



Mailed feedback for problem drinkers in the emergency department: evidence from rural Australia

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Why rural Australian EDs?

- Emergency department (ED) good setting to intervene:
 - Problem drinking more common among ED patients
 - ED presentation represents critical incident that may motivate patient to change drinking behaviour
- Disproportionately high rates of alcohol-caused deaths and hospital admissions in rural Australia
 - Higher rates of risky drinking
 - Resources limited

Brief interventions for alcohol (BAI) in EDs

- ED-based BAIs *can* be efficacious (but are not always)
- Counselling BAI rarely successfully integrated into practices of ED staff because high demand on their time
- Written feedback reduces demands on ED staff and can be efficacious, but relies on availability of computers
- Personalised feedback via mail reduces alcohol consumption in other settings, is it efficacious in ED patients?

Aims

To examine the efficacy of screening and mailed feedback relative to screening alone

To examine potential moderators of efficacy

To examine the cost-efficacy of screening and mailed feedback relative to screening alone

Sample

- 5 EDs in rural NSW, Australia
- Patients presenting 5th March - 18th December 2009
- All patients aged 14+ eligible for screening
- Identification of risky drinkers based on AUDIT scores ≥ 8 \longrightarrow invited to participate in trial
- Screener also contained items on:
 - Sex-specific heavy drinking episodes
 - Demographics

Procedure

- 95% of screening by project staff face-to-face
- Risky drinkers invited to participate in follow-up, without indicating that drinking at risky level = FEEDBACK
- 73% provided verbal consent
- Equal numbers randomly allocated to:
 - Control – no further contact until follow-up
 - Intervention – mailed feedback \approx 1 wk after screening
- 94% of 6 week follow-up interviews by phone, interviewer blinded

Intervention

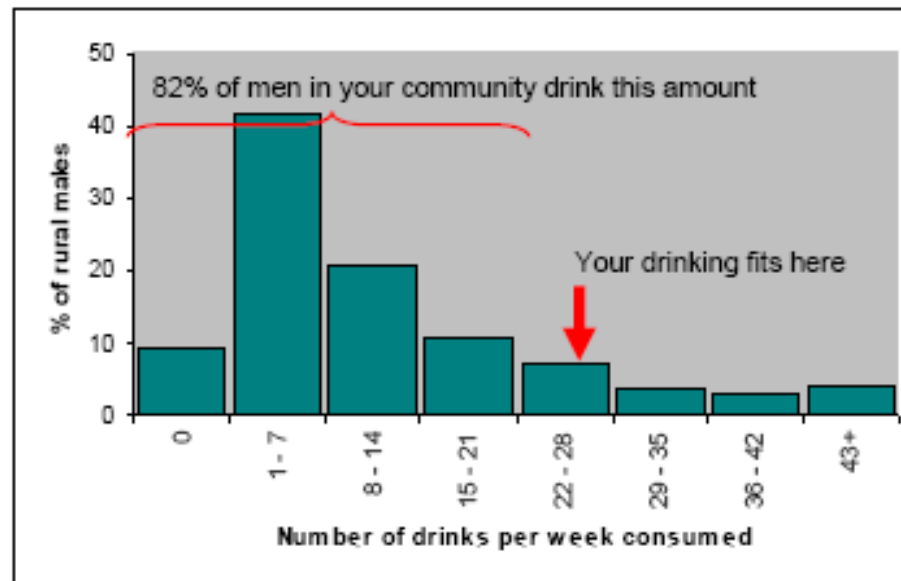
- Letter providing feedback re participant's alcohol consumption
- **NORMATIVE DATA** from AARC community survey

Intervention – Quantity/frequency of consumption

YOUR ALCOHOL CONSUMPTION

The following graphs show how your drinking compares with drinking by men in rural communities in NSW, including Griffith.

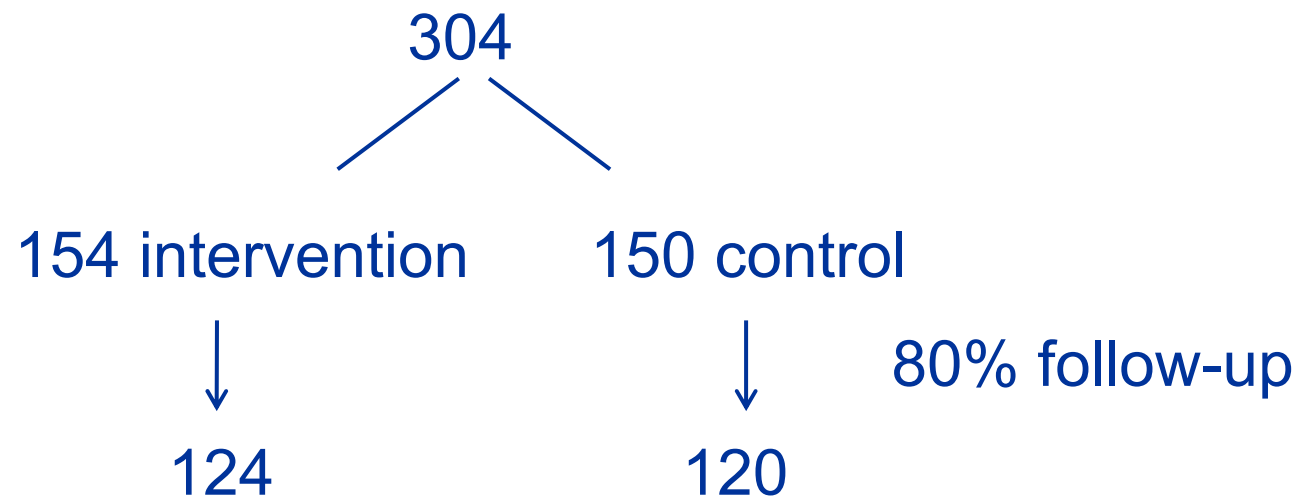
You reported usually drinking 27 standard drinks per week, which is more than 82% of men in your community drink. If your usual alcohol consumption is too high, it can lead to cancers and problems with your blood pressure, heart, memory, liver, pancreas and stomach.



