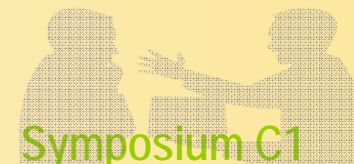


การคัดกรองและบำบัดเบื้องต้นสำหรับผู้มีปัญหาจากการดื่มสุรา

EARLY INTERVENTION FOR ALCOHOL-RELATED PROBLEMS



C1-1: การคัดกรองและบำบัดอย่างย่ออย่างมีประสิทธิภาพสำหรับผู้ที่มีปัญหาจากการดื่มสุรา
OVERVIEW OF EFFECTIVE SCREENING AND BRIEF INTERVENTIONS FOR ALCOHOL-RELATED PROBLEMS

Sawitri Assanangkornchai, M.D., Ph.D.

C1-2: การคัดกรองและบำบัดอย่างย่อในชุมชนและเวชปฏิบัติในประเทศออสเตรเลีย
EARLY INTERVENTION FOR ALCOHOL-RELATED PROBLEMS IN CLINICAL PRACTICE AND COMMUNITY IN AUSTRALIA

Katherine M Conigrave, FACHAM, FAFPHM, PhD

C1-3: การดื่มสุราและพฤติกรรมเสี่ยงต่อเอชไอวีในหญิงบริการในประเทศไทย
HAZARDOUS ALCOHOL CONSUMPTION AND HIV RISK BEHAVIOUR AMONG FEMALE COMMERCIAL SEX WORKERS IN BANGKOK, THAILAND

Robert Ali, FACHAM, FAFPHM, PhD

C1-4: การคัดกรองและการบำบัดอย่างย่อในสถานบริการสุขภาพในประเทศไทย
EARLY INTERVENTION IN HEALTH CARE SETTINGS IN THAILAND

Phunnapa Kittirattanapaiboon, M.D.

Early intervention

for

alcohol problems

Overview and Summary of Evidences



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Screening for alcohol use & alcohol-related problems

Screening in different settings

- Primary care
- Emergency department
- Prenatal care settings
- Criminal justice system
- College population

Screening in primary care



- Single question

“On any single occasion during the past 3 months, have you had more than 5 drinks containing alcohol?”*

“When is the last time you drank > 4 (for women) 5 (for men) in one day?” (+ if <3 months)**

- Quantity-frequency questions

- CAGE

- Michigan Alcoholism Screening Test (MAST)

- Alcohol Use Disorders Identification Test (AUDIT)

*Taj N, et al. J Fam Pract 1998,46(4):328-335., **Vinson DC, et al. Ann Fam Med 2004;2:398-404.

Screening in the emergency department



- 31% of ED patients and 50% of severely injured trauma patients screen positive for alcohol problems.*
- ED patients are 1.5-3 times > primary care patients to report heavy drinking and alcohol-related problems.**
- Barriers: chaotic environment, time constraint, negative attitude, ethical, legal and insurance issues
- Quantity-frequency questions
- CAGE

*D' Onofrio et al. Acad Emer Med 2002,9:627-638. **Cherpitel, et al. Subs Abuse 1999, 20:85-95.

Screening in prenatal care settings



- 14-22.5% of women report drinking while pregnant.*
- Fetal Alcohol Spectrum Disorders (FASD) –birth defects caused by prenatal alcohol exposure
- Drinking patterns before becoming pregnant predict first-trimester consumption
- T-ACE -4 items based on CAGE
- TWEAK

*Bearer CF. Alcohol Res Health 2001, 25(3):210-218.

Screening in the criminal justice system



- Alcohol misuse is related to domestic violence and DWI offenses.
- Problems: no specifically designed instrument, offenders' denial (fear of penalty), confidentiality, financial constraints.

Screening in College populations



- 19% and 10% of youth aged 12-18 in 2001 and 2003 drank alcohol in the past 30 days. (National household surveys) *
- 13-14% of boys and 4-5% of girls in 2002-2004 drank > 5 drinks in a row in the past 30 days. (Southern high school surveys)*
- Young Adult Alcohol Problems Screening Test (YAAPST) - 27 items
- College Alcohol Problems Scale (CAPS-r)
- Rutgers Alcohol Problem Index (RAPI)

*Assanangkornchai S, et al. Drug Alcohol Depen 2007, 86:167-174.

