

School-Based Education on Alcohol and Drugs

Systematic Literature Review on Effectiveness of School-based Alcohol and Drug Education Programmes

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Summary

Systematic reviews of early intervention drug and alcohol programmes concluded that there was evidence of a small effect from some multi-component community interventions, no effect from the life-skills programmes, mixed but some positive effects on drug use of early intervention, and little effect from family interventions apart from the Iowa Strengthening Families Programme (ISFP). The ISFP had been evaluated long term and at six year follow up showed positive effects on reducing drug use. Brief intervention for drug use was found to have little effect on tobacco consumption, but was effective in reducing alcohol consumption and multiple substance use.

Focus of the review

There has been a focus on high quality studies that have been assessed as methodologically sound, and that have measured health and behavioural changes. The studies included in the section on behaviour and health outcomes comprised reviews undertaken by the Cochrane Collaboration since 2000 and systematic or robust meta-analyses. These provide the most robust basis available for identifying effectiveness as they are a state of the art distillation and analysis of current programmes.

The second section outlines the basis for the best practice principles for teaching and learning for alcohol and drugs programmes. This literature is useful in informing development of best practice guidelines for HOW to implement programmes, but is of limited value in ascertaining the most effective programmes regarding longer term health and behavioural changes. Literature reviewed for this section was not subjected to the same inclusion criteria as literature covered in section one

Findings

The reviews of primary prevention programme evaluations conclude that the considerable weight of evidence indicates little or no effect of school based drug education programmes on actual drug use (White and Pitts, 1998, Foxcroft et al., 2006, Faggiano, 2005). These authors reported that strategies with a focus on shaping or changing individual behaviour through the promotion of knowledge and skills have been largely ineffective in delaying or reducing drug use. Some report short-term impacts on behaviour, but these effects generally disappear over time (Faggiano, 2005, Foxcroft et al., 2006). Some programmes have also resulted in a harmful effect such as arousing curiosity which results in experimenting with drugs (Babor et al., 2003, Foxcroft et al., 2006).¹

Babor et al's (2003) findings are consistent with the above conclusions. They noted that while school based health education programmes based on values clarification, self-esteem, general social skills and 'alternative' approaches may increase knowledge and influence young people's attitudes toward alcohol and other substances, actual substance abuse among young people remained largely unaffected. Programmes that provided resistance skills training and normative

¹ A recent systematic review of the grey literature on drug prevention among young people conducted by McGrath and associates (2006) found that twenty-six of 209 reports reviewed were sufficiently robust to include in the analysis. Findings were generally consistent with those reported in the white literature cited in this section.

education produced mixed results but with generally modest short-term effects. Booster sessions may improve effectiveness.

Compared to the education approaches commonly used, those teaching general social skills are the most likely to have some effect in determining early stage drug use (Faggiano, 2005). White and Pitts (1998) also pointed to the value of broadly based generic social skills training, but in their findings, the more effective interventions had both generic and specific social skills training components. It was emphasised that social skills programmes need to take account of the social and psychological dimensions of young people and include addressing individual risk and protective factors associated with drug use (Faggiano, 2005).

White and Pitts (1998) also note that booster sessions along with sufficient intensity of the programme may increase the chance of an effect, but these factors did not guarantee effectiveness. They also reported some effectiveness of 'booster sessions' that were not school based but reinforced prevention messages to young people. Examples cited were community or mass media components as well as an integrated school and community level intervention where the community level component was essential to the effectiveness.

In reviewing alcohol prevention programmes, Foxcroft et al. (2006) found it difficult to draw any conclusions regarding effectiveness from interventions that had only short term follow-up and found almost no evidence of effectiveness in interventions with medium term follow-up. They therefore focused particularly on programme evaluations that were three years or longer. While noting problems with limited numbers of studies and somewhat mixed results, they conclude that community action projects were promising and highlight the theoretical robustness of community level interventions versus a focus on individual change through education programmes. The results of one community action initiative cited showed significant reductions in alcohol related harm across a metropolitan community (Holder 1997 cited in Foxcroft et al., 2006)). Foxcroft et al. (2006) highlights that community level interventions can shift the potential benefit beyond young people at school, to include the whole population. They also point out the potential cost effectiveness of targeting community level change through policy and environmental measures, rather than individual change.

However, with regard to education programmes, Foxcroft et al. (2006) also noted that skills training programmes designed to be culturally specific also showed some promise of improved effectiveness over general programmes. (Schinke 2000 cited in Foxcroft et al., 2006). The programme cited included school based cognitive and behavioural skills development and also had a focus on cultural values, holistic concepts of health and Native American history which were seen as an important part of the programme. A community component was included in one arm of the programme. This involved media and posters and meetings for parents, community members and teachers, but no additional effect of this component could be shown over and above the school based component. Drug use (except tobacco) was lower for the intervention than the control group at the 3.5 years follow up measure. Foxcroft et al. (2006) recommended further evaluation of culturally specific programmes. White and Pitts (1998) also emphasised that to increase effectiveness, programme designs needed to be better customised to meet the differing cultural, drug-use stage and other needs of young people.

