

## **RCT of the effectiveness of electronic mail based alcohol intervention with university students: dismantling the assessment and feedback components**

**Aims:** University students in Sweden routinely receive electronic mail based alcohol interventions sent from student health services. Earlier trials have examined effectiveness in simple parallel group designs. This study also aims to dismantle effective components.

**Design, Setting & Participants:** This trial used a dismantling design and randomized 5,227 university students to groups: 1) routine practice assessment and feedback; 2) assessment-only without feedback; and 3) neither assessment nor feedback.

**Intervention:** Brief electronic mail based alcohol intervention comprising normative feedback and tailored advice.

**Methods:** At baseline all participants were blinded to study participation, with no contact being made with Group 3. At 6-8 week follow-up, students were approached to participate in a cross-sectional alcohol study.

**Findings:** Overall, 45% (n=2,336) of those targeted for study completed follow-up. Attrition was similar in Groups 1 and 2 (approximately 41% retained) and lower in Group 3 (52% providing data). Intention-to-treat analyses among all participants regardless of their baseline drinking status revealed no differences between groups. Per-protocol analyses of Groups 1 and 2 among those who accepted the e-mail offer (approximately 37%) and who were risky drinkers (62% follow-up rate) suggested small effects on weekly consumption attributable to feedback.

**Conclusions:** Electronic mail offer alone of alcohol intervention among unselected populations of university students was not found to be beneficial, though between-group differences in attrition prevent strong conclusions being drawn. Small benefits may follow actual uptake of feedback intervention. The design of a

further trial currently in progress has been successfully influenced by data from this unusually large pilot study.

Jim McCambridge<sup>1</sup>, Preben Bendtsen<sup>2</sup>, Marcus Bendtsen<sup>2,3</sup>, Nadine Karlsson<sup>2</sup>, Per Nilsen<sup>2</sup>

<sup>1</sup>Faculty of Public Health & Policy

London School of Hygiene and Tropical Medicine

15-17 Tavistock Place

London WC1H 9SH

UK

[Jim.McCambridge@lshtm.ac.uk](mailto:Jim.McCambridge@lshtm.ac.uk)

<sup>2</sup>Department of Medicine and Health

Linköping University

581 83 Linköping

Sweden

[preben.bendtsen@liu.se](mailto:preben.bendtsen@liu.se), [per.nilsen@liu.se](mailto:per.nilsen@liu.se), [nadine.karlsson@liu.se](mailto:nadine.karlsson@liu.se)

<sup>3</sup>Department of Computer and Information Science

Linköping University

581 83 Linköping

Sweden

[marcus.bendtsen@liu.se](mailto:marcus.bendtsen@liu.se)