efficacy and the cost-effectiveness of interventions is required

FUNDING: National Institute on Alcohol Abuse and Alcoholism, grant numbers AA12158 and AA7459

Notes: Accession number: 12005004772

English

DARE

32. Bertholet N, Daeppen JB, Wietlisbach V, Fleming M, Burnand B. Reduction of alcohol consumption by brief alcohol intervention in primary care: systematic review and meta-analysis. *Arch.Intern.Med.* 2005;165:986-95.

Abstract: RECORD STATUS: This record is a structured abstract written by CRD reviewers. The original has met a set of quality criteria. Since September 1996 abstracts have been sent to authors for comment. Additional factual information is incorporated into the record. Noted as [A:....]

AUTHOR'S OBJECTIVES: To determine the efficacy of brief alcohol interventions (BAIs) for the long-term reduction of alcohol consumption and related harm in patients attending primary care for reasons other than alcohol-related problems

STUDY SELECTION - SPECIFIC INTERVENTIONS: Studies of interventions delivered individually in a primary care setting that focused on alcohol consumption and had face-to-face contact during the initial session were eligible for inclusion. Interventions had to be defined as a brief intervention, a motivational intervention, or report the use of feedback or advice to reduce the risk of alcohol consumption. There were no restrictions on repeated interventions or reinforcement sessions. Studies conducted in a hospital ward or emergency department were excluded. The duration of the interventions ranged from 5 to 45 minutes. In most of the studies the intervention was repeated or a booster session given, or participants were offered a follow-up visit. The majority of studies had control groups that consisted of no intervention or usual care; in others it was up to 5 minutes of advice

STUDY SELECTION - PARTICIPANTS: Studies that included out-patients who were attending primary care for reasons other than alcohol-related problems were eligible for inclusion. Studies of those actively seeking alcohol treatments, including those responding to advertisements or referred for alcohol treatment, were excluded. Studies that selected patients from registers or patient lists, or that brought people together specifically for alcohol screening, were also excluded. At least 75% of the study population had to consist of primary care patients or, if less than 75%, then subanalyses for the different patient populations were to have been performed. The participants included in the review were males and females aged from 15 to 70 years. Most of the studies excluded alcohol-dependent individuals

STUDY SELECTION - OUTCOMES: The studies had to have at least one outcome related to change in alcohol intake, drinking status, health-related quality of life or functional status, laboratory markers related to alcohol use, utilisation of health care resources, or cost data to be eligible for inclusion. The primary outcome in the review was alcohol consumption. The secondary outcomes included the number of drinking days per month, usual drinking amount per occasion among women, use of health care resources, mental or physical health perception status, well-being, alcohol-related problems and mortality

STUDY SELECTION - STUDY DESIGNS: Randomised controlled trials (RCTs) were eligible for inclusion in the review

SEARCHING: The Cochrane CENTRAL Register, MEDLINE and PsycINFO were searched from inception to January 2003. In addition, the ISI Web of Science and ETOH databases were searched. The reference lists of all identified articles and the authors' own

bibliographic resources were also checked for further relevant trials. There were no restrictions on language or date of publication

VALIDITY ASSESSMENT: The authors assigned a quality score from 0 (lowest) to 18 (highest) using an instrument adapted from the Cochrane Drugs and Alcohol group. The instrument assessed randomisation, concealment of allocation, blinding in the outcome assessment, attrition during follow-up, intention-to-treat analysis, clear definition of the intervention, selection and performance bias, and the presence of a measure of intervention exposure. Two reviewers independently assessed the validity of the studies. When necessary, decisions were reached by consensus

STUDY SELECTION - HOW WERE DECISIONS ON THE RELEVANCE OF PRIMARY STUDIES MADE?: Two reviewers independently selected studies for inclusion. If an agreement was not reached, a third reviewer was consulted

DATA EXTRACTION: Two independent reviewers extracted the data. Any disagreements were resolved by consensus, with a third reviewer consulted when necessary. For studies that reported alcohol consumption or differences in alcohol consumption, data were extracted to calculate a mean net reduction in alcohol consumption (grams of ethanol per week) for the intervention group compared with the control group. When information on weekly alcohol was missing, the authors used the definition of absolute ethanol content in a standard drink used in the country where the study was conducted. Data were extracted in accordance with intention-to-treat principles. Individuals excluded from the follow-up were assigned the mean group baseline alcohol consumption value. In studies that reported change in alcohol consumption, missing individuals were rated as showing no change in alcohol consumption

METHODS OF SYNTHESIS - HOW WERE THE STUDIES COMBINED?: Studies that reported alcohol consumption or differences in alcohol consumption at 6 or 12 months' follow-up, and which had confidence intervals (CIs), standard deviations, or standard errors at baseline and other follow-up time points, were combined using a random-effects model. A pooled weighted mean difference (WMD) was calculated, along with 95% CIs, by the weighted average of individual study effects using a DerSimonian and Laird weighting method. The results for the other outcomes were discussed narratively. Publication bias was assessed using the Begg and Mazumdar adjusted rank correlation test and the Egger regression asymmetry test

METHODS OF SYNTHESIS - HOW WERE DIFFERENCES BETWEEN STUDIES

INVESTIGATED?: Heterogeneity was assessed using the Cochran chi-squared Q statistic and the I-squared statistic. Potential causes of heterogeneity were investigated using meta-regression models. The variables considered were: year of study publication; gender of study population; mean alcohol consumption in the brief alcohol intervention group at baseline; the length of follow-up; the response rate to follow-up; the duration of the intervention; the technique used in the intervention; and methodological quality

RESULTS OF THE REVIEW: Nineteen RCTs (3 of which were cluster RCTs) with a total of 5,639 participants were included in the review. The mean methodological quality score was 9.6 (range: 5 to 14). Studies of lower quality (a score less than 10) were associated with inadequate randomisation or reporting of allocation concealment. High-quality studies (a score of 10 or greater) were more likely to show statistically significant beneficial effects of the intervention in comparison with low-quality studies. Alcohol consumption. When the analysis

was not adjusted for drop-outs, BAIs were associated with significantly less alcohol consumption per week (10 RCTs; WMD -50 g ethanol, 95% CI: -65, -34). This corresponds to about 5 drinks, or an additional relative mean reduction of 15% in alcohol consumption in a comparison of the intervention group and control groups. When the analysis only included trials for which intention-to-treat analysis was possible and also adjusted for drop-outs, BAIs were still associated with significantly less alcohol consumption per week, although the effect was smaller (9 RCTs; WMD -38 g, 95% CI: -51, -24). No evidence of statistical heterogeneity between studies was found ($Q=15.1$, $P=0.24$). Heterogeneity was estimated to account for approximately one fourth of the total variance in the outcome (I-squared 25.8%). No evidence of statistical heterogeneity was found in the intention-to-treat analysis ($Q=6.7$, $P=0.82$). Heterogeneity was higher in low-quality studies than in high-quality studies. There was no evidence of publication bias, but a cumulative meta-analysis found that trials published after 1996 showed a significantly greater effect size than those published before this time. The results were similar for studies reporting results at both 6- and 12-month follow-ups, and for males and females. Methodological quality, baseline alcohol consumption and studies conducted in the USA were found to impact on the effect size. Other variables had only a minor impact on the effect of BAIs. Other outcomes. The results for the other outcomes were inconclusive. Seven studies evaluated laboratory values as an indicator of alcohol use: four found improvements and three found no significant effect. Three studies evaluated health care utilisation. One study found a lower number of medical visits in the intervention group than in the control group. One study found no significant differences between the groups in emergency department visits at 6 and 12 months, but did find a significant difference at 48 months; There were significantly less hospital days in the intervention group at 6, 12 and 48 months. One study found no significant differences between the intervention and control groups in health care utilisation during the 2 years after the BAI. Nine studies evaluated mental or physical well-being-related outcomes. There were significant differences between the intervention and control groups on 9 of the 21 measures of mental or physical health perception status, demonstrating better quality of life for the intervention group participants. One study found a significant decrease in mortality in the intervention group when compared with the control at 36 months, but this difference was not maintained at 48 months

PRODUCTIVITY COSTS: One study performed a cost-benefit analysis, based on reduced hospitalisations, reduced emergency department visits, and reduced motor vehicle or criminal events compared with the overall cost of screening, assessment and intervention. The study found a cost-benefit ratio for a BAI of 4.3:1 from a medical perspective, and 39:1 from a societal perspective. The net benefits per intervention patient were US\$456 (1993) from a medical perspective and US\$7,780 (1993) from a societal perspective

AUTHOR'S CONCLUSION: BAIs are effective in reducing alcohol consumption in primary care settings and their effects can last for as long as 48 months. The typical effective BAI lasts up to 15 minutes, has additional written material, and provides patients with the opportunity to make a follow-up appointment

CRD COMMENTARY: The authors set out a clear objective and the inclusion criteria were clearly defined in terms of participants, intervention, outcomes and study design. Several relevant sources were searched without any restrictions on language or publication date, which helps reduce the risk of missing relevant articles. The study selection, quality

assessment and data extraction processes were carried out in duplicate by two independent reviewers, which also helps reduce the risk of reviewer error and bias. Adequate details of the participants and interventions were provided. Methodological quality was assessed, although the use of a non-validated quality score to rank the study quality might not have been appropriate. Statistical homogeneity and the impact of several relevant variables were assessed using appropriate techniques. The analysis was undertaken using an intention-to-treat approach, which strengthens the results. The decision to only pool studies of alcohol consumption seemed appropriate given the heterogeneity of the other outcomes. This was a relatively well-conducted review, and it is likely that the authors' conclusions are reliable

IMPLICATIONS OF THE REVIEW FOR PRACTICE AND RESEARCH: Practice: The authors stated that BAIs that last between 5 and 15 minutes, and are accompanied by written material and the chance for patients to make an appointment for a follow-up visit, have the potential to reduce alcohol consumption in comparison with no intervention, usual care, or interventions which are less than 5 minutes' duration. Research: The authors stated that future research should focus on determining which components of brief interventions are the most effective in the primary care setting, and should evaluate the effects of BAIs on morbidity, mortality and quality of life-related outcomes

FUNDING: Clinical Epidemiology Center; Alcohol Treatment Center

Notes: Accession number: 12005008230

English

DARE

33. Carey KB, Scott-Sheldon LAJ, Carey MP, DeMartini KS. Individual-level interventions to reduce college student drinking: A meta-analytic review. *Addict.Behav.*2007;32:2469-94.

Abstract: In light of increasing numbers of controlled studies evaluating alcohol abuse prevention interventions for college drinkers, we conducted a meta-analysis to summarize the current status of the literature. The meta-analysis includes 62 studies, published between 1985 to early 2007, with 13750 participants and 98 intervention conditions. All studies were content coded for study descriptors, participant characteristics, and intervention components. We derived weighted mean effect sizes for alcohol interventions versus comparison conditions for consumption variables and alcohol-related problems, over four measurement intervals. Over follow-up intervals lasting up to 6 months, participants in risk reduction interventions drank significantly less relative to controls. Students receiving interventions also reported fewer alcohol-related problems over longer intervals. Moderator analyses suggest that individual, face-to-face interventions using motivational interviewing and personalized normative feedback predict greater reductions in alcohol-related problems. Implications for future research include attention to maintenance of effects, and developing more efficacious interventions for at-risk college drinkers. (PsycINFO Database Record (c) 2009 APA, all rights reserved) (journal abstract)

Notes: English

Journal

Peer Reviewed Journal

34. Coombes L, Allen D, Foxcroft D, Guydish J. Motivational interviewing for the prevention of alcohol misuse in young people. *Cochrane Database of Systematic Reviews* 2008;CD007025.

