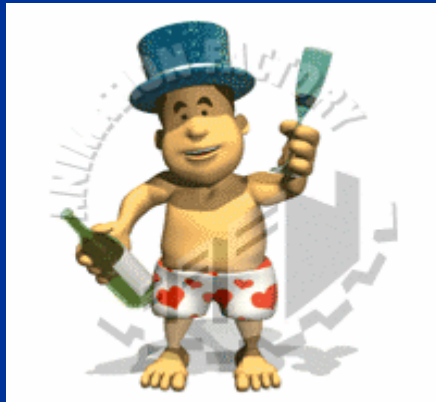


# Effective Psycho-social Therapy for Alcohol Dependence



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# Mesa Grande: a methodological analysis of clinical trials of treatment for alcohol use disorders

- Miller WR & Wilbourne PL, 2002
- 361 RCTs – at least one treatment, comparison, randomization, at least one outcome measure of drinking
- MQS = methodological quality score (max = 17)
- Excellent methodology =  $MQS \geq 14$
- OLS = outcome logic score
- OLS +2 = comparison and beneficial effect, +1 = beneficial but less confidence, -2 = failed to support for the specific efficacy, -1 = negative finding, no additive effect
- Cumulative evidence score (CES) = sum of cross-products of MQS x OLS

**Table 1** Component criteria of the methodological quality score, showing percentage of studies meeting each criterion.

	Points	%
Randomization to conditions	4	78.4
Quality control of treatments	1	56.8
Outcome data from >70% of participants at follow-up	2	74.8
Follow-up for at least 12 months after intake	2	50.5
Outcome data collected by in-person or telephone interview	1	79.5
Collaterals interviewed in >50% of cases	1	32.4
Self-report checked against objective information source	1	43.2
Treatment dropouts included in some outcome analyses	1	69.5
Cases lost to follow-up reported and considered in outcome	1	60.4
Outcome data collected by personnel blind to treatment condition	1	43.5
Acceptable statistical analysis of group differences	1	85.9
Study findings replicated at multiple sites	1	05.0

**Table 3** Summary scores for treatment modalities with three or more studies.

Treatment modality	<i>All studies, regardless of population severity</i>						<i>Clinical populations only</i>			
	Rank order	CES	% +	N	Mean MQS	% MQS ≥ 14	% Clinical	Rank order	CES	% +
Brief intervention	1	280	68	31	12.68	48	48	1	136	73
Motivational enhancement	2	173	71	17	13.12	53	53	11	37	56
GABA agonist	3	116	100	5	11.60	20	100	3	116	100
Opiate antagonist	4	100	83	6	11.33	0	100	4	100	83
Social skills training	5	85	68	25	10.50	16	84	2	125	63
Community reinforcement	6	80	100	4	13.00	50	80	5	68	100
Behavior contracting	7	64	80	5	10.40	0	100	6	64	80
Behavioral marital therapy	8	60	62	8	12.88	50	100	7.5	60	63
Case management	9	33	67	6	10.20	0	100	7.5	60	67
Self-monitoring	10	25	50	6	12.00	50	83	18	-3	40
Cognitive therapy	11	21	40	10	10.00	10	88	9	41	50
Client-centered counseling	12.5	20	57	7	10.57	0	86	13	28	67
Disulfiram	12.5	20	50	24	10.75	17	100	10	38	50
aversion therapy, apneic	14.5	18	67	3	9.67	0	100	15.5	18	67
Covert sensitization	14.5	18	38	8	10.88	0	100	15.5	18	38
Acupuncture	16.5	14	67	3	9.67	0	100	17	14	67
Aversion therapy, nausea	16.5	14	40	5	10.40	20	100	14	20	40
Self-help	18	11	40	5	12.00	30	60	12	33	67
Self-control training	19	9	49	35	12.80	51	63	20	-8	45

