

Personality-targeted interventions delivered by teachers may be effective at reducing alcohol use

doi:10.1136/eb-2013-101394

QUESTION

Question: Is a teacher-delivered personality-targeted intervention for substance misuse effective for reducing drinking behaviour in high-risk adolescents?

Participants: A total of 2643 adolescents (mean age 13.7 years; 42% white ethnicity) attending 1 of 21 secondary schools in September 2007. Adolescents at high risk for addiction (n=1210) were defined as students with baseline scores 1 SD above the school mean on one of the four subscales of the Substance Use Risk Profile Scale (anxiety sensitivity, hopelessness, impulsivity and sensation seeking); low-risk adolescents (n=1433) did not meet these criteria.

Setting: Twenty-one secondary school in London, UK; interventions delivered 2008–2009.

Intervention: Schools were randomised to provide either brief personality-targeted intervention to all high-risk adolescents, or usual care. Four different interventions (each targeting one of the four personality risk dimensions) were delivered during two 90 min sessions over the course of 4 months. Interventions incorporated psychoeducational, motivational and cognitive behavioural components. They were provided in group sessions by trained facilitators and included use of a therapist manual and student workbook. Schools randomised to usual care received only the statutory drug education supplemental material provided through the national curriculum.

Outcomes: Alcohol use in the past 6 months. Frequency and quantity were assessed on two, six-point scales with response options including 'never', 'daily or almost daily', 'never had a full drink' and '10 or more on one occasion'. Binge drinking was assessed using the same scales and defined as consuming four or more alcoholic drinks on one occasion (five for boys) in the past 6 months. Severity of alcohol problems was assessed using the abbreviated version of the Rutgers Alcohol Problem Index. Odds ratios were calculated to assess the effect size for dichotomous outcomes, controlling for cluster, baseline drinking scores and demographic variables.

Participant follow-up: Seventeen schools (two schools did not start the intervention; a further two did not complete all follow-up assessments); analysis was by intention to treat.

METHODS

Design: Cluster randomised controlled trial.

Allocation: Concealed.

Blinding: Unblinded.

Follow-up period: Two years (assessments at 6, 12, 18 and 24 months).

MAIN RESULTS

Overall, students at intervention schools had significantly lower odds of drinking during the course of the trial compared with students at the control schools (OR 0.71, 95% CI 0.51 to 0.99; see online table). Among high risk students, those at intervention schools had significantly lower odds of several drinking behaviours compared with those at control schools, including binge drinking between six and 24 months follow-up (OR 0.57, 95% CI 0.41 to 0.80); reporting drinking problems between 6 and 24 months of follow-up (OR 0.71, 95% CI 0.53 to 0.94); and reporting drinking problems 2 years after the end of the intervention (OR 0.58, 95% CI 0.39 to 0.86). There were no significant differences in likelihood of binge drinking at 24 months of follow-up (OR 0.65, 95% CI 0.42 to 1.0).

CONCLUSIONS

Two-year personality-targeted interventions may be effective at reducing alcohol use when provided by trained school staff.

ABSTRACTED FROM

Conrod PJ, O'Leary-Barrett M, Newton N, et al. Effectiveness of a selective, personality-targeted prevention program for adolescent alcohol use and misuse: a cluster randomised controlled trial. *JAMA Psychiatry* 2013;**70**:334–42.

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Sources of funding Action on Addiction.

► Additional material is published online only. To view please visit the journal online (<http://dx.doi.org/10.1136/eb-2013-101394>).

In addressing the costs and consequences of alcohol problems across the age span, researchers have alternated between testing universal prevention efforts and interventions targeted to more circumscribed high-risk populations. In this study, Conrod and colleagues extend the targeted population approach by selecting a high-risk population based on the presence of four 'personality' profiles, and then delivering four specific modified forms of the prevention intervention to adolescents with specific high-risk profiles. The targeted interventions themselves borrow from the treatment literature, using a combination of cognitive-behavioural and motivational enhancement approaches that have shown promise in the treatment of adolescents with substance use disorders. In as much as the intervention produced the desired results: reductions in

drinking behaviour; the value of prevention also depends on more practical aspects; reasonable costs, training and supervision of interventionists and sustainability. The interventions in this study appear to pass this test as well.

Despite the promise of this intervention, important questions remain. As 45% of the school populations met at least one high-risk category, is this truly a targeted intervention, rather than a universal one? While maintenance of effects across a 2 year follow-up is impressive, the mean age of the subjects is still relatively young. Will the results persist into later adolescence when drinking becomes more ubiquitous? Will the proposed intervention need booster sessions or other means to maintain positive results? The investigators fail to account for students who are elevated in multiple personality dimensions.

The likely overlap between these dimensions among high-risk youth begs the question of whether a single intervention might be as effective for the high-risk group as four different interventions. Answers to these questions await future research.

Finally, the presence of 'herd effects' suggest a substantial role for high-risk youth in setting social norms for drinking behaviours. Studying this phenomenon and examining herd effects in future prevention studies may become a standard for researchers in the future.

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Competing interests OGB has acted as a consultant for Ezra Innovations and PRIME CME and has received royalties from Routledge Press.