Abstract: This is the protocol for a review and there is no abstract. The objectives are as follows: To evaluate the effectiveness of motivational interviewing (MI) interventions for the prevention of alcohol and alcohol-related problems in young people. The specific objectives are: (1) To summarise the current evidence about the effects of MI intended to prevent alcohol and alcohol-related problems in young people, compared with no intervention or a different intervention, on alcohol consumption and other substantive outcome measures (2) To investigate whether MI's effects are modified by the length of the intervention or age of young people targeted (3) To identify areas where further research is needed. The following comparisons will be made: (1) Brief MI versus control (placebo/no intervention) (2) Brief MI versus alternative intervention (3) Very brief MI versus longer MI
Notes: HM-ADDICTN DOI: 10.1002/14651858.CD007025

35. Couzigou P, Vergniol J, Kowo M, Terrebonne E, Foucher J, Castera L *et al.* [Brief intervention about alcohol use]. *Presse Med.* 2009;38:1126-33.
Abstract: The brief intervention lasts from 5 to 20 minutes and uses motivational interview techniques. This brief intervention is addressed not at alcohol-dependent patients (approximately 1.5 million people in France) but at those whose consumption is harmful or at risk (estimated at approximately 4 million people in France), especially men. The efficacy of the brief intervention is demonstrated by numerous randomized studies and meta-analyses. A mean reduction of one glass of an alcoholic beverage a day results, with consumption returning to a moderate rather than at-risk level for approximately 30%. This efficacy has been demonstrated for a duration of at least 4 years. Given that evidence also supports the behavioral changes, these findings should be taken into account by healthcare providers.
[References: 44]
Notes: 19195820
Presse medicale (Paris, France : 1983)
8302490, pmt
IM
English Abstract. Journal Article. Review
French
36. Deas D. Evidence-based treatments for alcohol use disorders in adolescents. *Pediatrics* 2008;121 Suppl 4:S348-S354.
Abstract: The prevalence of adolescent alcohol use and its related consequences underscore the need for evidenced-based treatments in this population. During the past decade, much progress has been made in treating adolescent alcohol use disorders with evidenced-based modalities developed specifically for adolescents. Controlled treatment outcome studies that compared > or = 1 modality, used random assignment to treatment conditions, and were published between 1990 and 2004 are discussed in this review. Psychosocial treatments such as family-based interventions, motivational enhancement therapy (motivational interviewing), behavioral therapy, and cognitive-behavioral therapy, as well as the limited pharmacotherapy studies, are discussed. All of the studies used assessment tools validated for use in adolescent populations. Overall, great strides have been made in the area of adolescent alcohol treatment, and the treatment modalities presented have more than adequate potential for replication. [References: 23]

Notes: 18381498

Pediatrics

oxv, 0376422

AIM, IM

Journal Article. Review

English

37. Kaner Eileen FS, Dickinson HO, Beyer FR, Campbell F, Schlesinger C, Heather N *et al.* Effectiveness of brief alcohol interventions in primary care populations. *Cochrane Database of Systematic Reviews* 2007;CD004148.
- Abstract:** BACKGROUND: Many trials reported that brief interventions are effective in reducing excessive drinking. However, some trials have been criticised for being clinically unrepresentative and unable to inform clinical practice. OBJECTIVES: To assess the effectiveness of brief intervention, delivered in general practice or based primary care, to reduce alcohol consumption. To assess whether outcomes differ between trials in research settings and those in routine clinical settings. SEARCH STRATEGY: We searched the Cochrane Drug and Alcohol Group specialised register (February 2006), MEDLINE (1966 to February 2006), EMBASE (1980 to February 2006), CINAHL (1982 to February 2006), PsycINFO (1840 to February 2006), Science Citation Index (1970 to February 2006), Social Science Citation Index (1970 to February 2006), Alcohol and Alcohol Problems Science Database (1972 to 2003), reference lists of articles. SELECTION CRITERIA: Randomised controlled trials, patients presenting to primary care not specifically for alcohol treatment; brief intervention of up to four sessions. DATA COLLECTION AND ANALYSIS: Two authors independently abstracted data and assessed trial quality. Random effects meta-analyses, sub-group, sensitivity analyses, and meta-regression were conducted. MAIN RESULTS: Meta-analysis of 22 RCTs (enrolling 7,619 participants) showed that participants receiving brief intervention had lower alcohol consumption than the control group after follow-up of one year or longer (mean difference: -38 grams/week, 95% CI: -54 to -23), although there was substantial heterogeneity between trials ($I^2 = 57\%$). Sub-group analysis (8 studies, 2,307 participants) confirmed the benefit of brief intervention in men (mean difference: -57 grams/week, 95% CI: -89 to -25, $I^2 = 56\%$), but not in women (mean difference: -10 grams/week, 95% CI: -48 to 29, $I^2 = 45\%$). Meta-regression showed little evidence of a greater reduction in alcohol consumption with longer treatment exposure or among trials which were less clinically representative. Extended intervention was associated with a non-significantly greater reduction in alcohol consumption than brief intervention (mean difference = -28, 95%CI: -62 to 6 grams/week, $I^2 = 0\%$) AUTHORS' CONCLUSIONS: Overall, brief interventions lowered alcohol consumption. When data were available by gender, the effect was clear in men at one year of follow up, but not in women. Longer duration of counselling probably has little additional effect. The lack of evidence of any difference in outcomes between efficacy and effectiveness trials suggests that the current literature is relevant to routine primary care. Future trials should focus on women and on delineating the most effective components of interventions. EFFECTIVENESS OF BRIEF INTERVENTIONS IN PRIMARY CARE POPULATIONS: Excessive drinking contributes significantly to social problems, physical and psychological illness, injury and death. Hidden effects include

increased levels of violence, accidents and suicide. Most alcohol-related harm is caused by excessive drinkers whose consumption exceeds recommended drinking levels, not the drinkers with severe alcohol dependency problems. One way to reduce consumption levels in a community may be to provide a brief intervention in primary care over one to four sessions. This is provided by healthcare workers such as general physicians, nurses or psychologists. In general practice, patients are routinely asked about alcohol consumption during registration, general health checks and as part of health screening (using a questionnaire). They tend not to be seeking help for alcohol problems when presenting. The intervention they are offered includes feedback on alcohol use and harms, identification of high risk situations for drinking and coping strategies, increased motivation and the development of a personal plan to reduce drinking. It takes place within the time-frame of a standard consultation, 5 to 15 minutes for a general physician, longer for a nurse. A total of 29 controlled trials from various countries were identified, in general practice (24 trials) or an emergency setting (five trials). Participants drank an average of 306 grams of alcohol (over 30 standard drinks) per week on entry to the trial. Over 7000 participants with a mean age of 43 years were randomised to receive a brief intervention or a control intervention, including assessment only. After one year or more, people who received the brief intervention drank less alcohol than people in the control group (average difference 38 grams/week, range 23 to 54 grams). For men (some 70% of participants), the benefit of brief intervention was a difference of 57 grams/week, range 25 to 89 grams (six trials). The benefit was not clear for women. The benefits of brief intervention were similar in the normal clinical setting and in research settings with greater resources. Longer counselling had little additional benefit

Notes: HM-ADDICTN DOI: 10.1002/14651858.CD004148.pub3

38. Kiefer F, Mann K. [Evidence-based treatment of alcoholism]. *Nervenarzt* 2007;78:1321-9.
- Abstract:** The acute and post acute treatment of alcohol dependence consists of an individual combination of outpatient, day care or inpatient therapy approaches, including medical advice, motivational intervention, qualified detoxification, and psychotherapeutic and pharmacological relapse prevention treatment. Using these therapy approaches abstinence rates of 60-70% over 1 year can be achieved. In addition to a sufficient diagnostic assessment the practitioner applies motivational interview techniques as well as knowledge on effective therapeutic measures of outpatient and inpatient detoxification, pharmacological relapse prevention and the referral to a rehabilitation facility. [References: 25]
- Notes: 17898980
- Der Nervenarzt
nws, 0400773
IM
English Abstract. Journal Article. Review
German
39. Larimer ME, Cronce JM. Identification, prevention, and treatment: a review of individual-focused strategies to reduce problematic alcohol consumption by college students. *J.Stud.Alcohol* 2002;Supplement 14:148-63.
- Abstract:** RECORD STATUS: This record is a structured abstract written by CRD reviewers. The original has met a set of quality criteria. Since September 1996 abstracts have been sent

to authors for comment. Additional factual information is incorporated into the record. Noted as [A:....]

AUTHOR'S OBJECTIVES: To assess the effect of individually focused prevention and treatment strategies on the drinking habits of college students

STUDY SELECTION - SPECIFIC INTERVENTIONS: Studies of individually focused prevention strategies (including universal, indicated and selective) and prevention/treatment strategies (educational/awareness, cognitive-behavioural and motivational enhancement techniques) compared to a control or comparator group were eligible for inclusion. Single and multiple component strategies were included

STUDY SELECTION - PARTICIPANTS: Studies in college and high-school students, including those at high risk of problematic alcohol use, were eligible for inclusion

STUDY SELECTION - OUTCOMES: Studies that measured behavioural change in drinking or consequences were eligible for inclusion. The outcomes reported included reduction in alcohol consumption, abstinence, drink driving and negative consequences

STUDY SELECTION - STUDY DESIGNS: The inclusion criterion for study design was the presence of a control or comparator group. Randomised controlled trials (RCTs) and non-randomised studies (if they used pre- and post-intervention assessments) were included

SEARCHING: MEDLINE, PsycINFO and ETOH (Alcohol Problems Science Database of the National Institute of Alcohol Abuse and Alcoholism) were searched, as were the reference lists of previous reviews. The Promising Practices: Campus Alcohol Strategies sourcebook was reviewed and sources identified and contacted. Researchers in the field were also contacted for both published and unpublished studies. This review was of strategies evaluated between 1984 and 1999

VALIDITY ASSESSMENT: The authors did not state that they assessed validity

STUDY SELECTION - HOW WERE DECISIONS ON THE RELEVANCE OF PRIMARY STUDIES MADE?: The authors did not state how the papers were selected for the review, or how many reviewers performed the selection

DATA EXTRACTION: The authors did not state how the data were extracted for the review, or how many reviewers performed the data extraction. The data extracted included the period of follow-up, pre-test post-test interval, and a summary of the study results

METHODS OF SYNTHESIS - HOW WERE THE STUDIES COMBINED?: The review was a narrative synthesis, grouped by the type of intervention

METHODS OF SYNTHESIS - HOW WERE DIFFERENCES BETWEEN STUDIES INVESTIGATED?: The individual studies were discussed in the text and summarised in tabular format. The results from the RCTs were not given more weight in the synthesis

RESULTS OF THE REVIEW: Thirty-two studies were included in the review (n at least 3,725; sample size not reported for 3 studies). Ten were RCTs (n at least 1,297; sample size not reported for 2 studies), 2 were quasi-randomised (n at least 296; sample size not reported in 1 study), 8 were non-randomised (n=1,170), 1 study matched treatment and controls (n=31), and in 11 it was unclear whether the assignment was randomised (n=931). Educational or awareness programmes. Information/knowledge programmes (e.g. alcohol information school and alcohol skills-training programme) and values clarification programmes (e.g. talking about alcohol schemes) provided little support for the efficacy of these programmes. Only 1 of the 7 studies using information/knowledge programmes, and 2 of the 5 studies using values

clarification programmes, reported a significant reduction in the drinking rates. The majority of the studies used to assess these interventions contained methodological limitations, making it difficult to draw any conclusions from them. Two studies evaluating normative re-education programmes (e.g. peer-led re-education) gave opposing results: one based on freshmen showed significant reductions in drinking, whereas the one based on a mixed-age population of a hall of residence and Greek system members showed no effect on alcohol consumption. Cognitive-behavioural skills-based programmes. Overall, there was a positive effect of cognitive-behavioural skills-based programmes on student behaviour regarding alcohol consumption, at least in the short-term. All 3 studies using self-monitoring/self-assessment and 2 (out of 3) using specific alcohol-focused skills training reported a significant decrease in consumption. Two studies using general life skills training/lifestyle balance both showed short-term benefits of the intervention. Ten studies using multi-component alcohol skills training were included, with 7 of these showing some effect and 3 no effect. Motivational or feedback-based programmes. Overall, there was a positive effect of motivational or feedback-based programmes on student behaviour regarding alcohol consumption, with both brief motivational interventions (8 studies) and mailed feedback schemes (3 studies) reporting reductions in alcohol consumption after the intervention. Information on the effect of these interventions in high-risk populations, and the effectiveness of techniques to identify and recruit students to intervention programmes, was available in the review

AUTHOR'S CONCLUSION: The authors concluded that little evidence exists for the use of educational or awareness programmes; the Prime for Life (Campus Talking About Alcohol) programme possibly being the exception. Skills-based and motivational or feedback-based interventions have greater efficacy

CRD COMMENTARY: The review addressed a clear and focused question. The inclusion criteria were stated for the intervention, population, outcome and study design. No information was given on the method of study selection or data extraction, therefore the potential for bias cannot be assessed. While a validity assessment was not reported, the requirement for a control or comparator group and the study details provided gave some indication of the potential quality of the included studies. However, study quality was not considered during the narrative synthesis. A narrative synthesis was appropriate since the included studies were clinically diverse

IMPLICATIONS OF THE REVIEW FOR PRACTICE AND RESEARCH: Practice: The authors recommended that colleges intending to implement schemes on their campus use brief, motivational or skills-based interventions, targeted at high-risk students identified either through screening or membership of an identified risk group. Research: The authors made recommendations for further research. In particular, research should address the role of self-assessment in drinking reductions and methods for facilitating this effect; evaluate the conditions under which expectancy challenge procedures are effective; identify the effects of graphic feedback separately from skills training, and in combination; and evaluate on-campus treatment programmes and the effects of interventions on students mandated to comply. The authors also recommended that future studies have longer-term follow-up and larger sample sizes

Notes: Accession number: 12002006341

English

DARE

40. McCambridge J., Jenkins RJ. Do brief interventions which target alcohol consumption also reduce cigarette smoking? Systematic review and meta-analysis. *Drug Alcohol Depend.* 2008;96:263-70.