Treatment modality	All studies, regardless of population severity						Clinical populations only			
	Rank order	CES	% +	N	Mean MQS	% MQS ≥ 14	% Clinical	Rank order	CES	% +
Minnesota model	20.5	-3	33	3	11.33	33	33	25	-22	0
Exercise	20.5	-3	33	3	11.00	0	33	21	-11	0
Stress management	22	-4	33	3	10.33	0	66	25	-22	0
Family therapy	23	-5	33	3	9.30	15	100	19	-5	33
Aversion therapy, electric	24.5	-13	40	20	10.55	67	100	22.5	-13	40
Twelve-Step facilitation	24.5	-13	33	3	15.67	0	100	22.5	-13	33
Antidepressant, SSRI	26	-16	53	15	8.60	0	53	25	-22	50
Lithium	27	-32	43	7	11.43	29	100	28	-32	43
Marital therapy, other	28	-33	38	8	12.25	25	100	29	-33	38
Functional analysis	29	-36	0	3	12.00	33	66	27	-24	0
Hypnosis	30	-41	0	4	10.25	0	100	30	-41	0
Psychedelic medication	31	-44	25	8	10.12	0	100	31	-44	25
Calcium carbimide	32	-52	0	3	10.00	0	100	33	-52	0
Serotonin antagonist	33	-68	0	3	11.33	0	66	32	-46	0
Anti-anxiety medication	34	-80	29	14	8.36	0	100	35.5	-80	29
Relapse prevention	35	-87	30	20	11.85	30	85	34	-62	29
Metronidazole	36	-101	11	9	10.56	0	100	37.5	-82	11
Antidepressant, non-SSRI	37	-104	0	6	8.67	0	100	41	-104	0
Milieu therapy	38	-107	17	12	10.58	25	100	42	-107	17
Alcoholic anonymous	39.5	-108	14	7	10.71	29	86	35.5	-80	14
Video self-confrontation	39.5	-108	0	8	10.50	13	88	39	-84	0
Standard treatment	41	-130	13	15	9.20	7	87	43	-111	10
Relaxation training	42	-144	17	18	10.56	17	66	40	-98	17
Confrontational counseling	43	-190	0	11	10.73	27	73	37.5	-129	0
Psychotherapy	44	-225	11	18	10.94	22	88	45	-185	13
General alcoholism counseling	45	-239	10	20	11.15	20	85	46	-211	6
Educational lectures, films, groups	46	-343	27	23	8.74	13	38	44	-161	0

CES = cumulative evidence score.

% + = Percent of studies with positive finding for this modality.

N = total number of studies evaluating this modality.

MQS = methodological quality score of studies.

% Clinical = Percent of studies conducted with treatment-seeking populations.

# The effectiveness of psycho-social treatment

(Bottlender M et al., 2006)

- Cognitive behavioral therapy included in a multimodal treatment program is effective.
- Social skills training, community reinforcement approaches, behavior contracting, motivation-enhancing treatment, and family/marital therapy.
- Neither a positive result or were counter productive like relapse prevention, non-behavioral marital therapy, and insight psychotherapy, confrontational counseling,

# Brief intervention

- Many persons with alcohol-related problems do not seek the help of an alcoholism treatment specialist, but rather receive care from a primary care provider
- Brief therapy (1-5 office visits, 5-30 min each visit)
- Feed-back, Responsibility, Advice, Menu, Empathy, Self-efficacy (FRAMES)
- Be less intensive care, first choice of intervention, control in RCT

# Meta-analyses of BI

(Bellesteros J et al. 2004)

- Brief interventions lead to a reduction in hazardous alcohol use, alcohol-related problems and biochemical abnormalities for at least 12 months
- No differential response according to gender
- Findings similar in treatment-seeking and non-treatment-seeking populations