Cost efficiency of screening instruments



- Six general practices in south Wales.
- 194 male primary care attendees aged ≥ 18 completed AUDIT
- AUDIT is an efficient and cost efficient diagnostic tool for routine screening for alcohol use disorders in primary care.
- A significant correlation was observed between alcohol consumption and score on the AUDIT and measures of GGT and %CDT but not AST and MCV.
- AUDIT exhibited significantly higher sensitivity, specificity, and positive predictive value than all of the biochemical markers for hazardous consumption, weekly binge consumption, monthly binge consumption and alcohol dependence.

Brief interventions



- Short, one-on-one counseling session
- Suitable for people who drink in a harmful or abusive way.
- **Goals:** to moderate a person's alcohol consumption to sensible levels
and to eliminate harmful drinking practices
- **Approaches:** motivational interviewing, personalised feedback and counseling

Brief interventions: summary of evidences



Moyer et al, 2002:

People who received BI when being treated for other problems showed greater reductions in alcohol use.

Whitlock et al, 2004:

- BI decreases alcohol consumption and works in a variety of populations –younger/older adults, men/women.
- Repeated contacts are more effective than single contact.

Brief interventions: summary of evidences



US. Preventive Services task Force, 2004:

- ◎ BI participants reduced their alcohol consumption 13-34% compared to controls.

Cuijpers et al, 2004:

- ◎ BI reduces mortality rates among problem drinkers by 23-26%.

Project TrEAT

Trial for Early Alcohol Treatment



- ◎ A large scale clinical trial in 774 primary care patients in 10 counties in southern Wisconsin
- ◎ 2 15-min brief physician advice sessions, 1 month apart self-help book, drinking diary and contract + 2 FU telephone calls 2 weeks after each session

Results at 12 and 48 months:

- ❑ Reduced alcohol use, fewer days of hospitalization, fewer ED visits, motor vehicle crashes, arrests, economic costs
- ❑ Effectiveness lasts up to 4 years later.