Abstract: Brief interventions are known to be effective in changing both substance use and other health-compromising behaviors. It is unknown whether they may have secondary effects on behaviors which are not specifically targeted. The literature on brief alcohol interventions was selected to explore this possibility, with a study focus on secondary impact on cigarette smoking. The CINAHL, EMBASE, MEDLINE and PSYCINFO bibliographic databases were searched for reviews of brief alcohol intervention studies published in English language, peer-reviewed journals between 1995 and 2005. Authors of primary studies identified in the reviews were contacted to ascertain whether or not their studies had collected cigarette smoking data and, if available, to obtain data. Random effect models were used to pool data for meta-analysis. Eleven review papers reported the results of 41 individual primary studies which were included in this systematic review. Fourteen of these studies collected cigarette smoking outcome data, of which 7 studies still had information available and provided these data for meta-analysis. There were no between-group differences in smoking cessation or reduction across these studies. High levels of smoking cessation were detected in both brief intervention and control groups with much heterogeneity between studies. Brief alcohol interventions do not also reduce cigarette smoking, and it appears unlikely that there exist other important secondary effects. The behavioral consequences of brief intervention study participation itself warrant further study. [References: 44]

Notes: 18457926

Drug and alcohol dependence

ebs, 7513587

IM

Comparative Study. Journal Article. Meta-Analysis. Research Support, Non-U.S. Gov't.

Review

English

41. Moreira MT, Smith LA, Foxcroft D. Social norms interventions to reduce alcohol misuse in University or College students. *Cochrane Database of Systematic Reviews* 2009;CD006748.
- Abstract:** BACKGROUND: Drinking is influenced by youth (mis)perceptions of how their peers drink. If misperceptions can be corrected, young people may drink less. OBJECTIVES: To determine whether social norms feedback reduces alcohol misuse in university or college students. SEARCH STRATEGY: Cochrane Drugs and Alcohol Group Register of Trials; Central; MEDLINE; EMBASE; PsycInfo; CINAHL (up to March 2008). SELECTION CRITERIA: RCT or cluster RCT that evaluate social normative intervention with no intervention, alcohol education leaflet or other non-normative feedback intervention DATA COLLECTION AND ANALYSIS: 2/3 authors extracted data. Included studies were assessed against criteria indicated in the Cochrane Reviewers Handbook version 5.0.0. MAIN RESULTS: Twenty-two studies were included (7,275 participants). Alcohol related problems: Significant reduction with Web/computer feedback (WF) (SMD -0.31 95% CI -0.59 to -0.02), three studies, 278

participants. No significant effect of mailed feedback (MF), individual face-to-face feedback (IFF) or group face-to-face feedback (GFF). Peak Blood Alcohol Content (BAC) : Significant reduction with WF (SMD -0.77 95% CI -1.25 to -0.28), two studies, 198 participants. No significant effect of MF or IFF. Drinking Frequency: Significant reduction with WF (SMD -0.38 95% CI -0.63 to -0.13), two studies, 243 participants and IFF (SMD -0.39 95% CI -0.66 to -0.12), two studies, 217 participants. No significant effect of MF. Drinking Quantity: Significant reduction with WF (SMD -0.35 95% CI -0.51 to -0.18), five studies, 556 participants and GFF (SMD -0.32 95% CI -0.63 to -0.02) three studies, 173 participants. No significant effect of MF or IF. Binge drinking: Significant reduction with WF (SMD -0.47 95% CI -0.92 to -0.03) one study, 80 participants, IFF (SMD -0.25 95% CI -0.49 to -0.02) three studies, 278 participants and and GFF (SMD -0.38 95% CI -0.62 to -0.14) four studies, 264 participants. No significant effect for MF. BAC: No significant effect of MF and IFF. Drinking norms: Significant reduction with WF (SMD -0.75 95% CI -0.98 to -0.52) three studies, 312 participants.

AUTHORS' CONCLUSIONS: WF and IFF are probably effective in reducing alcohol misuse. No direct comparisons of WF against IFF were found, but WF impacted across a broader set of outcomes and is less costly so therefore might be preferred. Significant effects were more apparent for short-term outcomes (up to three months). For mailed and group feedback, and social norms marketing campaigns, the results are on the whole not significant and therefore cannot be recommended.

SOCIAL NORMS INTERVENTIONS TO REDUCE ALCOHOL MISUSE IN UNIVERSITY AND COLLEGE STUDENTS: Misuse of alcohol can result in disabilities and death. Alcohol also leads to accidents, fights and unprotected sex. Young people aged 15 to 24 years contribute a high proportion to this burden. University students may not drink as frequently as their non-university peers but they have a tendency to drink excessively when they do. Social norms refer to our perceptions and beliefs about what is 'normal' behaviour. People may believe that their peers drink heavily, which influences their drinking, yet much of peer influence is the result of incorrect perceptions. Normative feedback relies on the presentation of information on these misperceptions, about personal drinking profiles, risk factors, and normative comparisons. Feedback can be given alone or in addition to individual or group counselling. This systematic review was based on 22 controlled trials involving 7275 college or university students randomly assigned to the social norms intervention or a control group. Interventions delivered using the web or computer, or in individual face-to-face sessions, appeared to reduce alcohol misuse. The evidence was less convincing for group face-to-face sessions. Mailed and group feedback were on the whole no different than with the control intervention. Two large studies showed contradictory results for a social marketing campaign. Only a small number of good quality studies were available for many of the outcomes and analyses, and most of the studies were from the USA. The intensity of the intervention differed between trials as did the control intervention, which was no intervention, educational leaflets or an alcohol educational session. Individual face-to-face feedback typically involved social norms feedback as just one aspect of a broader motivational interviewing intervention. Locations where alcohol outlet density is higher may promote higher consumption through more frequent alcohol promotions and easier access to alcohol, so the effectiveness of an intervention designed to reduce drinking could be expected to be lower in these areas

Notes: HM-ADDICTN DOI: 10.1002/14651858.CD006748.pub2

42. Poikolainen K. Effectiveness of brief interventions to reduce alcohol intake in primary health care populations: a meta-analysis. *Prev.Med.* 1999;28:503-9.

Abstract: RECORD STATUS: This record is a structured abstract written by CRD reviewers. The original has met a set of quality criteria. Since September 1996 abstracts have been sent to authors for comment. Additional factual information is incorporated into the record. Noted as [A:....]

AUTHOR'S OBJECTIVES: To determine what effect very brief (5- to 20-min) interventions and extended (several visits) brief interventions have on alcohol intake and gamma-glutamyltransferase (GGT) activity in primary health care populations

STUDY SELECTION - SPECIFIC INTERVENTIONS: Brief (5- to 20-min) and extended (several visits) brief interventions aimed at reducing alcohol intake. Interventions reported in the review included advice from general practitioners (GPs), information on alcohol consumption and risks, and workbooks containing feedback on current health behaviours

STUDY SELECTION - PARTICIPANTS: Individuals from the primary health care population i.e. from the general population or from family/GP practices. Studies that focused on hospital patients or alcoholics were excluded. Five studies reported in the review included both men and women, one included just men and the other just women. Participants ages ranged from 17 to 70 years

STUDY SELECTION - OUTCOMES: Alcohol intake and gamma-glutamyltransferase (GGT) activity

STUDY SELECTION - STUDY DESIGNS: Randomised controlled studies (RCTs), with a follow-up time of 6-12 months that report means, numbers of cases and standard deviations (SDs) for the outcome variables at follow-up

SEARCHING: EMBASE, MEDLINE and PsycLIT were searched from 1966 to 1997 (search strategy not stated). In addition the following journals were searched along with seven earlier reviews (see Other Publications of Related Interest no.1-no.7): *Addiction* (formerly *British Journal of Addiction*), *Alcoholism* and *Journal of Studies of Alcohol*. The bibliographies of retrieved articles were searched for additional studies. No language restrictions were reported

VALIDITY ASSESSMENT: No formal assessment of quality was undertaken

STUDY SELECTION - HOW WERE DECISIONS ON THE RELEVANCE OF PRIMARY STUDIES MADE?: The author does not state how the papers were selected for the review, or how many of the reviewers performed the selection

DATA EXTRACTION: The author does not state how the data were extracted for the review, or how many of the reviewers performed the data extraction. Tables reported in the review included the following types of information: population details, method of randomisation, number of participants, blinding, attrition rates, intervention details, type of analysis, outcome measures and results

METHODS OF SYNTHESIS - HOW WERE THE STUDIES COMBINED?: The study intervention effects for both alcohol intake and gamma-glutamyltransferase (GGT) activity were pooled using fixed-effect model and 95% confidence intervals (95% CI) quoted. The intervention effect was taken as the difference between the intervention and the control group at follow-up

METHODS OF SYNTHESIS - HOW WERE DIFFERENCES BETWEEN STUDIES

INVESTIGATED?: Heterogeneity was investigated using the chi-square distributed Q statistic

(significance $P < 0.05$)

RESULTS OF THE REVIEW: Seven RCTs (2546 participants in total) were included. For very brief interventions, the change in alcohol consumption was not significant among men (effect estimate=-42g of alcohol per week, 95% CI: -105, 21) or among women (effect estimate=-4g of alcohol per week, 95% CI: -50, 43). For extended brief interventions the pooled effect estimate of change in alcohol intake was -51g of alcohol per week (95% CI: -74, -29) among women. Among men the estimate was of similar magnitude (effect estimate=-55, 95% CI: -77, -33), but significant lack of statistical homogeneity (Q statistic=7.66, df=2, $P < 0.05$) implied that the summary estimate was not meaningful. Significant statistical heterogeneity (Q statistic=25.3, df=5, $P < 0.001$) was observed when data on very brief interventions among men and women were pooled (effect estimate=-70g of alcohol per week, 95% CI: -99, -40). Similarly when extended brief interventions among men and women were pooled (effect estimate=-65g of alcohol per week, 95% CI: -79, -51; Q statistic=35.4, df=7, $P < 0.001$). That was also the case for gamma-glutamyltransferase (GGT) activity (Q statistic=9.8, df=2, $P < 0.01$ for very brief interventions; and Q statistic=23.3, df=2, $P < 0.001$ for extended interventions)

AUTHOR'S CONCLUSION: Extended brief interventions were effective among women. Other brief interventions seem to be effective sometimes, but not always, and the average effect cannot be reliably estimated. The reasons for the lack of uniform effectiveness should be explored

CRD COMMENTARY: This review is based on clearly defined inclusion criteria and a wide search of a number of databases and other sources. However, the search strategy is not reported and so it is difficult to comment on whether relevant literature may have been missed. Unpublished studies may have been missed though as no specific attempts were made to locate unpublished studies and so there is a possibility of publication bias. The author also provided very little detail about methods in terms of how the processes of study selection and data extraction were performed and how many individuals were involved. It would also appear that the quality of the individual studies was not formally assessed. However, the author did assess the level of heterogeneity between studies and pooled them using a random-effects model. Where there was significant heterogeneity the author specifically highlighted this. The pooling of studies would therefore seem appropriate and the details provided about the individual studies were extensive. The author also discussed the limitations of the review. The author's conclusions and implications would therefore seem to be supported by the data, however in view of the above comments a certain degree of caution should be used when interpreting the findings

IMPLICATIONS OF THE REVIEW FOR PRACTICE AND RESEARCH: Practice: The author states that 'extended brief interventions are uniformly effective for women and decrease alcohol intake by an average of half a drink per day in primary health care populations'. Also 'since some effect has been found in some brief interventions, interventions in primary care populations should be continued'. Research: The author states that 'intervention studies should systematically report means and SDs for the principal outcome variable at the baseline and at the follow-up examination and the change in this variable for both intervention and control groups. It would also be most helpful to have data available on excessive drinking based on standard criteria.'