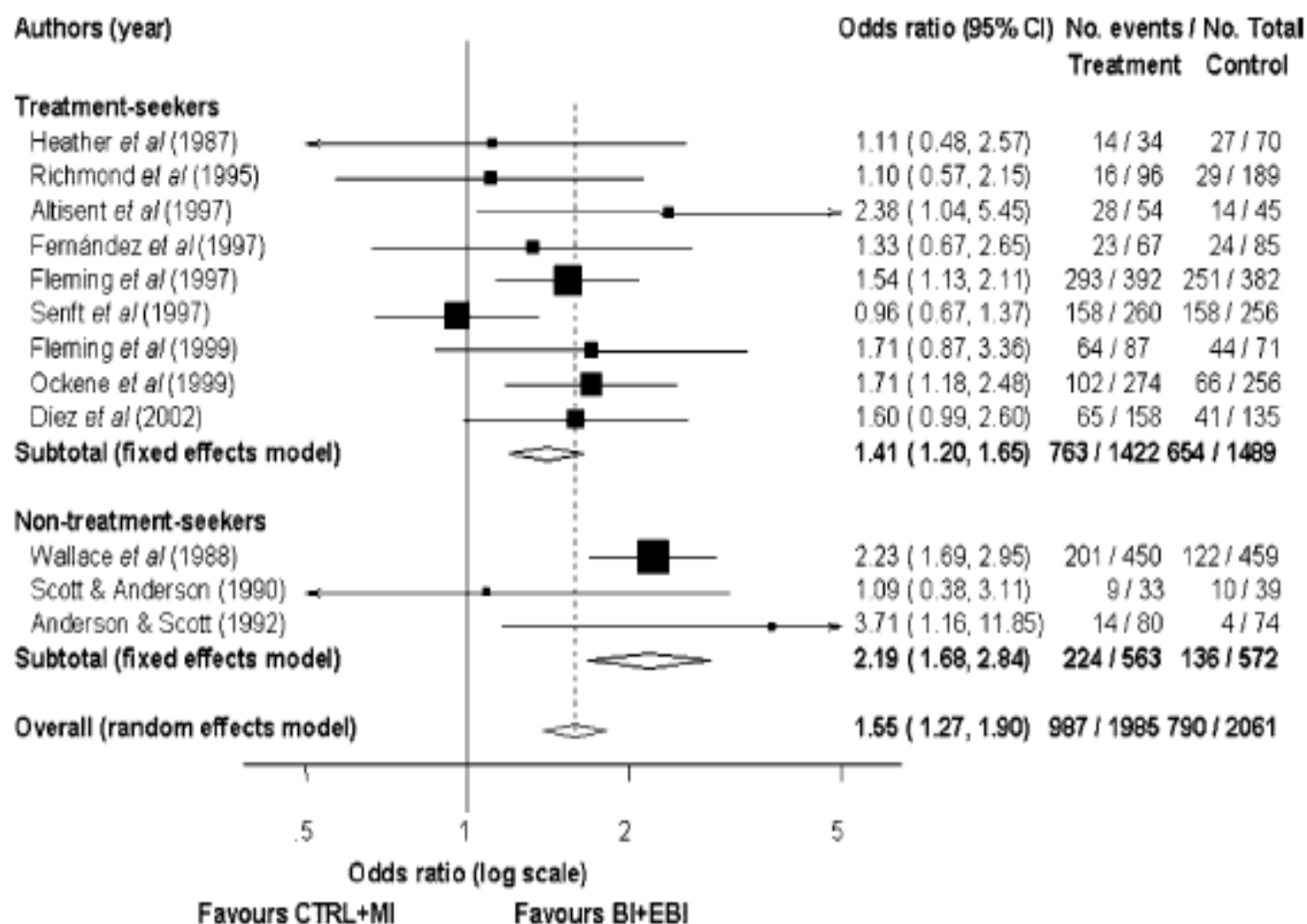


Fig. 2. Meta-analysis. Individual and combined estimates.

# MI or MET studies in Thailand

- การศึกษาผลของการให้คำปรึกษาแบบสั้นต่อการเปลี่ยนแปลงพฤติกรรมการดื่มสุราของผู้ป่วยในผู้ติดยาในระดับผดปกติโรงพยาบาลลำพูน (วิวัฒน์ เขวงชัยยง และคณะ 2543)
- การศึกษาประสิทธิผลของการให้คำปรึกษากับผู้ที่มีปัญหาจากการดื่มเครื่องดื่มแอลกอฮอล์โดยใช้เทคนิคการเสริมสร้างแรงจูงใจในหน่วยบริการปฐมภูมิ (สายรัตน์ นกน้อย, พิชัย แสงขามุขชัย และรามรังสินธุ์ 2547)
- Buddhism-Motivational Interviewing-Cognitive behavioural Therapy (BuMI-CBT) (ดร.ณิ ภูขาว 2548)
- ประสิทธิภาพการบำบัดเพื่อเสริมสร้างแรงจูงใจในการลดปัญหาการดื่มสุราของผู้ติดยาที่รับบริการโรงพยาบาลสวนปรุง (สุนทรี ศรีโกโสย 2548)
- การให้คำปรึกษาโดยการสร้างแรงจูงใจในการรักษาผู้ติดยา (มานิต ศรีสุรภานนท์ และคณะ 2549)