In summary, the evidence for effectiveness of school-based primary prevention programmes is at the very best, mixed, with the considerable weight of evidence indicating little or no effect on drug use (White and Pitts, 1998, Foxcroft et al., 2006,

Faggiano, 2005). There is however both theoretical and evaluation evidence for the effectiveness of community action initiatives to reduce alcohol related harm in multiple settings at an integrated school/community level. They may or may not include a school based component

Gates et al (2006) conducted a systematic review of interventions for prevention of drug use by young people. Some of these included school based components. Interventions were either education and skills training, brief intervention/motivational interviewing, family interventions or multi component community interventions. There was evidence of small effect from some of the multi-component community interventions, no effect from the life-skills programmes, mixed but some positive effects on drug use of brief intervention, and apart from the Iowa Strengthening Families Programme (ISFP), little effect from family interventions. In summary, while a small number of programmes reviewed showed a weak effect on drug use, methodological issues in many of the studies, and the relatively small number of studies robust enough to be included meant that it was difficult to assert any effect.

The Iowa Strengthening Families Programme (ISFP) was noted by both Gates (2006) and Foxcroft (2006) as a programme which had been evaluated long term and at six year followup showed positive effects on reducing drug use. ISFP is a multi component family skills training programme which includes parent skills training, children skills training and family life skills training. To date, there has been only one evaluation of this programme and further evaluation is recommended to validate ISFP's effects and replicability (Gates, 2006; Foxcroft, 2006).

Early Intervention Programmes

Finally, Tait et al (2003) systematically reviewed the evidence for the effectiveness of brief intervention (BI) in reducing drug use in adolescents. Results showed that BI had a small effect on alcohol consumption and a lessor effect on tobacco consumption. In contrast to these effects there was a significant effect on multiple substances use, but generalisation of this result requires a little caution as sample sizes were small.

Conclusion

It is clear from the literature reviewed that there is little if any effect of universal drug and alcohol education programmes on young people's alcohol and drug use and htee is some evidence for small effects on long term drug use of alcohol and drug early intervention programmes.

Best Practice Principles, based on the literature and key policy and guidelines documents

Introduction

(Cuijpers, 2002) highlights that a plethora of programmes are often promoted to schools and the lack of effectiveness of most makes it difficult for schools to select and implement effective programmes. He also asserts that there are not adequate criteria available to assist schools in determining which programmes or approaches are harmful or ineffective, and which are more promising. In the New Zealand context, the Ministry of Youth Development (2004) has recently developed best practice guidelines on drug education Strengthening Drug Education in School Communities. These have provided a sound basis for the development of best

practice principles for this project. While the principles below are largely based on those outlined in the guidelines, they have been adapted slightly to include some other principles identified in the literature reviewed. .

Best Practice Principles for Effective Contexts for School Based Programmes

1. This is based on evidence of what works in terms of behavioural and health outcomes
2. Programme formulated in the context of evidence for effectiveness of strategies at the level of the wider, social, cultural and economic environment
3. Co-ordinated with other community initiatives eg community action projects
4. Part of a comprehensive school wide approach to student well being
5. Integrates with and supports a comprehensive health education programme delivered by the school's health education teachers
6. Teachers/facilitators get adequate training and support
7. Programmes are regularly and effectively evaluated
8. Uses interactive teaching methods
9. Teaches social skills
10. Encourages critical analysis of wider social and economic factors affecting health, including media and marketing
11. Provides opportunities for good relationships and fosters connectedness
12. Is implemented as intended (fidelity) ²
13. Ensures delivery is by educators that have the respect of/are acceptable to the students
14. Programme is of a duration and intensity to be effective³
15. Realistic goals and clear aims and objectives
16. Provides age appropriate, accurate and relevant factual information
17. Supported by involving families/whanau
18. Is long term and delivered over several years
19. Relevant to students and have their input
20. Responsive to different cultural views and realities

Early Invention (extra criteria)

1. Evidence based effective targeted approaches that are accessible, safe and appropriate
2. Provides opportunities for good relationships and fosters connections

² A critical issue to consider in programme evaluation is the measurement of the fidelity of a programme's implementation (i.e., how well and how reliably the programme is implemented) (Hansen, 2002, McConney et al., 2002). Evaluation literature has highlighted factors such as experiential training of facilitators/teachers so that they are able to rehearse the content of the programme and have a competent skill base to implement the programme well and the provision of a clearly articulated manual as assisting in achieving fidelity (references).

³ The drug, alcohol and mental health literature has highlighted that more positive findings have been achieved when universal, classroom programmes have some intensity and are offered over an extended timeframe. This enables the programme to build on skills development and increase knowledge and experience over a number of years (Midford, 2002; Hawthorne, 2001; Tobler, 2000).