OTHER PUBLICATIONS OF RELATED INTEREST: 1. Bien TH, Miller WR, Tonigan JS. Brief interventions for alcohol problems: a review. *Addiction* 1993;88:315-36. 2. Freemantle N, Gill P, Godfrey C, Long A, Richards C, Sheldon T, Song F, Webb J, et al. Brief interventions and alcohol use. *Effective Health Care* 1993;(7):2-12. 3. Ashenden R, Silagy C, Weller D. A systematic review of the effectiveness of promoting lifestyle change in general practice. *Fam Pract* 1997;14:160-75. 4. Wilk AI, Jensen NM, Havighurst TC. Meta-analysis of randomized controlled trials addressing brief interventions in heavy alcohol drinkers. *J Gen Intern Med* 1997;12:274-83. 5. Holder H, Longabaugh R, Miller WR, Rubonis AV. The cost effectiveness of treatment for alcoholism: a first approximation. *J Stud Alcohol* 1991;52:517-40. 6. Mattick RP, Jarvis T. Brief or minimal intervention for 'alcoholics'? The evidence suggests otherwise. *Drug Alcohol Rev* 1994;13:137-44. 7. Finney JW, Monahan SC. The cost-effectiveness of treatment for alcoholism: a second approximation. *J Stud Alcohol* 1996;57:229-43

FUNDING: A-Clinic Foundation, Jarvenpaa Social Hospital; National Public Health Institute (KTL)

Notes: Accession number: 11999009258

English

DARE

43. Stolle M, Sack PM, Thomasius R. Binge drinking in childhood and adolescence: epidemiology, consequences, and interventions. *Dtsch*. 2009;106:323-8.

Abstract: BACKGROUND: Episodic excessive alcohol consumption ("binge drinking") among children and adolescents has become a serious public health problem in Germany and is associated with a variety of risks. METHODS: Selective literature search of the Ovid Medline database from 1998 to 2008. RESULTS: Episodic excessive alcohol consumption is associated not only with somatic complications, but also with traffic accidents and other types of accident, violent behavior, and suicide. The more frequently a child or adolescent drinks to excess, and the younger he or she is, the greater is the risk of developing an alcohol-related disorder (alcohol misuse or dependence syndrome). In the USA, brief motivational interventions have been shown to have a small to medium-sized beneficial effect in reducing further binge drinking and its complications. CONCLUSIONS: The intervention HaLT ("Stop," also an acronym for Hart am Limit--"near the limit") is performed in a number of regions in Germany. Further types of brief motivating intervention should be developed and evaluated to prevent the development of alcohol-related disorders, where indicated, in children and adolescents that engage in binge drinking. [References: 28]

Notes: 19547732

Deutsches Arzteblatt international

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IM

Journal Article. Meta-Analysis. Review

English

44. Vasilaki EI, Hosier SG, Cox WM. The efficacy of motivational interviewing as a brief intervention for excessive drinking: A meta-analytic review. *Alcohol Alcohol* 2006;41:328-35.

Abstract: Aims: (1) To examine whether or not motivational interviewing (MI) is more

efficacious than no intervention in reducing alcohol consumption; (2) to examine whether or not MI is as efficacious as other interventions. Method: A literature search followed by a meta-analytic review of randomized control trials of MI interventions. Aggregated between-group effect sizes and confidence intervals were calculated for each study. Results: Literature search revealed 22 relevant studies, of which nine compared brief MI with no treatment, and met methodological criteria for inclusion. In these, the aggregate effect size was 0.18 (95% C.I. 0.07, 0.29), but was greater 0.60 (95% C.I. 0.36, 0.83) when, in a post-hoc analysis, the follow-up period was three months or less. Its efficacy also increased when dependent drinkers were excluded. There were nine studies meeting methodological criteria for inclusion which compared brief MI with another treatment (one of a diverse set of interventions), yielding an aggregate effect size of 0.43(95% C.I. 0.17, 0.70). The literature review pointed to several factors which may influence MI's long-term efficacy effectiveness of MI. Conclusions: Brief MI is effective. Future studies should focus on possible predictors of efficacy such as gender, age, employment status, marital status, mental health, initial expectations, readiness to change, and whether the population is drawn from treatment-seeking or non-treatment-seeking populations. Also, the components of MI should be compared to determine which are most responsible for maintaining long-term changes. (PsycINFO Database Record (c) 2009 APA, all rights reserved) (journal abstract)

Notes: English

Journal

Peer Reviewed Journal

45. Walters ST, Neighbors C. Feedback interventions for college alcohol misuse: What, why and for whom? *Addict.Behav.*30:1168-82.

Abstract: In response to the persistent problem of college drinking, universities have instituted a range of alcohol intervention programs for students. Motivational feedback is one intervention that has garnered support in the literature and been adopted on college campuses. This article reviews published outcome studies that have utilized feedback as a major component of an alcohol intervention for college students. Overall, 11 of the 13 reviewed studies (77%) found a significant reduction in drinking as compared to a control or comparison group. While the studies varied widely in terms of population, follow-up period, and feedback content, it appears that feedback can be effective whether delivered by mail, the Internet, or via a face-to-face motivational interview. Feedback seems to change normative perceptions of drinking and may be more effective among students who drink for social reasons. The addition of a group or individual counseling session does not appear to increase the short-term impact of the feedback. (PsycINFO Database Record (c) 2009 APA, all rights reserved) (journal abstract)

Notes: English

Journal

Peer Reviewed Journal

46. Whitlock, E. P., Green, C. A., and Polen, M. R. Behavioral counseling interventions in primary care to reduce risky/harmful alcohol use. 2004. Preventive Services Task Force Systematic Evidence Review No. 30.

Abstract: RECORD STATUS: This is a bibliographic record of a published health technology

assessment from a member of INAHTA. No evaluation of the quality of this assessment has been made for the HTA database

AUTHOR'S OBJECTIVES: To systematically review evidence for the efficacy of brief behavioral counseling interventions conducted in primary care settings to reduce risky/harmful alcohol consumption or patterns, and to link this evidence to results from other systematic reviews of alcohol screening in primary care populations

TYPE OF INTERVENTION: Counselling

STUDY SELECTION - STUDY DESIGNS: Systematic review

RESULTS OF THE REVIEW: Good evidence supports the efficacy of brief, multi-contact primary care interventions for risky/harmful alcohol use in primary care patients identified through screening and screening-related assessment of at-risk drinking and alcohol use disorders. Patients in these trials underwent screening to identify those possibly in need of alcohol misuse intervention in primary care or elsewhere, followed by screening-related clinical assessment to qualify patients appropriate for primary care-based intervention or for referral to specialty treatment of abuse/dependence. Patients were screened generally using standardized self-report instruments alone (e.g., AUDIT), or in combination, (e.g., CAGE with standardized quantity and frequency questions) that have been found to be valid in primary care populations. After primary care brief, multi-contact interventions, patients reduced average drinks per week by 13%-34% and increased the proportion drinking at moderate or safe levels by 10%-19% compared with controls. Similar population-level reductions in average alcohol consumption have been projected to reduce the prevalence of alcohol abuse/dependence by 3%, while use of alcohol within safe/recommended levels has been epidemiologically related to reduced short-term (e.g., injuries, alcohol-related problems) and long-term (e.g., cirrhosis, total mortality) health risks

AUTHOR'S CONCLUSION: Brief, multi-contact behavioral counseling interventions among adult primary care patients are feasible and potentially highly effective components of an overall public health approach to reducing alcohol misuse. Future research should focus on developing implementation strategies that facilitate the adoption of these practices as a regular part of routine health care. Additional research is needed to develop effective interventions among sub-populations such as pregnant women, ethnic minorities, and adolescents

CO1: United States

Notes: Accession number: 32004000190

English

HTA

47. Wilk A, I, Jensen NM, Havighurst TC. Meta-analysis of randomized control trials addressing brief interventions in heavy alcohol drinkers. *J.Gen.Intern.Med.* 1997;12 :274-83.

Abstract: RECORD STATUS: This record is a structured abstract written by CRD reviewers. The original has met a set of quality criteria. Since September 1996 abstracts have been sent to authors for comment. Additional factual information is incorporated into the record. Noted as [A:....]

AUTHOR'S OBJECTIVES: To assess the effectiveness of brief interventions in heavy drinkers

STUDY SELECTION - SPECIFIC INTERVENTIONS: Brief interventions of less than one hour

incorporating simple motivational counselling techniques much like outpatient smoking cessation programmes, including feedback and education in the harm of heavy drinking and advice to moderate drinking to low-risk, problem-free levels. Some sessions were 10-15 minutes and some as much as 60 minutes. Follow-up sessions after the initial intervention varied from 0 to 3 sessions. The control group received no alcohol-related treatment or intervention

STUDY SELECTION - PARTICIPANTS: The less severely alcohol-affected population, or those classed as 'problem drinkers', aged 19 to 65 years. Some studies included people who were drinking more than 2 to 35 units per week. Other inclusion criteria were elevated GGT levels, a positive Cut-down/Annoyed/Guilty/Eye-opener (CAGE) (greater than or equal to 2) or Michigan Alcoholism Screening Test (MAST) questionnaire, and scales of alcohol-related problems. People with severe alcohol dependence were excluded from some trials, as were people with a previous history of advice to change drinking patterns and people with serious medical and psychiatric disorders. Two trials excluded people who were homeless

STUDY SELECTION - OUTCOMES: The primary outcome was moderation of drinking levels

STUDY SELECTION - STUDY DESIGNS: Randomised controlled trials (RCTs) were included. The control group received no alcohol-related treatment or intervention. The sample size was greater than 30

SEARCHING: MEDLINE and PsycLIT were searched from 1966 to 1995. MeSH terms are listed. Bibliographies of relevant articles and of research experts in the field were reviewed. Only English language articles were retrieved

VALIDITY ASSESSMENT: Validity was assessed according to Chalmers et al (see Other Publications of Related Interest no.1). Categories included were selection criteria, rejection log, randomisation, blinding, biological equivalents, statistical analyses, handling of withdrawals, data presentation. The authors do not state how papers were assessed for validity, or how many of the reviewers performed the validity assessment

STUDY SELECTION - HOW WERE DECISIONS ON THE RELEVANCE OF PRIMARY STUDIES MADE?: A single reviewer screened the titles and abstracts for relevance

DATA EXTRACTION: The authors do not state how data were extracted for the review, or how many of the reviewers performed the data extraction

METHODS OF SYNTHESIS - HOW WERE THE STUDIES COMBINED?: A Peto odds ratio (OR), with 95% confidence intervals (CIs), was calculated for achieving alcohol moderation 6 to 12 months after intervention. All ORs and combined ratios were verified using the Mantel-Haenszel technique

METHODS OF SYNTHESIS - HOW WERE DIFFERENCES BETWEEN STUDIES

INVESTIGATED?: Subgroup analyses of gender, number of intervention sessions, type of clinical setting (outpatient vs inpatient) and high-quality clinical trials were conducted. The Chi-square test for heterogeneity was performed for all summary OR estimates. The Z statistic was used to test the differences between different subgroups of data

RESULTS OF THE REVIEW: Twelve RCTs (n=3,948) were included. The average quality score for the 12 RCTs was 0.49 (out of a possible 1.00). Pooled OR of decreasing and moderating drinking after intervention compared to no intervention (8 RCTs) = 1.95 (95% CI: 1.66, 2.30). No significant heterogeneity was detected. A subanalysis of the 6 high quality