Intervention

- Letter providing feedback re participant's consumption
- **NORMATIVE DATA** from rural community survey:
 - Quantity/frequency of consumption
 - Frequency of heavy drinking
 - Frequency of dependence symptoms
 - Frequency of alcohol-related negative consequences
- **GOALS:** Australian Alcohol Guidelines
- **STRATEGIES:** Tips and suggestions for cutting down
- **ADVICE:** Local sources of further help or advice

Results

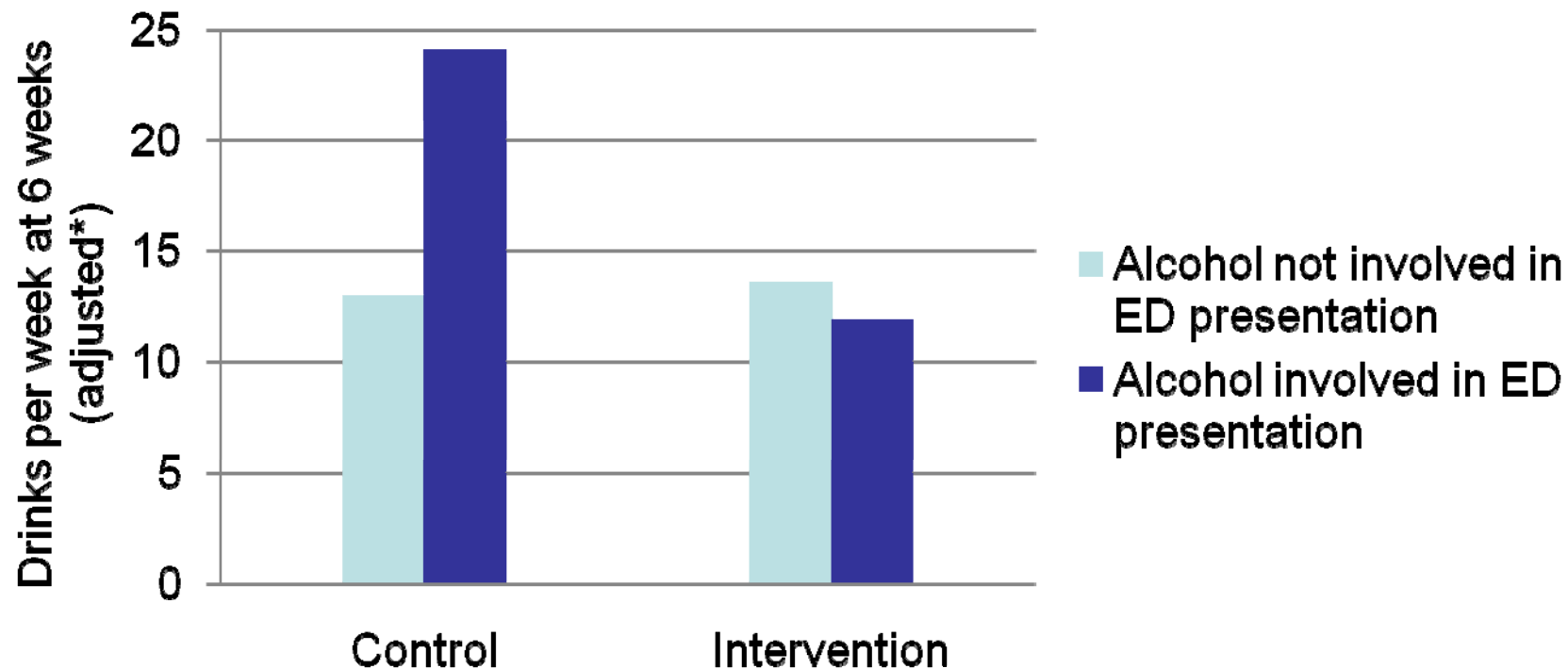


- Lost to follow-up younger & experienced negative consequences of drinking more often → included as a covariate in analyses