Project TrEAT works in young adults



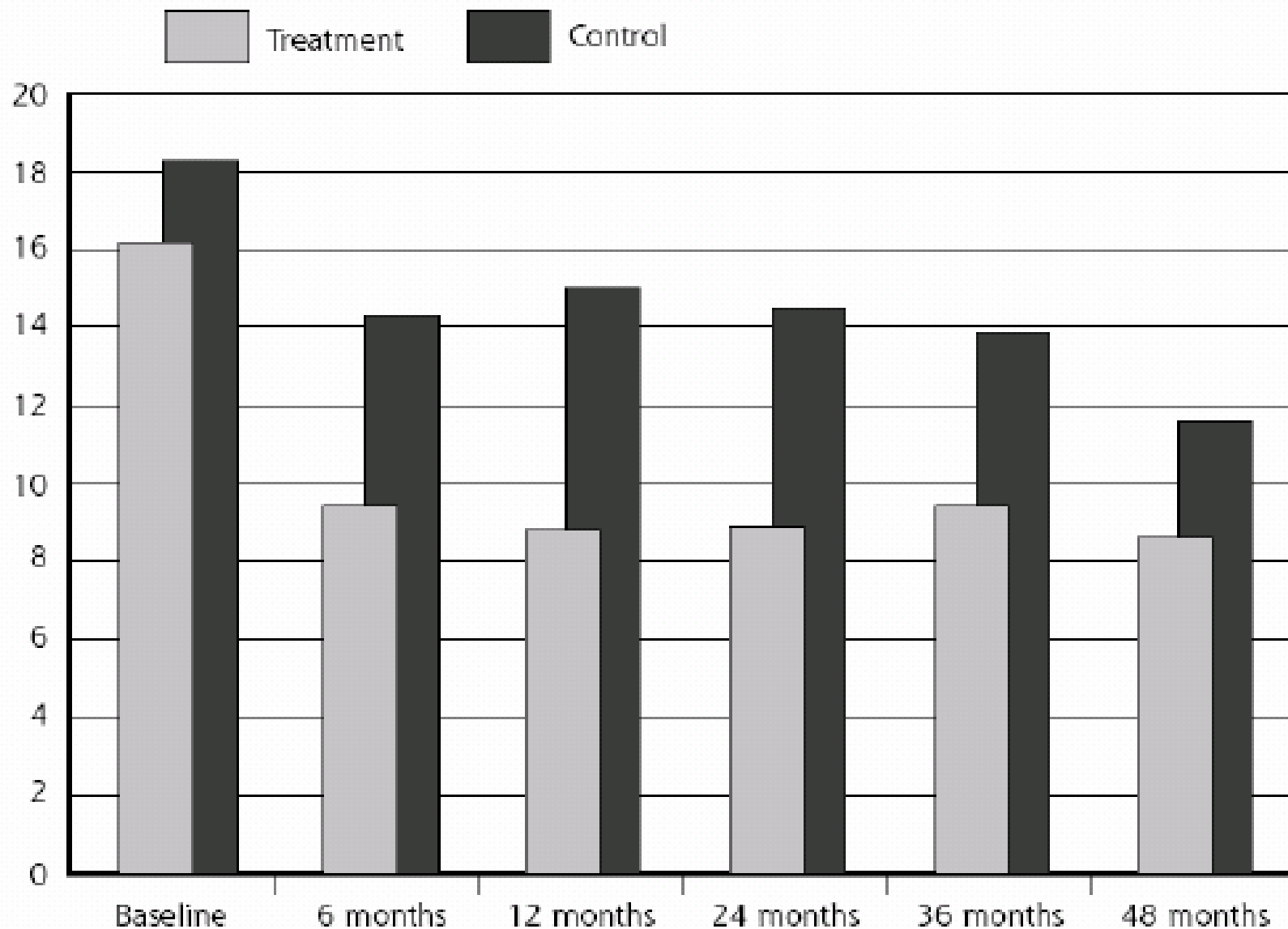
- a subanalysis of 226 young adults (18-30 years) who participated in Project TrEAT

During the 4-year follow-up period:

- significant reductions in numbers of persons drinking >3 drinks per day, average 7-day alcohol use, drinking >6 drinks per occasion, binge drinking episodes in the previous 30 days
- significant differences in ER visits, motor vehicle crashes, total motor vehicle events, and arrests for controlled substance or liquor violation

Grossberg et al, *Annals of Family Medicine* 2004,2:474-480.