RCTs showed little difference in the summary OR (1.91, 95% CI: 1.61, 2.27). Calculated ORs suggest a greater likelihood of alcohol moderation with greater intensity of intervention (OR 2.12 for >1 session compared with OR 1.83 for 1 session), female gender (OR 2.42 for women compared with OR 1.90 for men) and the intervention in the inpatient setting (OR 2.41 for inpatient compared with OR 1.91 for outpatient) although none of these comparisons were significant by Z statistic (p values 0.37, 0.24, 0.43, respectively)

AUTHOR'S CONCLUSION: Heavy drinkers who received a brief intervention were twice as likely to moderate their drinking 6 to 12 months after an intervention when compared with heavy drinkers who received no intervention. Brief intervention is a low cost effective preventive measure for heavy drinkers in outpatient settings

CRD COMMENTARY: The review question is clear and simple and inclusion criteria are clearly stated. The search strategy is reasonable although restriction to the English language may have resulted in studies being missed. A validity assessment was undertaken and the results presented. Statistical pooling should probably have used the relative risk rather than the odds ratio as the summary estimate due to high event rates in both groups. Heterogeneity was assessed and subgroup analyses were undertaken to account for possible sources of heterogeneity. Study details are presented although more details of the trial participants would have been useful. The authors' conclusions do seem to follow from the results presented

IMPLICATIONS OF THE REVIEW FOR PRACTICE AND RESEARCH: The authors state that generalisability of the results must be limited to less severely affected drinkers who exhibit little or no alcohol dependence. They state that in future RCTs should include supporting outcome measures such as the CAGE questionnaire and confirmatory reports by close contacts as well as standardised outcome measures that include function and quality of life over 5-10 years after treatment manouvers

OTHER PUBLICATIONS OF RELATED INTEREST: 1. Chalmers TC, Smith H, Blackburn B, Silverman B, Schroeder B, Reitman D, et al. A method for assessing the quality of a randomized control trial. *Control Clin Trials* 1981;2:31-49

Notes: Accession number: 11997000715

English

DARE

Referanser for kombinert misbruk

48. Belkacem A, Benyamina A, Blecha L, Reynaud M, Lukasiewicz M. Motivational interview. Evaluation of efficacy in addiction medicine. [French]. *Alcoologie et Addictologie* 2009;31:129-40.

Abstract: This article follows two previous articles devoted to theoretical and practical aspects of motivational interview (MI). This third part concerns evaluation of the efficacy of MI in addiction medicine based on a review of the literature analyzing the effects of MI as a function of the substance consumed and the populations studied. MI has been shown to be

effective regardless of the substance consumed (alcohol, illicit drugs and tobacco) when it is initiated at the beginning of therapeutic management in combination with other forms of psychotherapy. Results on long-term efficacy are more discordant, due to a paradoxical effect of MI when it is used in highly motivated patients. Poorly defined endpoints and methodological biases are also taken into account. MI appears to be an effective technique, but must be adapted to each patient. (PsycINFO Database Record (c) 2009 APA, all rights reserved) (journal abstract)

Notes: French

Journal

Peer Reviewed Journal

49. Tait RJ, Hulse GK. A systematic review of the effectiveness of brief interventions with substance using adolescents by type of drug. *Drug Alcohol Rev* 2003;22:337-46.

Abstract: RECORD STATUS: This record is a structured abstract written by CRD reviewers. The original has met a set of quality criteria. Since September 1996 abstracts have been sent to authors for comment. Additional factual information is incorporated into the record. Noted as [A:....]

AUTHOR'S OBJECTIVES: To assess the effectiveness of brief interventions (BIs) in reducing alcohol, tobacco, or other drug use in adolescents

STUDY SELECTION - SPECIFIC INTERVENTIONS: Studies that compared BIs with no advice or usual care, or compared different levels of advice, were eligible for inclusion. The interventions could target specific drugs or multiple substances. The review defined a BI as a maximum of four intervention sessions, including booster or follow-up sessions. Treatment could also use supplementary materials. Studies of school curriculum-based interventions were excluded. The interventions in the included studies were located in universities, schools, out-patient departments, hospital emergency departments, specialist treatment centres and community-based clinics. The interventions included programmes based on motivational interviewing, the Brief Alcohol Screening and Intervention for College Students (BASICS) programme, personalised health information, and the Start Taking Alcohol Seriously (STARS) programme. Nurses, physicians and the participants' peers delivered the interventions. Most of the included studies were conducted in the USA

STUDY SELECTION - PARTICIPANTS: Studies of groups with a mean age of less than 20 years were eligible for inclusion. The participants in included studies included substance users, high-risk alcohol users and students

STUDY SELECTION - OUTCOMES: Studies that only assessed attitudinal outcomes rather than behavioural outcomes were excluded. The duration of follow-up ranged from 6 weeks to 24 months. The included studies assessed alcohol, tobacco and substance use using a variety of outcome measures that were reported in the paper

STUDY SELECTION - STUDY DESIGNS: The inclusion criteria were not specified in terms of study design. The included studies were randomised controlled trials (RCTs) or quasi-RCTs, although their designs were unclear. One study randomised study locations

SEARCHING: MEDLINE, PsycINFO, Current Contents, the Cochrane Database of Systematic Reviews, Sociological Abstracts and AUSThealth were searched for studies up to 2002;

EMBASE: Pharmacology and Drugs (CD-ROM version; 1993 to 1998) was also searched.

The search terms were listed in the paper. In addition, the reference lists in selected studies and reviews were handsearched. Only studies reported in English were included

VALIDITY ASSESSMENT: The authors did not state that they assessed validity

STUDY SELECTION - HOW WERE DECISIONS ON THE RELEVANCE OF PRIMARY

STUDIES MADE?: The authors did not state how the papers were selected for the review, or how many reviewers performed the selection

DATA EXTRACTION: The authors did not state how the data were extracted for the review, or how many reviewers performed the data extraction. The extracted data included country, setting, characteristics of the participants and interventions, timing of follow-up, percentage of participants followed up, and results. For each study and each outcome within each study, Cohen's d effect size (ES) was either calculated using raw data or estimated from inferential statistics. For studies with more than one control group, the ESs were calculated for the BI compared with the least intensive control intervention. The mean ES was calculated for studies reporting more than one measure for an outcome. For outcomes reported as not significant and with insufficient data to calculate the ES, an ES of zero was used

METHODS OF SYNTHESIS - HOW WERE THE STUDIES COMBINED?: The studies were grouped according to the substance used (alcohol, tobacco and multiple substances) and combined in a meta-analysis. Pooled ESs and 95% confidence intervals were calculated using a random-effects model

METHODS OF SYNTHESIS - HOW WERE DIFFERENCES BETWEEN STUDIES

INVESTIGATED?: Statistical heterogeneity was assessed using the Q statistic

RESULTS OF THE REVIEW: Eleven studies (3,734 adolescents) were included. The meta-analysis of all studies showed that BIs significantly reduced substance abuse ($d=0.126$, $P<0.001$). No statistically significant heterogeneity was detected. Alcohol (8 studies): the meta-analysis showed that BIs for alcohol significantly reduced substance abuse ($d=0.275$). No statistically significant heterogeneity was detected. A subgroup analysis showed that BIs based on motivational interviewing significantly reduced substance abuse ($d=0.241$). No statistically significant heterogeneity was detected. Tobacco (2 studies): the meta-analysis showed no significant difference between interventions and control ($d=0.037$). No statistically significant heterogeneity was detected. Multiple substances (2 studies): only one study (39 participants) presented sufficient data for the calculation of an ES. This study found that BIs had a medium to large effect ($d=0.736$)

AUTHOR'S CONCLUSION: BIs may slightly reduce alcohol and tobacco consumption. There was limited evidence (based on one study) to suggest that a BI substantially reduced multiple substance use, but these results may not generalise. The authors advised caution in interpreting the review's findings for multiple substance abuse until further research is undertaken

CRD COMMENTARY: The review question was clear in terms of the interventions, and was broadly defined in terms of the participants and outcomes. The inclusion criteria were not defined in terms of the study design. Several relevant sources were searched and the search terms were stated. No attempts to minimise language or publication bias were made. The methods used to select the studies, assess validity and extract the data were not described, so it is not known whether any efforts were made to reduce errors and bias. Validity was not systematically assessed and only the method of treatment allocation was briefly discussed. It

may not have been appropriate to pool ESs based on different outcomes from clinically heterogeneous studies. Since the studies were predominantly conducted in America, the results may not generalise to other countries. In view of these problems, the review's findings may not be reliable

IMPLICATIONS OF THE REVIEW FOR PRACTICE AND RESEARCH: Practice: The authors did not state any implications for practice. Research: The authors stated that research is required to determine the relationship between changes in alcohol consumption and reduced morbidity, and that further research should assess the effects of BIs on multiple substance abuse in adolescents

FUNDING: Healthway, the Western Australian Health Promotion Foundation

Notes: Accession number: 12003008594

English

DARE

Referanser for endring i levevaner på flere områder

50. Bridle C, Riemsma RP, Pattenden J, Sowden, A J, Mather L *et al.* Systematic review of the effectiveness of health behavior interventions based on the transtheoretical model. *Psychology and Health* 2005;20:283-301.
Abstract: RECORD STATUS: This review has been evaluated by a CRD Reviewer as potentially meeting the CRD quality criteria and a structured abstract is in the process of being written. This provisional record is for information, before the full abstract is loaded
Notes: Accession number: 12005008762
English
DARE
51. Britt E, Hudson SM, Blampied NM. Motivational interviewing in health settings: A review. *Patient Educ.Couns.* 2004;53:147-55.
Abstract: There is evidence that patient-centred approaches to health care consultations may have better outcomes than traditional advice giving, especially when lifestyle change is involved. Motivational interviewing (MI) is a patient-centred approach that is gathering increased interest in health settings. It provides a way of working with patients who may not seem ready to make the behaviour changes that are considered necessary by the health practitioner. The current paper provides an overview of MI, with particular reference to its application to health problems. (PsycINFO Database Record (c) 2009 APA, all rights reserved) (journal abstract)
Notes: English
Journal
Peer Reviewed Journal
52. Britt E, Blampied NM, Hudson SM. Motivational interviewing: A review. *Australian Psychologist* 38 :193-201.

Abstract: There has been considerable interest shown in motivational interviewing (MI), since Miller (1983) initially presented it as an alternative and potentially more effective way of working with problem drinkers, particularly those individuals who may have been perceived as being resistant or in denial. This interest has included developing specific interventions using MI, and extending its use beyond alcohol abuse to a range of problem behaviours, including other mental health problems (e.g., eating disorders) and health problems (e.g., diabetes). The current paper provides an overview of MI-its development, theoretical basis, and applications. Research on its efficacy is reviewed, and recommendations are made for future research. (PsycINFO Database Record (c) 2009 APA, all rights reserved) (journal abstract)

Notes: English

Journal

Peer Reviewed Journal

53. Burke BL, Arkowitz H, Menchola M. The efficacy of motivational interviewing: A meta-analysis of controlled clinical trials. *J.Consult.Clin.Psychol.*2003;71:843-61.

Abstract: A meta-analysis was conducted on controlled clinical trials investigating adaptations of motivational interviewing (AMIs), a promising approach to treating problem behaviors. AMIs were equivalent to other active treatments and yielded moderate effects (from .25 to .57) compared with no treatment and/or placebo for problems involving alcohol, drugs, and diet and exercise. Results did not support the efficacy of AMIs for smoking or HIV-risk behaviors. AMIs showed clinical impact, with 51% improvement rates, a 56% reduction in client drinking, and moderate effect sizes on social impact measures ($d=0.47$). Potential moderators (comparative dose, AMI format, and problem area) were identified using both homogeneity analyses and exploratory multiple regression. Results are compared with other review results and suggestions for future research are offered. (PsycINFO Database Record (c) 2009 APA, all rights reserved) (journal abstract)

Notes: English

Journal

Peer Reviewed Journal

54. Burke BL, Dunn CW, Atkins DC, Phelps JS. The Emerging Evidence Base for Motivational Interviewing: A Meta-Analytic and Qualitative Inquiry. *Journal of Cognitive Psychotherapy* 2004;18:309-22.