Intervention coverage & acceptability

- 71% of intervention participants reported receiving letter
 - 11% of control participants reported receiving letter!!
- analyse according to original assignment AND
- restrict to those that reported accurate receipt/non receipt
- Of the intervention participants who recalled the letter:
 - 87% read at least some of it
 - Of those who read it, 76% found it useful & 77% thought hospital should send it on an ongoing basis

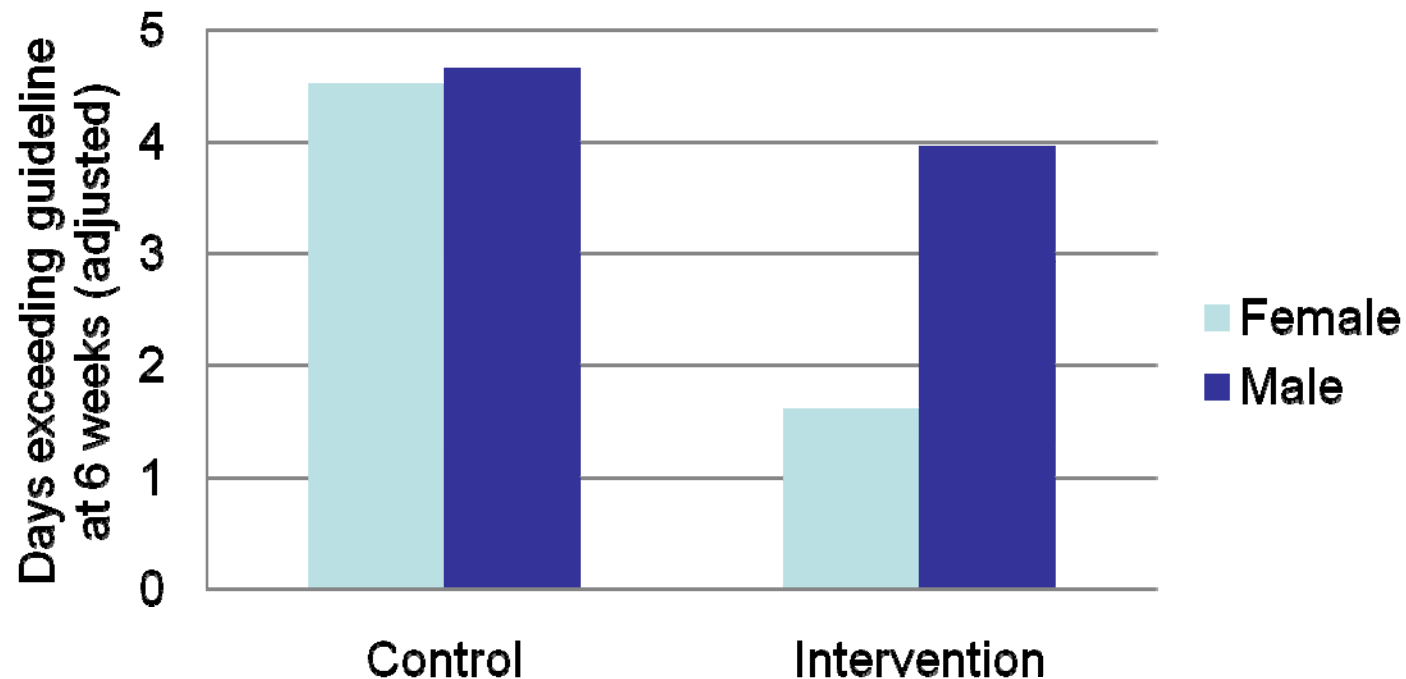
Quantity/frequency of alcohol consumption



* Adjusted for baseline QF, age & frequency of negative consequences
Interactions of Condition x BL QF; sex; education; dependence; alcohol-involvement

Frequency of heavy drinking (≥ 5 females, ≥ 7 males)

(effect not observed when analysed according to original group assignment)



* Adjusted for baseline freq of heavy drinking, age & freq of negative consequences
Interactions: Condition x BL heavy; sex; education; dependence; alcohol-involvement

Cost-efficacy

ICER = $\frac{\text{Difference in cost between intervention \& control}}{\text{Difference in efficacy between intervention \& control}} = 0.48$

- Incremental cost = Au\$5.83 per patient
- Incremental efficacy = 12.22 drinks per week
(for patients with alcohol-involved ED presentation)
- ICER for counselling BAI : $\text{US\$}135.35 / 0.42 = 322.26$
(Kunz, French, & Bazargan-Hejazi (2004). Cost-effectiveness analysis of a brief intervention delivered to problem drinkers presenting at an inner-city hospital emergency department. *Journal of Studies on Alcohol*; 65: 363-70)
- Limitation: cost of screening not included

What next?

Findings support ED-based mailed personalised feedback, but further research to:

- Improve receipt & clarify effect on heavy drinking
- Measure longer term efficacy & alcohol-related harms
- Measure feasibility of incorporating into routine care & cost-effectiveness under these conditions
- Extend reach to patients without alcohol-involved presentations

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