Author	Setting/ subject	Treatment	F/U	outcome
วิวัฒน์ เสงขยง และคณะ	General hospital CAGE Alcohol dep (IPD)	MI (n=170) Ctrl (n=170)	6 mo	P<0.05
สายรัตน์ นกน้อย และ คณะ	PCU 8 units AUDIT Hazardous use	MI (n=64) 0, 2, 6 wk Ctrl (n=55)	1.5, 3, 6 mo	P<0.05
สุนทรี ศรีโกไสย	Mental hospital Alcohol dep (OPD) SOCRATES 8A, DrInC	MI (n=22) 1 session/2 wk x 7	0, 2, 4, 6, 8, 10, 12 wk	P<0.05
มานิต ศรีสุรภานนท์	Addiction Rx center Alcohol dep (OPD) SOCRATES 8A	MI (n=30) 0, 1 wk, 1 mo Ctrl (n=30)	1, 2, 3 mo	P<0.05 at 2 mo
ครุณี ภูขาว	Addiction Rx center Alcohol dependence (IPD)	BuMICBT (n=26) 3 hr/session/day x 5 Standard care(n=19)	1, 3, 6 mo	P<0.001

# Motivational Interviewing (MI) & Motivational Enhancement Therapy (MET)

- Stage of change (Prochaska JO & DiClemente CC)
- Motivational interviewing (Miller WR & Rollnick S, 1991)
- MET in project MATCH (NIAAA, 1999)
- 4 sessions (0, 1, 6, 12 wk)
- Health education & feed-back, commitment strengthening, follow through

# Cognitive-Behavioral Therapy

- Cognitive and behavioral coping skills to avoid drinking and general methods for coping with stressful situations
- Higher self-efficacy in positive social situations, greater treatment program involvement, lower perception of staff control, greater perception of treatment as helpful, reduction in psychological symptoms during treatment (Long et al, 2000)
- Cognitive therapy, social skill training, community reinforcement approach, contingency management, cognitive therapy, aversive therapy

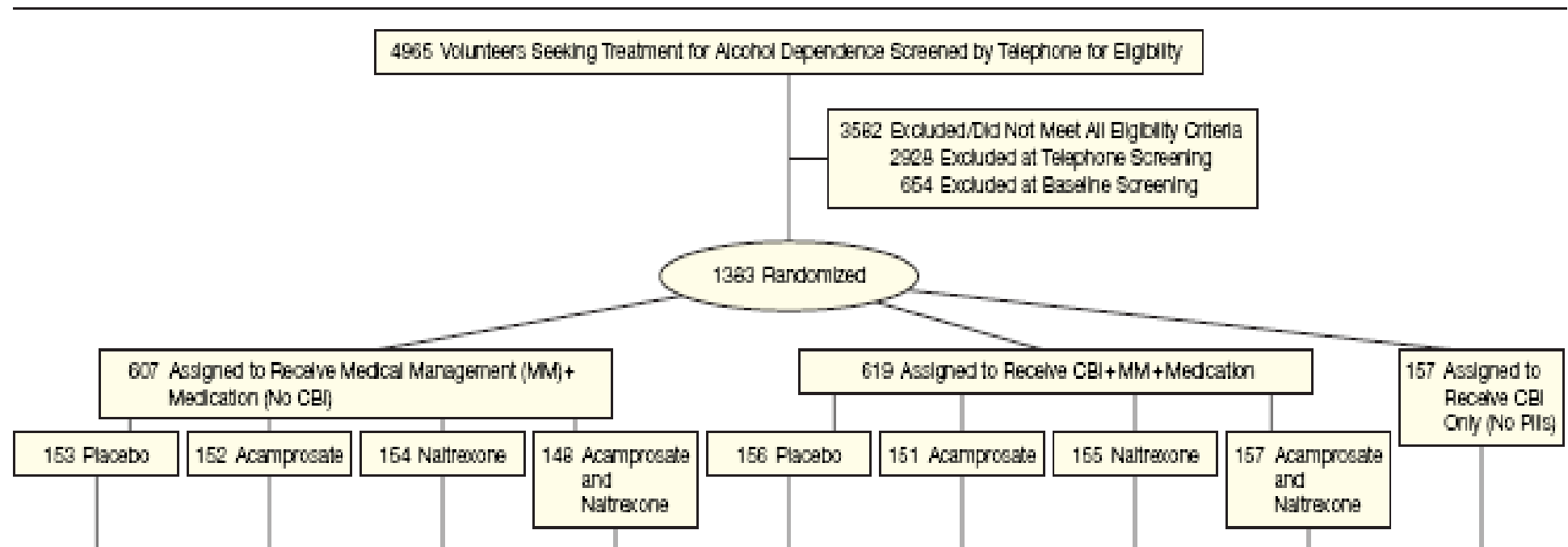
# Harm reduction

- Empirical studies have demonstrated that harm reduction approaches to alcohol problems are at least as effective as abstinence-oriented approaches at reducing alcohol consumption and alcohol-related consequences. (Marlatt GA, et al. 2002)
- Brief intervention, moderation management (MM), behavioral self-control training (BSCT), moderation-oriented cue exposure (MOCE)

