

S1 - Promoting Alcohol-related Attitudinal and Behavioural Change amongst Adolescents through Internet Intervention: A Cluster Randomised Controlled Trial

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Background and Objectives: Underage drinking is an important public health problem, but previous prevention/intervention yielded mixed results. This study aimed to compare the effectiveness of an Internet intervention against conventional health education.

Design: This is a cluster randomised controlled trial with parallel group design. Participating schools were randomised to the Internet intervention or the conventional health education group (control) with 1:1 allocation ratio.

Participants: Local secondary schools (excluding schools targeting international students and students with special needs) were eligible. Secondary 1–3 students of the participating schools were invited. Students who could not comprehend basic Chinese were excluded.

Interventions: The Internet intervention was a web-based quiz game competition, in which participating students would answer 1,000 alcohol-related multiple-choice quiz questions. They were also incentivised to refer the game in their social circle. Conventional health education group received a promotional package on equivalent alcohol-related knowledge.

Main Outcome Measures: Presence and number of units of alcohol drinking in the past 30 days were self-reported before intervention (baseline), as well as one month, and three months after the intervention completion.

Results: 30 schools were recruited using stratified random sampling, in which 15 (4,294 students) were randomised to the Internet intervention arm and 15 (3,498 students) to the conventional health education arm (control). No between-group differences were identified at baseline. Overall retention rate for students was 86.0%. One month after the completion of intervention, students randomised to the Internet group were less likely to drink (risk ratio [RR] 0.79, 95% confidence interval 0.68–0.92, $P=0.003$) and drank less alcohol (β -0.06, -0.11 to -0.01, $P=0.02$). These remained statistically significant three months after the completion of intervention (RR 0.86, 0.74–0.999, $P=0.048$; β -0.06, -0.11 to -0.01, $P=0.02$).

Conclusions: This Internet intervention has reduced the risk of underage drinking by 21% post-intervention compared with the conventional health education.

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