Abstract: This article offers a meta-analytic, qualitative, and process review of the empirical literature for adaptations of motivational interviewing (AMIs), a promising approach to treating problem behaviors. AMIs are equivalent to other active treatments and yield moderate effects (from 0.35 to 0.56) compared to no-treatment/placebo for problems involving alcohol, drugs, and diet and exercise. Results do not support the efficacy of AMIs for smoking or HIV-risk behaviors. Conclusions regarding the mechanisms of action for AMIs are limited by methodological problems: confounding motivational interviewing with feedback, unclear definitions of the AMI interventions used, difficulties in therapist training, and limited use of treatment integrity rating scales. Extant research suggests that AMIs are equivalent in efficacy to and briefer than cognitive behavioral skills training (CBST) approaches. Since AMIs focus on readiness to change while CBST targets the change process, AMIs may be useful as preludes or additions to CBST. (PsycINFO Database Record (c) 2009 APA, all rights reserved)

reserved) (journal abstract)

Notes: English

Journal

Peer Reviewed Journal

55. Burke BA. Motivational interviewing: A meta-analysis of controlled clinical trials. *Dissertation Abstracts International: Section B: The Sciences and Engineering* 64:4605.

Abstract: This is a meta-analytic review of controlled clinical trials investigating adaptations of motivational interviewing (AMIs), a promising approach to treating problem behaviors. For each study, descriptive characteristics were coded and individual effect sizes (Cohen's d) were computed. In order to evaluate comparative efficacy, combined effect sizes for AMIs were calculated, separated by comparison group and problem area. To test for sustained efficacy, post-treatment & follow-up effect sizes for AMIs were compared. Additional data were compiled to evaluate the clinical impact of AMIs. Finally, potential moderators were analyzed to test five specific hypotheses related to the effects of AMIs. Thirty clinical trials were included in this review, representing a wide variety of studies. AMIs were equivalent to other active treatments and yielded moderate effects (ranging from .25 to .57) compared to no-treatment or placebo controls for problems involving alcohol, drugs, and diet & exercise. These effects were sustained through an average of 67 weeks of follow-up and for as long as 4 years post-treatment. Based on four studies, there was weak evidence for AMIs in the areas of smoking cessation and HIV-risk behaviors. Overall, AMIs demonstrated considerable clinical impact, with 51% improvement rates, a mean within-group effect size of .82, a 56% reduction in client drinking, and moderate effects on social impact measures ($d = .47$) such as days of work lost due to substance use. Each of the five specific hypotheses in this meta-analysis was at least partially confirmed. Miller's lab (the founder of motivational interviewing) produced the best outcomes for AMIs, while AMI treatments were most efficacious for severe client samples. AMIs generated the best results when used as preludes to further clinical services rather than as stand-alone treatments. Studies of low methodological quality yielded better outcomes for AMIs than did high quality studies, although the overall picture with regards to quality was unclear. Finally, AMIs showed a significant dose-effect relationship, with higher treatment doses resulting in better study outcomes. Additional analyses provided evidence that the conclusions of this meta-analysis are reasonably immune to the effects of client attrition as well as to publication bias. (PsycINFO Database Record (c) 2009 APA, all rights reserved)

Notes: English

Dissertation Abstract

56. Cummings SM, Cooper RL, Cassie KM. Motivational interviewing to affect behavioral change in older adults. *Research on Social Work Practice* 2009;19:195-204.

Abstract: This article reviews and assesses the existing research literature on the efficacy of motivational interviewing (MI) to promote lifestyle changes and improve functioning among older adults confronting serious health challenges. A comprehensive literature review was conducted of intervention studies that tested the use of MI to achieve behavioral change among older adults with acute and chronic illnesses. Although limited in number, the studies revealed a significant improvement in physical activity, diet, cholesterol, blood pressure and

glycemic control, and increased smoking cessation following MI. MI and its derivatives can be useful in dealing with a range of health issues faced by older adults. Further research to extend findings and address methodological issues is recommended. The integration of MI into social work courses focused on practice with older adults should be considered.

(PsycINFO Database Record (c) 2009 APA, all rights reserved) (journal abstract)

Notes: English

Journal

Peer Reviewed Journal

57. Dunn C, DeRoo L, Rivara FP. The use of brief interventions adapted from motivational interviewing across behavioral domains: A systematic review. *Addiction* 2001;96:1725-42.

Ref ID: 418

Abstract: Examined the effectiveness of brief behavioral interventions adapting the principles and techniques of Motivational Interviewing (MI), a style of behavior change counseling, to four behavioral domains: substance abuse, smoking, HIV risk, and diet/exercise. A systematic review of 29 randomized trials of MI interventions was conducted. Data on methodological quality were extracted and tabulated. Between-group behavior change effect sizes and confidence intervals were calculated for each study. 60% of the 29 studies yielded at least one significant behavior change effect size. No significant association between length of follow-up time and magnitude of effect sizes was found across studies. There was substantial evidence that MI is an effective substance abuse intervention method when used by clinicians who are non-specialists in substance abuse treatment, particularly when enhancing entry to and engagement in more intensive substance abuse treatment treatment-as-usual. Data were inadequate to judge the effect of MI in the other domains. Client attribute-treatment interactions were understudied and the sparse and inconsistent findings revealed little about the mechanism by which MI works or for whom it works best. (PsycINFO Database Record (c) 2009 APA, all rights reserved)

Notes: English

Journal

Peer Reviewed Journal

58. Hettema J, Steele J, Miller WR. Motivational interviewing. *Annual Review of Clinical Psychology* 2005;1:91-111.

Abstract: RECORD STATUS: This record is a structured abstract written by CRD reviewers. The original has met a set of quality criteria. Since September 1996 abstracts have been sent to authors for comment. Additional factual information is incorporated into the record. Noted as [A:....]

AUTHOR'S OBJECTIVES: To summarise the evidence for motivational interviewing (MI) techniques to prepare individuals for changes in behaviour

STUDY SELECTION - PARTICIPANTS: The authors did not specify any inclusion criteria for the participants. The participants included in the review were drawn from the following behavioural domains: alcohol use, smoking, human immunodeficiency virus/acquired immunodeficiency syndrome (HIV/AIDS), drug abuse, treatment compliance, gambling, intimate relationships, water purification/safety, eating disorders, and diet and exercise. The age of the included participants ranged from 16 to 62 years (mean 34.11)

STUDY SELECTION - OUTCOMES: Only studies that assessed at least one post-treatment outcome were eligible for inclusion in the meta-analysis. The number of outcome variables reported in the included studies varied between 1 and 12 per study. Variables focused on measures of addictive behaviours and health behaviours; treatment adherence was also reported. Studies varied in the behavioural domains and scales reported. Further details of the individual study outcomes were provided

STUDY SELECTION - STUDY DESIGNS: Any study design was eligible for inclusion in the review, but only comparative studies such as randomised controlled trials (RCTs), quasi-RCTs, non-randomised controlled trials and cohort studies were eligible for inclusion in the meta-analysis

SEARCHING: PsycINFO was searched using the term motivational interviewing; the dates of the search were not reported. In addition, the authors searched the reference lists of the motivational interview website and previous reviews for further studies

VALIDITY ASSESSMENT: The methodological quality of the studies was assessed according to 12 criteria taken from a published coding manual: method of treatment assignment; use of treatment quality control; rate of follow-up; duration of follow-up; method of data collection; collateral verification of self-report data; objective verification of follow-up data; inclusion of drop-outs in the analysis; adequate consideration of losses to follow-up; blinded outcome assessment; appropriate statistical methods; and use of multiple study sites. Each study was awarded a quality score from 0 (low) to 16 (high). The authors did not state how many reviewers performed the validity assessment

STUDY SELECTION - HOW WERE DECISIONS ON THE RELEVANCE OF PRIMARY STUDIES MADE?: The authors did not state how the papers were selected for the review, or how many reviewers performed the selection

DATA EXTRACTION: Two independent reviewers coded each study and extracted data according to an adapted coding manual, based on a tool used in previous outcome reviews (see Other Publications of Related Interest no.1). Any discrepancies were resolved by consensus. The amount and type of MI training provided and the specific components of MI included were extracted. For each study, effect sizes with 95% confidence intervals (CIs) were calculated for each outcome measure where there was sufficient data available (i.e. mean, SD or sample size). Significance tests were also used to estimate effect sizes. Study authors were contacted for missing information and, in the event that effect sizes were still unavailable, data quoted in previous meta-analyses were used (see Other Publications of Related Interest nos.2-4). Zero effect sizes were assigned where the p-value was greater than 0.05 and no effect sizes could be calculated. In addition to individual effect sizes for each outcome, a combined effect size for each individual study was calculated by averaging all variables at each follow-up point using weighted linear combinations. The variance of these combined effect sizes was minimised by assigning weights inversely proportional to the variance of each effect size to each variable included in the analyses. Follow-up periods were classified into five groups and data were combined within these groups: 1 to 3 months; 4 to 6 months; 7 to 12 months; 13 to 24 months; and longer than 2 years. The effect sizes for each time interval were then compared with the baseline level for each study variable

METHODS OF SYNTHESIS - HOW WERE THE STUDIES COMBINED?: The studies were combined according to the target behaviour under investigation (i.e. alcohol use, smoking,

HIV/AIDS, drug abuse, treatment compliance, gambling, intimate relationships, water purification/safety, eating disorders, and diet and exercise) and comparison group (untreated control, active treatment, MI given in addition to another treatment). Where possible, differentiations were made between pure, stand-alone MI and MI combined with other therapies. Combined effect sizes were calculated and reported with 95% CIs

METHODS OF SYNTHESIS - HOW WERE DIFFERENCES BETWEEN STUDIES

INVESTIGATED?: Statistical heterogeneity between studies used in the calculation of between-group effect sizes was assessed using the Q statistic. Regression and correlational analyses were performed to assess the effects of MI duration, purity, counsellor training, post-training support, quality score, number of outcome variables, longest follow-up point, type of comparison group or problem area, gender, age, ethnicity and problem severity on the study outcomes. Potential variables studied in alcohol-related studies were blood alcohol level and alcohol-related problem categories. For smoking-related studies, abstinence variables and quit variables were used. HIV variables included knowledge, behavioural intentions and sexual risk behaviours

RESULTS OF THE REVIEW: Seventy-two studies (n=14,267) were included in the review. The quality scores ranged from 4 to 16 points (mean 10.8, SD=2.4). The combined effect sizes (for all outcome variables and follow-up points) for each individual study ranged from -0.19 to 3.25 (mean 0.43, SD=0.62). Thirty-eight of the 72 studies (53%) showed a significant effect favouring MI ($p < 0.05$). Based on meta-analyses of all comparative studies in each behavioural area, the effect sizes combined for all variables and follow-up time periods were: alcohol, 0.26 (95% CI: 0.18, 0.33; 31 studies); smoking, 0.14 (95% CI: 0.09, 0.20; 6 studies); HIV, 0.53 (95% CI: 0.24, 0.81; 5 studies); drugs, 0.29 (95% CI: 0.15, 0.43; 13 studies); treatment adherence, 0.72 (95% CI: 0.56, 0.89; 5 studies); gambling, 0.29 (95% CI: 0.16, 0.42; 1 study); water purification/safety, 0.30 (95% CI: 0.05, 0.55; 4 studies); and diet and exercise, 0.78 (95% CI: 0.41, 1.16; 4 studies). The only behaviour in which MI did not appear beneficial overall (all effect sizes over all time points) was eating disorders (effect size -0.07, 95% CI: -0.42, 0.26); however this was not a significant finding and was based only on 1 study. Overall, the strongest evidence base was for addictive behaviours, with the largest effect sizes (> 0.7) observed in studies comparing MI with no treatment, waiting-list control or education, or studies adding MI to other standard treatment. However, MI did not appear effective in smoking cessation. In terms of health behaviours, large but inconsistent effects were seen in HIV studies, encouraging effects were observed for diet and exercise programmes, and large effects were seen for encouraging water purification/safety in African villages. Large effect sizes were also reported for studies of treatment adherence; the effects appeared to persist or increase with time when MI was added to an active treatment. Variations in the delivery of MI made substantial differences to the effect sizes. A trend for decreasing effect sizes over time was also apparent for combined effect sizes over all studies: the effect size was 0.77 (95% CI: 0.35, 1.19) at 0 to 1 month post-treatment, 0.39 (95% CI: 0.27, 0.50) at 1 to 3 months, 0.31 (95% CI: 0.23, 0.38) at 3 to 6 months, 0.30 (95% CI: 0.16, 0.43) at 6 to 12 months, and 0.11 (95% CI: 0.06, 0.17) at longer than 12 months. Combined effect sizes for combined variables across all time points for alcohol studies were 0.22 (95% CI: 0.10, 0.34) for blood alcohol concentration and 0.08 (95% CI: -0.02, 0.19) for alcohol-related problems. For smoking studies, the effect sizes were 0.15 (95% CI: -0.06, 0.23) for

abstinence and 0.11 (95% CI: 0.00, 0.21) for quit attempts. For HIV studies, the effect sizes were 1.46 (95% CI: -0.54, 3.45) for knowledge, 0.88 (95% CI: 0.05, 1.72) for behavioural intentions and 0.07 (95% CI: -0.05, 0.19) for sexual risk behaviours. In the regression analyses, the only significant correlates were found to be use of an MI manual, which produced smaller effect sizes (trend, $t=1.53$; $p=0.28$), and ethnicity, where larger effect sizes were associated with minority groups (significant trend, $t=-0.39$; $p<0.05$). Further details of the results were provided