# Combined Pharmacotherapies and Behavioral Interventions for Alcohol Dependence

## The COMBINE Study (NIAAA 2004)

Figure 1. Study Profile



**Table 5.** Drinking Outcomes Through End of Treatment

Drinking Outcomes*	No. (N = 1383)†	Medical Management (No CBI)				CBI + Medical Management				CBI Only
		Placebo (n = 153)	Naltrexone (n = 154)	Acamprosate (n = 152)	Naltrexone + Acamprosate (n = 148)	Placebo (n = 156)	Naltrexone (n = 155)	Acamprosate (n = 151)	Naltrexone + Acamprosate (n = 157)	No Pills (n = 157)
Percent days abstinent, mean (SD)‡	1376	73.8 (25.98)	80.0 (26.06)	75.8 (26.01)	80.5 (25.91)	79.8 (25.94)	75.9 (26.02)	78.2 (25.83)	77.8 (25.94)	66.8 (27.14)
Return to heavy drinking, No. events (%)§	1383	115 (75.2)	104 (67.5)	108 (71.1)	96 (64.9)	111 (71.2)	103 (66.5)	103 (68.2)	116 (73.9)	124 (79.0)
Good clinical outcome, No. events (%)	1294	71 (58.2)	87 (73.7)	79 (60.8)	91 (78.4)	92 (71.3)	99 (74.4)	93 (74.4)	97 (73.5)	80 (60.8)

Abbreviation: CBI, combined behavioral intervention.

\*All drinking measures are adjusted for baseline drinking.

†A total of 1383 patients were randomly assigned. Other numbers represent all patients who have data available for analysis.

‡Percent days abstinent is computed monthly for the treatment period. At least 5 days of data per month were required to compute percent days abstinent; otherwise, it was considered missing.

§A heavy drinking day is defined as  $\geq 4$  drinks/d for women and  $\geq 5$  drinks/d for men.

||See "Methods" section for definition.



# Project COMBINE

- Placebo pills and meeting with a health care professional had a positive effect above that of CBI during treatment.
- Naltrexone with MM could be delivered in health care settings, thus serving alcohol-dependent patients who might otherwise not receive treatment.
- No combination produced better efficacy than naltrexone or CBI alone in the presence of medical management.

# Treatment Matching

- Support for matching to a specific treatment method is weak  
(Project MATCH, 1997, Berglund M, et al. 2003)
- The association between the setting and intensity of treatment and outcome is weak (Berglund M, et al. 2003)
- For persons with limited problems (moderate or low dependence), limited treatment yields the same effect as more extensive treatment (Berglund M, et al. 2003)
- Patient with greater problem severity had more sober days and if they received more inpatient treatment, and vice versa (Rychtarik et al. 2000)

# Phramongkutklao model (PMK model)

- 28 days inpatient program
- Combination of western psychology and Buddhist psychology
- Multi-disciplinary team and team meeting once a week
- Group therapy – 2 hr/session x 2 session/day x 5 day/wk x 4 wk
- Motivational interviewing, health education, cognitive-behavioral therapy, the Buddhist twelve steps, relaxation therapy, family education

# Outcome of PMK model

- Jun 2003 – July 2006
- N= 174
- 100% completer, no drop-out
- Alcohol 85.63% & others 14.37%
- 1 year survival = 72.22%
- A= 36.42%, M=35.80%, R=27.78%, N/A=6.32%

# Conclusion

- Brief interventions and motivational enhancement therapy lead to a reduction in hazardous alcohol use and alcohol-related problems
- MI & BI are also effective interventions for Thai alcoholics
- Cognitive behavioral therapy included in a multimodal treatment program is effective
- Harm reduction to alcohol problems is alternative approach
- No combination in the COMBINE study produced better efficacy than naltrexone or CBI alone in the presence of medical management
- Support for matching to a specific treatment method is weak

# Question ??

Many thanks for your attention