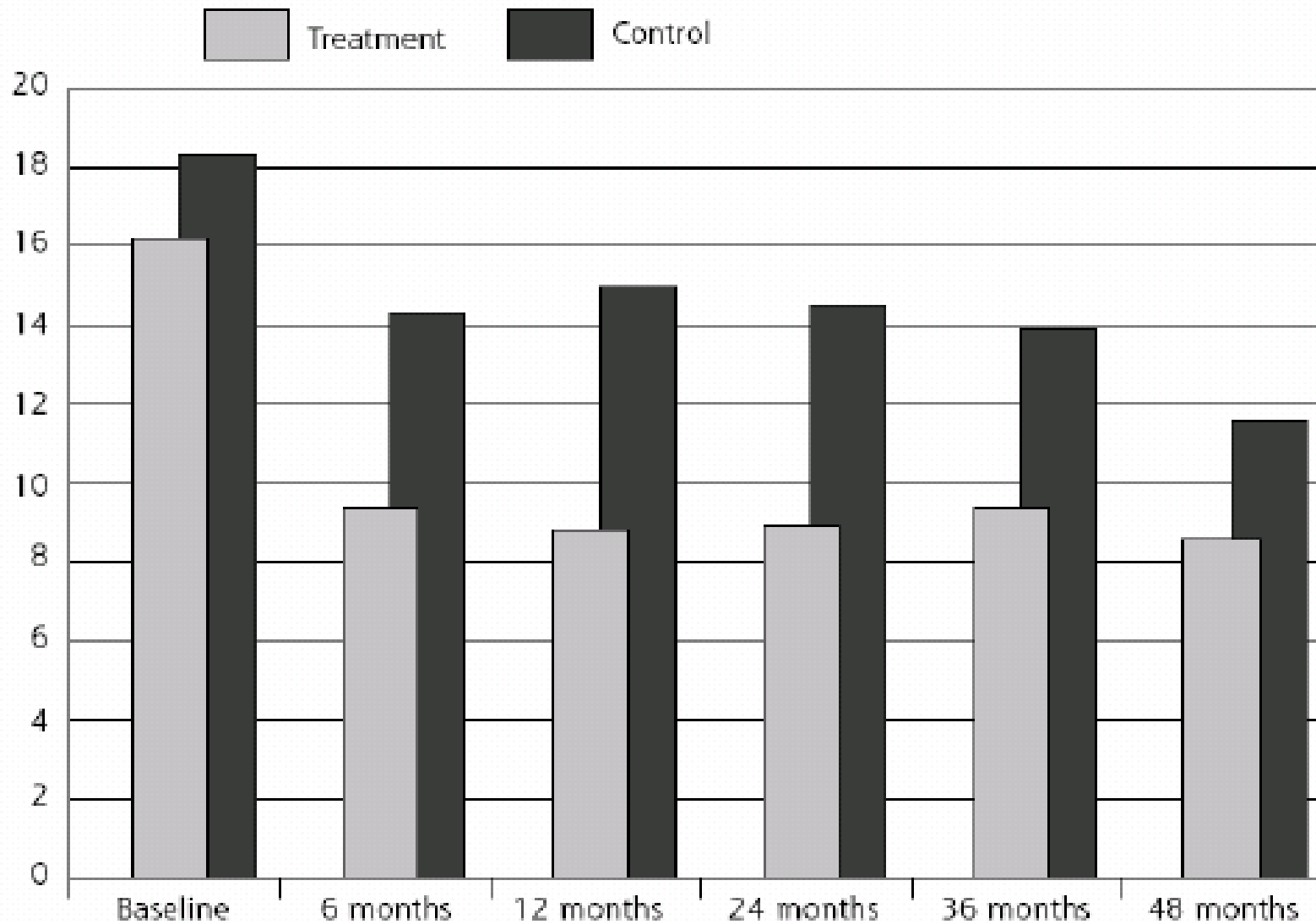
Figure 1. Percentage of total sample drinking 3 or more drinks per day in the previous 7 days.



Grossberg et al, *Annals of Family Medicine* 2004,2:474-480.



Figure 2. Mean total number of drinks in the previous 7 days.



Grossberg et al, *Annals of Family Medicine* 2004,2:474-480.



Cost and benefit of Project TrEAT



- Project TrEAT was examined from two perspectives.
 1. the medical care providers, focused on clinic and hospital costs, contrasting the benefits that directly reduced medical expenditures with the costs to providers
 2. the societal perspective took all of the intervention's costs and benefits into account.
- Project TrEAT led to a reduction in alcohol consumption by high-risk drinkers and a corresponding reduction in medical and societal costs.
- Its costs were outweighed by its benefits.

Cost and benefit of Project TrEAT



<i>Benefits</i>					
Hospital & Emergency Dept. (ED) Use	No. ED Visits (at 12 months)	No. Days Hospitalized (at 12 months)	ED & Hospital Costs		
			(12 mos.)	(48 mos.)	
Intervention Subjects	107	126	\$421	\$1,394	
Control Subjects	132	326	\$943	\$2,106	
Legal Outcomes	No. Arrests		Event Costs		
Intervention Subjects	28		\$269		
Control Subjects	41		\$371		
Motor Vehicle Outcomes	Fatalities	Crashes With Injuries	Crashes With Property Damage Only	Average Costs of Incidents	
Intervention Subjects	0	20	67	\$3,839	
Control Subjects	2	31	72	\$11,010	
<i>Costs</i>					
	Screening & Assessment	Staff Training	Intervention	Patient Time & Travel	Total
Per Intervention Subject	\$88	\$23	\$55	\$39	\$205