AUTHOR'S CONCLUSION: There is a strong evidence base for MI in preparing individuals for behavioural changes in the areas of addiction and health. In addition to being useful as a stand-alone intervention, it also appears to improve outcomes when added to other treatment approaches

CRD COMMENTARY: This review was based on a very broad research question, with broad inclusion criteria. The literature searches were limited to one search term in one database and cross-checks with reference lists from previous reviews. In addition, the search dates were not reported. Given the limited searches and the lack of specific attempts to identify unpublished material, it is possible that relevant material was missed. It was also unclear whether the authors took appropriate steps to reduce errors and bias in the selection of studies and assessment of study quality, although two independent reviewers were responsible for extracting the study data, which suggests that the potential for errors and bias was reduced in this process. Overall, given the variation between the studies and the use of pooled outcomes and time periods, the overall effect sizes should be treated with caution. The authors stated that they used the Q statistic to assess the level of heterogeneity in their analyses, but results were not reported in this publication. The large amount of data and the use of supplementary material were unavoidable given the size of the project, but it makes it difficult for the reader to check the review's findings. In general, the direction of the effect sizes do support the reviewers' conclusions and steps were taken to try and investigate the effects of potential confounding variables, but caution is advised and further research is required

IMPLICATIONS OF THE REVIEW FOR PRACTICE AND RESEARCH: Practice: The authors did not state any implications for practice. Research: The authors stated that further research to clarify the processes behind their observations and to investigate methods to further maximise effects is required, in particular, methods to help practitioners improve their proficiency in delivering the intervention. Further research is also needed to determine the true effects of MI in smoking cessation and the reasons behind the discrepant findings identified in this review. Investigations to identify factors which may influence the effectiveness of MI are also required. Any future studies should, however, ensure that they adequately report how those implementing the intervention were trained. Studies should also ensure that the delivery of MI is validated and that process measures related to outcomes are included. The authors stated that the finding that manual-guided MI was associated with smaller effect sizes should be investigated further

OTHER PUBLICATIONS OF RELATED INTEREST: 1. Miller WR, Wilbourne PL. Mesa grande: a methodological analysis of clinical trials of treatments for alcohol use disorders. *Addiction* 2003;97:265-77. 2. Bien TH, Miller WR, Tonigan JS. Brief intervention for alcohol problems: a review. *Addiction* 1993;88:315-36. 3. Burke BL, Arkowitz H, Menchola M. The efficacy of motivational interviewing: a meta-analysis of controlled clinical trials. *J Consult Clin*

Psychol 2003;71:843-61. 4. Dunn C, Deroo L, Rivara FP. The use of brief interventions adapted from motivational interviewing across behavioral domains: a systematic review. *Addiction* 2001;96:1725-42

Notes: Accession number: 12005006262

English

DARE

59. Hettema JE. A meta-analysis of motivational interviewing across behavioral domains. *Dissertation Abstracts International: Section B: The Sciences and Engineering* 67:5406.
Abstract: Motivational Interviewing (MI) is a client centered, directive therapeutic method designed to enhance motivation for change by helping individuals to explore and resolve ambivalence. MI utilizes signals of readiness to match treatment strategies to individuals' current level of motivation in an attempt to reduce resistance and counterarguments against change. The evidence base for MI is rapidly growing and to date two meta-analyses have been conducted on this topic. The current meta-analysis is an update to previous meta-analyses and includes 85 clinical trials across nine problem areas. Between-group effect sizes were calculated for 586 variables, representing 19,708 participants. The overall combined effect size for all studies of MI was .41. Effect sizes were largest for studies of diet and exercise and smallest among smoking studies. Changes in effect size across time were inconsistent. Observed effect sizes were higher among Black samples. Training and treatment fidelity information revealed highly variable practices across studies. The meta-analysis points to the need for knowledge regarding the mediators and moderators of MI efficacy and increased research on training standards. (PsycINFO Database Record (c) 2009 APA, all rights reserved)
Notes: English
Dissertation Abstract
60. Knight KM, McGowan L, Dickens C, Bundy C. A systematic review of motivational interviewing in physical health care settings. *British Journal of Health Psychology* 2006;11:319-32.
Abstract: Purpose: Motivational interviewing (MI), a method of augmenting an individual's motivation to change problematic behaviours, is a patient-centred counselling style that seeks to help patients resolve ambivalence about behaviour change. MI has successfully been used in the field of addictions and has recently received increased interest as a means of promoting treatment adherence in physical health care settings. This systematic review is aimed to evaluate the effectiveness of MI interventions in physical health care settings. Methods: Electronic databases were searched for articles specifying the use of 'motivational interviewing' in physical health care settings between 1966 and April 2004. Fifty-one relevant abstracts were yielded and data was extracted from eight relevant selected studies. Results: Eight studies were identified in the fields of diabetes, asthma, hypertension, hyperlipidaemia, and heart disease. The majority of studies found positive results for effects of MI on psychological, physiological, and life-style change outcomes. Problems with research in this area include: small sample sizes, lack of power, use of disparate multiple outcomes, inadequate validation of questionnaires, poorly-defined therapy and training. Conclusions: While MI has high face validity across a number of domains in physical health care settings, the general quality of trials in this area is inadequate and therefore recommendations for its

dissemination in this area cannot yet be made. More research into MI applied to health behaviour change is urgently required. (PsycINFO Database Record (c) 2009 APA, all rights reserved) (journal abstract)

Notes: English

Journal

Peer Reviewed Journal

61. Lundahl B.,Burke BL. The effectiveness and applicability of motivational interviewing: A practice-friendly review of four meta-analyses. *J.Clin.Psychol.* 2009;65:1232-45.

Abstract: This article reviews the research support for motivational interviewing (MI) so that practitioners can make informed decisions about the value and applicability of MI in their clinical work. We highlight the evidence from the three published meta-analyses of MI and a recent meta-analysis that we completed. MI is significantly (10-20%) more effective than no treatment and generally equal to other viable treatments for a wide variety of problems ranging from substance use (alcohol, marijuana, tobacco, and other drugs) to reducing risky behaviors and increasing client engagement in treatment. Although most client-related variables are unrelated to outcomes (e.g., age, gender, severity), some decisions about treatment format (e.g., individual vs. group) are important. For example, relying solely on group-delivered MI appears to be less effective than one-on-one MI, whereas delivering MI with problem feedback is likely to generate better outcomes for some problems than MI alone. (PsycINFO Database Record (c) 2009 APA, all rights reserved) (journal abstract)

Notes: English

Journal

Peer Reviewed Journal

62. Martins RK.,McNeil DW. Review of Motivational Interviewing in promoting health behaviors. *Clin.Psychol.Rev.* 2009;29:283-93.

Abstract: There is considerable evidence for the effectiveness of Motivational Interviewing (MI) in the treatment of substance abuse, as well as a number of other health behavior areas. The present paper summarizes and critically reviews the research in three emerging areas in which (MI) is being applied: diet and exercise, diabetes, and oral health. Although 10 prior reviews focused in part on MI studies in the areas of diet, exercise, or diabetes, the present paper provides an up-to-date review, and includes oral health as another emerging area of MI research. Overall, 37 articles were reviewed: 24 in the areas of diet and exercise, 9 in the area of diabetes, and 4 in the oral health area. Research in these areas suggests that (MI) is effective in all these health domains, although additional research is needed, particularly in the oral health arena. Specifically, future research in the areas of diet and exercise should examine the clinical utility of MI by health care professionals (other than dietitians), studies in the area of diabetes should continue to examine long-term effects of MI on glycemic control, and research in the area of oral health should focus on developing additional trials in this field. Further, future studies should demonstrate improved research methodology, and investigate the effects of possible outcome mediators, such as client change talk, on behavior change. (PsycINFO Database Record (c) 2009 APA, all rights reserved) (journal abstract)

Notes: English

Journal
Peer Reviewed Journal

63. Resnicow K, Dilorio C, Soet JE, Borrelli B, Hecht J, Ernst D. Motivational interviewing in health promotion: It sounds like something is changing. *Health Psychol.* 2002;21:444-51.
Abstract: Motivational interviewing (MI), initially developed for addiction counseling, has increasingly been applied in public health, medical, and health promotion settings. This article provides an overview of MI, outlining its philosophic orientation and essential strategies. Major outcome studies are reviewed, nuances associated with the use of MI in health promotion and chronic disease prevention are described, and future directions are offered. (PsycINFO Database Record (c) 2009 APA, all rights reserved) (journal abstract)
Notes: English
Journal
Peer Reviewed Journal
64. Rubak S, Sandbaek A, Lauritzen T, Christensen B. Motivational interviewing: a systematic review and meta-analysis. *Br.J.Gen.Pract.* 2005;55:305-12.
Abstract: RECORD STATUS: This record is a structured abstract written by CRD reviewers. The original has met a set of quality criteria. Since September 1996 abstracts have been sent to authors for comment. Additional factual information is incorporated into the record. Noted as [A:....]
AUTHOR'S OBJECTIVES: To assess the effectiveness of motivational interviewing across different diseases
STUDY SELECTION - SPECIFIC INTERVENTIONS: Studies that compared motivational interviewing (defined according to Miller and Rollnick, see Other Publications of Related Interest) with traditional advice were eligible for inclusion. The included studies used interventions in the following fields: alcohol abuse (single most common field), psychiatric/addiction, weight loss/physical activity, smoking cessation and diabetes/asthma. The majority of studies (94%) used individual interviews and the median duration of the encounter was 60 minutes (range: 10 to 120). Interviews were most commonly conducted by psychologists, followed by medical doctors and others (nurses, midwives and dieticians)
STUDY SELECTION - PARTICIPANTS: No inclusion criteria for the participants were specified
STUDY SELECTION - OUTCOMES: No inclusion criteria for the outcomes were specified. The included studies assessed a variety of outcome measures, details of which were reported in supplementary tables on the British Journal of General Practice website (accessed 26/07/2005). See Web Address at end of abstract. The review focused on the following outcomes: body mass index (BMI), glycated haemoglobin (HbA1c), total blood cholesterol, cigarettes per day, systolic blood-pressure, blood alcohol concentration and standard ethanol content. The review also assessed adverse effects
STUDY SELECTION - STUDY DESIGNS: Randomised controlled trials (RCTs) were eligible for inclusion. The median duration of follow-up was 12 months (range: 2 months to 4 years)
SEARCHING: Searches were conducted of the following sources (up to January 2004 unless stated otherwise) using the reported search terms: the Cochrane CENTRAL Register (Issue 4, 2002), MEDLINE, EMBASE, CINAHL, PsycINFO, Cancerlit, ScienceDirect, Sociological

Abstracts, Social Services Abstracts, EBSCO, CSA EconLit, CSA Biological Sciences, Biological Abstracts, AIDS and Cancer Research Abstracts, AskERIC, BIOSIS Previews and ABI/INFORM. Proceedings from the conferences of four named diabetes-related associations were searched. The reference lists of included studies and reviews were screened, and authors contacted for additional data were also asked for details of any additional unpublished studies