WHO Brief Intervention Study Group



- ⊙ Interviews at ER, hospitals, clinics, workplaces, health screening agency
- ⊙ Cross-cultural, 10 nations, Follow-up 6-9 months and 10 years
- ⊙ Exp1: 20 min interview, 5 min advice, pamphlet
Exp2: interview, 5 min advice, 15 min counseling, pamphlet
Control: interview
- ⊙ Results: Significant reduction in alcohol use and binge drinking for experiment groups in males.
Significant reductions for all groups for women.
Exps 1 and 2 were equally effective.

WHO Brief Intervention Study Group. A cross-national trial of brief interventions with heavy drinkers. *American Journal of Public Health* 1996;86(7):948-955.

WHO Brief Intervention Study Group



- Saunders JB, Aasland OG, Babor TF, de la Fuente Juan R, Grant M. Development of the Alcohol Use Disorders identification Test (AUDIT): WHO Collaborative Project on Early Detection of Persons with Harmful Alcohol Consumption - II. *Addiction* 1993;88:791-804.
- Gomel MK, Saunders JB, Burns L, Hardcastle DM, Sumich M. Dissemination of early intervention for harmful alcohol consumption in general practice. *Health Promotion Journal of Australia* 1994;4(2):65-69.
- The Drink-less Program. <http://www.cs.nsw.gov.au/drugahol/drinkless/>, 2004.
- Wutzke SE, Conigrave KM, Saunders JB, Hall WD. The long term effectiveness of brief interventions for unsafe alcohol consumption: a 10 year follow-up. *Addiction* 2002;97:665-675.
- Proude EM, Conigrave KM, Harber PS. Effectiveness of skills-based training using the Drink-less package to increase family practitioner confidence in intervening for alcohol use disorders. *BMC Medical Education* 2006, 6:8.

Screening and brief intervention in emergency department



- A single blind pragmatic randomised controlled trial
- Group 1 (n=312): information leaflet
- Group 2 (n=287): information leaflet + appointment with alcohol health worker

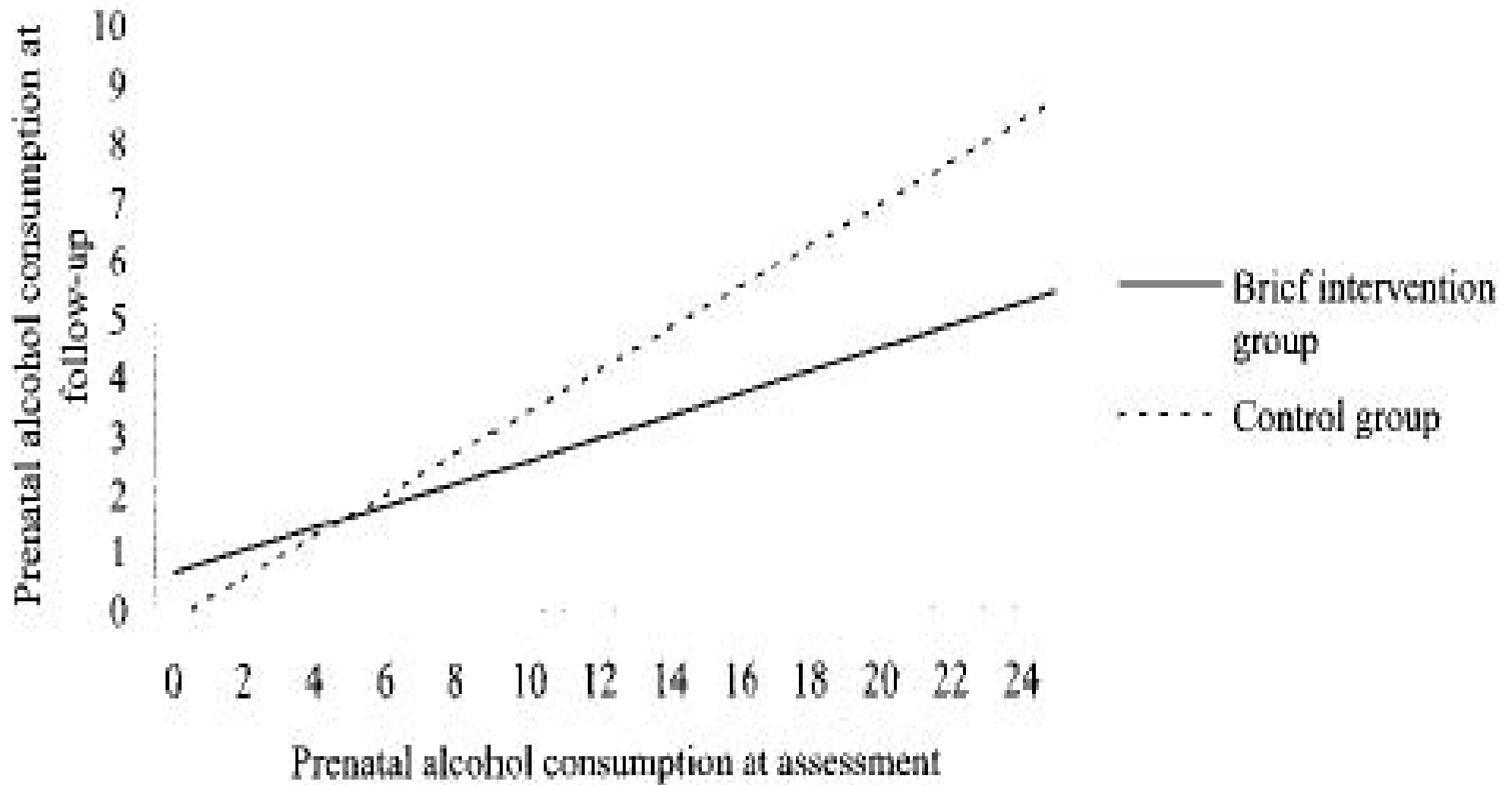
Results:

- Opportunistic identification and referral for alcohol misuse in ER is feasible.
- Lower levels of alcohol consumption among experimental group and reduced attendance at the department over the following 6 months.

Brief Intervention for Prenatal Alcohol Use



- Randomized trial of a single 25 min session BI for 304 pregnant women and their partners
- Women had positive T-ACE results and were at risk for alcohol consumption while pregnant. All completed initial diagnostic and postpartum interviews.
- Results: BI for prenatal alcohol reduced subsequent consumption most significantly for the women with the highest consumption initially. (interaction between BI and level of alcohol consumption)
- **Effects of BI were significantly enhanced when a partner participated.**



Chang G, et al. Obstet Gynecol.2005,105(5 pt 1):991-8.



Projecting the Next Pregnancy Project

- Intervention with women who have been identified as drinking during their last pregnancy.
- Goal: to reduce alcohol use during the women's future pregnancies
- Results: significantly less drinking during their later pregnancies, fewer low-birth-weight babies, fewer premature deliveries
- Children born to BI women had better neurobehavioral performance

Hankin, et al, 1995, 2000, 2002.



Computer-based interventions



- Increased sensitivity and accuracy for personal information from computer-based tools

Computer- or web-based version instruments

- Screening: AUDIT, CAGE
- Diagnostic: Alcohol Dependence Scale (ADS), CIDI core version 2.1, DIS-IV, Substance Dependence Severity Scale (SDSS), Addiction Severity Index – Multimedia version (ASI-MV)

Windows-based / Internet version interventions:

- Drinkers' Check-Up (DCU) www.drinkerscheckup.com based on motivation enhancement technique
- Harm Reduction Through Skill-Building Behavioral Self-Control Program (Windows Program) (BSCPWIN)

Innovative approaches to intervention for problem drinking

Kypros Kypri^a, Thiagarajan Sitharthan^b, John A. Cunningham^c,
David J. Kavanagh^d and Johanna I. Dean^e

In the period 2003-2004:

- ❑ 9 acceptability or feasibility studies of these approaches and 7 efficacy trials covering a wide range of settings identified.
- ❑ These modes of intervention are acceptable to patients and the public, and with careful planning, can be implemented in a variety of settings.
- ❑ Treatment trials demonstrate the efficacy of these interventions in reducing hazardous drinking by university students, in delaying initiation of heavy drinking in children and adolescents, and, intriguingly, in addressing insomnia among recovering alcoholics.