VALIDITY ASSESSMENT: Validity was assessed and scored using the Jadad scale, which considers the reporting and handling of randomisation, blinding and the handling of withdrawals. The maximum possible score was 5. Studies scoring 2 or more points were considered to be high quality. The authors did not state who performed the validity assessment

STUDY SELECTION - HOW WERE DECISIONS ON THE RELEVANCE OF PRIMARY STUDIES MADE?: One reviewer selected studies for inclusion

DATA EXTRACTION: The authors did not explicitly state how the data were extracted for the review, or how many reviewers performed the data extraction. All four reviewers confirmed outcome measures and clinically relevant goals. Authors of primary studies with missing results data were contacted for additional information. Where reported, the treatment difference was extracted in appropriate units, together with the 95% confidence interval (CI) and level of statistical significance (reported in the supplementary tables on the British Journal of General Practice website). The studies were classified as showing an effect if they reported a statistically significant effect and a relevant clinically significant effect

METHODS OF SYNTHESIS - HOW WERE THE STUDIES COMBINED?: All studies were combined in a narrative. Studies that used objective measures and presented sufficient relevant data were pooled using a generic, inverse variance fixed-effect meta-analysis. A funnel plot was used to examine the possibility of publication bias

METHODS OF SYNTHESIS - HOW WERE DIFFERENCES BETWEEN STUDIES

INVESTIGATED?: The influence of the following factors on the results was examined by considering the percentage of relevant studies that showed positive effects of the intervention: length of encounter; group or individual encounter; number of encounters; duration of follow-up; type of health care counsellor; area of intervention; and the use of direct or indirect measures. The results of this examination were tabulated and discussed in the text

RESULTS OF THE REVIEW: Seventy-two RCTs were included. The total number of participants involved was neither reported nor calculable. The numbers included in the meta-analyses are reported below. Fifty RCTs scored 3 points out of a maximum of 5 for quality, 21 scored two points and one scored 1 point. Seventy-four per cent of all studies (i.e. 53 out of 72) showed an effect with motivational interviewing. None of the studies reported any adverse effects of motivational interviewing, but none explicitly aimed to assess adverse effects. A higher percentage of studies reported effects for: encounters of 60 minutes compared with less than 20 minutes (81% versus 64%); more than five encounters compared with one encounter (87% versus 40%); at least 12 months compared with 3 months of follow-up (81% versus 36%); psychologists or medical doctors compared with others (79% and 83% versus 46%). Motivational interviewing showed an effect in: 75% of studies (i.e. 35 out of 47) that focused on alcohol abuse, psychiatric diagnoses and addiction; 72% (i.e. 18 out of 25) of those that focused on physiological problems; 67% (i.e. 8 out of 12) of those that focused on

smoking cessation alone; and 77% (i.e. 10 out of 13) of those that focused on asthma, diabetes and weight. A similar proportion of studies using direct and indirect measures reported an effect (75% versus 74%). The funnel plot was judged to show no evidence of publication bias. Nineteen studies provided sufficient data for inclusion in a meta-analysis. The meta-analysis showed a significant effect for the following outcomes: BMI (6 RCTs, n=1,140; effect size 0.72, 95% CI: 0.33, 1.11, P=0.0001), total blood cholesterol (3 RCTs, n=1,358; effect size 0.27 mmol/L, 95% CI: 0.20, 0.34, P=0.0001), systolic blood-pressure (2 RCTs, n=316; effect size 4.22 mmHg, 95% CI: 0.23, 8.99, P=0.038), blood alcohol concentration (6 RCTs, n=278; effect size 72.92 mg%, 95% CI: 46.80, 99.04, P=0.0001) and standard ethanol content (7 RCTs, n=648; effect size 14.64 standard units, 95% CI: 13.73, 15.55, P=0.0001). There was no significant effect of motivational interviewing on cigarettes per day (3 RCTs, n=190) or HbA1c (4 RCTs, n=243)

AUTHOR'S CONCLUSION: Motivational interviewing improved outcomes for a variety of behavioural problems and diseases compared with traditional advice

CRD COMMENTARY: The review addressed a clear question that was defined in terms of the intervention and study design; inclusion criteria were not defined for the outcomes or participants, resulting in the inclusion of a wide variety of participants and outcomes. The search strategy was extensive and attempts were made to locate unpublished studies, thus minimising the potential for publication bias; appropriate methods were used to assess the presence of publication bias, but no evidence of it was found. It was not reported whether attempts were made to limit language bias. Only one reviewer selected studies and this lack of duplication raises the potential for bias. The methods used to extract the data were not reported in full and those used to assess validity were not described; it is therefore not known whether any efforts were made to reduce reviewer errors and bias. Validity was assessed using established criteria, but only a validity score was reported rather than a more comprehensive description of study quality. Despite some information on the included studies being summarised, there was no information on the individual studies. Statistical heterogeneity was not assessed, so the appropriateness of pooling studies cannot be assessed. Differences between the studies were discussed in relation to several study characteristics. Owing to the limited reporting of review methods and the lack of adequate information on individual studies, it was not possible to judge the robustness of the authors' conclusions

IMPLICATIONS OF THE REVIEW FOR PRACTICE AND RESEARCH: Practice: The authors did not state any implications for practice. Research: The authors stated that there is a need for large RCTs and qualitative studies to determine how to implement methods of motivational interviewing

OTHER PUBLICATIONS OF RELATED INTEREST: Miller WR, Rollnick S. Motivational interviewing, preparing people to change addictive behavior. New York: The Guildford Press; 2002

FUNDING: Danish Research Foundation for General Practice

Notes: Accession number: 12005003870

English

DARE

Referanser for helseøkonomiske analyser

65. Cohen, D., Eliasson, M., Eriksson, C., Gilljam, H., Hedin, A., Hellnius, M.-L., Hjalmarson, A., Nilsson, P., and Tillgren, P. Smoking cessation methods. 1998. Report no. 138.

Abstract: RECORD STATUS: This is a bibliographic record of a published health technology assessment from a member of INAHTA. No evaluation of the quality of this assessment has been made for the HTA database

AUTHOR'S OBJECTIVES: The main objective of this study is to assess methods that can be used by the health services to help smokers break the smoking habit

TYPE OF INTERVENTION: Health education

STUDY SELECTION - STUDY DESIGNS: Systematic review, Cost study

PRODUCTIVITY COSTS: The cost per year of life saved is 5000 SEK to 15 000 SEK when using counseling methods, and 30 000 SEK to 80 000 SEK when using nicotine replacement agents. These costs are relative low compared to many other interventions in health care. The cost per year of life saved when treating elevated blood pressure among middle-aged individuals is 150 000 SEK to 200 000 SEK. It appears to be particularly cost effective to offer smoking cessation during pregnancy, which is profitable from a socioeconomic prospective

AUTHOR'S CONCLUSION: Tobacco smoking is the largest, single, preventable and treatable public health problem, leading to disease and premature death in many individuals. Scientific studies show that basic questions regarding smoking habits asked by health services' staff, followed up by clear recommendations to stop smoking and advice on nicotine replacement agents (for those who smoke more than 10 to 15 cigarettes per day) is cost effective when done routinely. Several obstacles against carrying out these basic measures in practice have been identified. These include the smoking habits of health services' staff and a lack of faith in one's own ability to contribute to change. Furthermore, staff perceive that resources and time are insufficient for questions about smoking habits and advice on smoking cessation. Smokers who come into contact with health services should be 1) asked about smoking habits, 2) recommended to stop smoking, 3) offered advice, and where appropriate 4) recommended to use nicotine replacement agents. Most smokers, over the course of a few years, have contact with their general practitioner and dentist. The scientific literature verifies that brief, structured counseling sessions and treatment using nicotine replacement agents are effective in these settings, not only in special research contexts. Hence it is particularly important that staff and decision makers in primary care and dental services actively take responsibility for smoking cessation. In areas of health care which serve patients whose disease is exacerbated by smoking (patients with cardiovascular diseases, pulmonary diseases, diabetes, and cancer), staff should increase their knowledge about smoking cessation and, to a greater extent, offer smoking cessation programs or refer patients to such programs. Hypnosis and other psychological methods of smoking cessation are resource-demanding, and their effects are poorly documented. However, some evidence is available to show that cognitive therapy can reduce the risk that patients start smoking again after having stopped. Acupuncture is not shown to be an effective method of smoking

cessation. A range of various drugs (other than nicotine replacement agents) have been tested, but they are either ineffective or associated with problematic side effects and hence cannot be recommended. A consolidated body of resources to develop and disseminate knowledge concerning smoking cessation, and develop special expertise concerning these issues, should be found in at least every health services region

CO1: Sweden

Notes: Accession number: 31999008231

Swedish

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66. Solberg LI, Maciosek MV, Edwards NM. Primary care intervention to reduce alcohol misuse ranking its health impact and cost effectiveness. *Am.J.Prev.Med.* 2008;34:143-52.

Abstract: BACKGROUND: The U.S. Preventive Services Task Force (USPSTF) has recommended screening and behavioral counseling interventions in primary care to reduce alcohol misuse. This study was designed to develop a standardized rating for the clinically preventable burden and cost effectiveness of complying with that recommendation that would allow comparisons across many recommended services. METHODS: A systematic review of the literature from 1992 through 2004 to identify relevant randomized controlled trials and cost-effectiveness studies was completed in 2005. Clinically preventable burden (CPB) was calculated as the product of effectiveness times the alcohol-attributable fraction of both mortality and morbidity (measured in quality-adjusted life years or QALYs), for all relevant conditions. Cost effectiveness from both the societal perspective and the health-system perspective was estimated. These analyses were completed in 2006. RESULTS: The calculated CPB was 176,000 QALYs saved over the lifetime of a birth cohort of 4,000,000, with a range in sensitivity analysis from -43% to +94% (primarily due to variation in estimates of effectiveness). Screening and brief counseling was cost-saving from the societal perspective and had a cost-effectiveness ratio of \$1755/QALY saved from the health-system perspective. Sensitivity analysis indicates that from both perspectives the service is very cost effective and may be cost saving. CONCLUSIONS: These results make alcohol screening and counseling one of the highest-ranking preventive services among the 25 effective services evaluated using standardized methods. Since current levels of delivery are the lowest of comparably ranked services, this service deserves special attention by clinicians and care delivery systems. [References: 127]

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Journal Article. Multicenter Study. Research Support, Non-U.S. Gov't. Research Support, U.S.

Gov't, P.H.S.. Review

English

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67. Leffingwell TR, Neumann CA, Babitzke AC, Leedy MJ, Walters ST. Social psychology and motivational interviewing: A review of relevant principles and recommendations for research and practice. *Behavioural and Cognitive Psychotherapy* 2007;35:31-45.
- Abstract:** Motivational Interviewing is an evidence-based brief intervention for helping people change problematic health behaviors. The development of motivational interviewing was influenced, in part, by the social psychology literature, especially the concept of psychological reactance. This paper argues for expanding the influence of social psychological processes upon the practice of motivational interviewing by reviewing three relevant processes: defensive bias, message framing, and cognitive-affective ambivalence. Relevant research findings are reviewed and specific recommendations are offered for future research and enhancing the practice of motivational interviewing. (PsycINFO Database Record (c) 2009 APA, all rights reserved) (journal abstract)
- Notes: English
- Journal
- Peer Reviewed Journal
68. Madson MB, Loignon AC, Lane C. Training in motivational interviewing: A systematic review. *J.Subst.Abuse Treat.*2009;36:101-9.
- Abstract:** Motivational interviewing (MI), an evidence-based counseling approach, has received much recognition from a wide variety of health care professionals. Because of the rising interest in MI, there is increasing demand for training in this counseling approach. The MI training community has answered this call and as a result placed much emphasis on studying the MI training process. The purpose of this article is to provide a systematic review of the published research on MI training. Our goal is to provide a consolidated account of MI trainings outlining the populations receiving training, methods used, and training outcomes. We also identify which aspects of the (W. R. Miller & T. B. Moyers, 2006) eight stages of learning MI each study addressed. Recommendations for advancing the MI training research are highlighted. (PsycINFO Database Record (c) 2009 APA, all rights reserved) (journal abstract)
- Notes: English
- Journal
- Peer Reviewed Journal