Innovative approaches to intervention for problem drinking

Kypros Kypri^a, Thiagarajan Sitharthan^b, John A. Cunningham^c,
David J. Kavanagh^d and Johanna I. Dean^e

- ❑ There is strong support among potential users for alcohol interventions that employ telephone assistance, written correspondence, and the Internet.
- ❑ These new technologies offer the prospect of increasing the reach of interventions for problem drinking and being cost-effective alternatives or supplements to face-to-face health service delivery.

A Randomized Controlled Trial of an Emergency Department–Based Interactive Computer Program to Prevent Alcohol Misuse Among Injured Adolescents

Study objective: To determine whether an emergency department (ED)–based laptop computer intervention reduces the normative age-related increase in alcohol misuse compared with standard of care.

Methods: This was a randomized controlled trial conducted from October 11, 1999, to April 14, 2001, in a community teaching hospital and university medical center. Subjects were aged 14 to 18 years and with a minor injury. Controls and intervention participants completed a computer-based questionnaire. Intervention participants also completed a laptop-based interactive computer program to affect alcohol misuse. Main outcome measures were Alcohol Misuse Index (Amidx) and binge-drinking episodes. Follow-up occurred by telephone at 3 and 12 months. Analysis included repeated-measures analysis of variance ($\alpha=0.05$; power 0.80; effect size 0.10).

Results: Three hundred twenty-nine participants were randomized to the intervention group, and 326 participants were randomized to the control group. Two hundred ninety-five (89.7%) intervention subjects and 285 (87.4%) control subjects completed 3- and 12-month follow-ups. For intervention and control groups, respectively, mean age was 16.0 and 15.9 years and men composed 66.8% and 66.3% of the groups; Amidx scores were 2.2 and 2.0; binge-drinking episodes were 1.2 and 1.0.

Outcomes for intervention and control, respectively, were Amidx (3 months) 1.5 and 1.4; Amidx (12 months) 1.8 and 2.1; binge drinking (3 months) 0.9 and 0.8; and binge drinking (12 months) 1.4 and 1.2. Overall, there were no significant effects (effect size 0.04). No detrimental effects were noted. Subgroup analysis suggested that the intervention may have an effect among subjects with experience drinking and driving (5% of the sample).

The intervention was not effective in decreasing alcohol misuse among the study population.

Maio, et al. *Ann Emerg Med*, 2005;45:420-429.



Conclusion



- Screening and brief intervention for alcohol problems can be useful in a wide variety of populations and settings and are potentially cost-effective in reducing hazardous or harmful alcohol consumption.
- A number of good screening instruments are available.
- New technology, e.g. computerized interventions, may offer an effective means.
- Early intervention in the course of alcohol use disorders can prevent alcohol dependence and related harms.

Resources



- National Institute on Alcohol Abuse and Alcoholism (NIAAA). Screening for alcohol use and alcohol-related problems. Alcohol Alert 2005,65.
- National Institute on Alcohol Abuse and Alcoholism (NIAAA). Brief interventions. Alcohol Alert 2005,66.
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- National Institute on Alcohol Abuse and Alcoholism (NIAAA). Helping patients who drink too much: A clinician's guide. 2005 edition. NIH Publication No. 05-3769.
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การประชุมวิชาการสุราระดับชาติ ครั้งที่ 1
“วิกฤตปัญหาสุรา และนโยบาย”

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The First National Conference on Alcohol Consumption and Related Problems in Thailand
“Alcohol : Situation, Trend, Threat and Policy”
13 - 15 July, 2005











