

# Library Watch on prevention

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## **Evaluation of an adolescent hospital-based injury prevention program.**

Stewart TC; Polgar D; Girotti MJ; Vingilis E; Caro D; Corbett BA et al. *Journal of Trauma, Injury, Infection and Critical Care* 66(5): 1451-1459, 2009

Background: IMPACT (Impaired Minds Produce Actions Causing Trauma) is an adolescent, hospital-based program aimed to prevent injuries and their consequences caused by alcohol or drug impairment and other high-risk behaviors. The overall objective of this evaluation was to determine the effect of the program on students' knowledge and behavior regarding drinking and driving, over time. Methods: A randomized control trial between students randomly selected to attend IMPACT and those not selected served as a control group. Students completed a questionnaire before the program and at three posttime periods (1 week, 1 month, and 6 months). Panel data models were used to analyze the effects of the experiment on students' knowledge of alcohol and crash issues and negative driving behaviors (no seat belt, driving while using a cell phone, involved in conversation, eating, annoyed with other drivers, and drowsy). Descriptive statistics and logistic regression models were used to analyze the effect of IMPACT on students' influence on friends and family about road safety. Results: This study consisted of 269 students (129 IMPACT; 140 control) with an overall response rate of 84% (range, 99% presurvey to 71% at 6 months). The IMPACT group had a 57%, 38%, and 43% increase in the number of correct answers on alcohol and crash issues during the three time periods, respectively ( $p < 0.05$ ). Students in the IMPACT group would try to influence friends and family to improve their road safety twice as often as 1-week postprogram (odds ratio 1.94, confidence interval 1.07, 3.53). The models did not suggest that the program had an effect on negative driving behaviors. Men and students who drove more frequently had worse driving behavior. Conclusions: Our evaluation demonstrates that the IMPACT program had a statistically significant, positive effect on students' knowledge of alcohol and crash issues that was sustained over time. IMPACT had an initial effect on students' behaviors in terms of peer influence toward improving road safety

(i.e., buckling up, not drinking, and driving) 1 week after the program, but this effect diminished after 1 month. Other negative driving behaviors had low prevalence at baseline and were not further influenced by the program. Copyright 2009, Lippincott, Williams and Wilcox.

## **A night to remember: A harm-reduction birthday card intervention reduces high-risk drinking during 21st birthday celebrations.**

LaBrie JW; Migliuri S; Cail J. *Journal of American College Health* 57(6): 659-663, 2009

Objective: In collaboration with Residence Life, the Heads UP research team developed a 21st birthday card program to help reduce the risky drinking often associated with these celebrations. Participants: 81 students (28 males, 53 females) completed a post-21st birthday survey. Of these, 74 reported drinking during their 21st birthday and were included in the analyses. Methods: During the 2005-2006 school year, the authors assigned students celebrating 21st birthdays to either receive an alcohol risk-reduction birthday card or to a no-card condition. The students completed a survey after their birthday. Results: Students who received the card consumed fewer drinks and reached lower blood alcohol content (BAC) levels on their birthday than did students who did not receive it. Female students who received the card consumed 40% fewer drinks and reached nearly 50% lower BAC levels than women who did not receive it. Conclusion: This program is easily replicated, inexpensive, and may be used by universities to reduce risk related to celebratory alcohol consumption. Copyright 2009, Heldref Publications.

## **Long-term effects of adolescent marijuana use prevention on adult mental health services utilization: The Midwestern Prevention Project.**

Riggs NR; Pentz MA. *Substance Use & Misuse* 44(5): 616-631, 2009. (44 refs.)

Evaluated were effects of a drug abuse prevention program, previously shown to prevent marijuana use in adolescence, on adulthood mental health service use. Analyses were conducted on 961 6th (41%) and 7th (59%) grade participants randomly assigned to intervention or control groups at baseline in 1984.

These participants were followed-up through 2003 representing 15 waves of data collection. Eighty-five percent of participants were Caucasian and 56% were female. The hypothesis was that direct program effects on early adulthood mental health service use would be mediated by program effects on high school marijuana use trajectories. Structural equation models, imputing for missing data, demonstrated that MPP (Midwestern Prevention Project) program effects on mental health were mediated by the marijuana use growth curve intercept. Findings support the role of early adolescent drug use prevention programs in impacting later mental health problems. The study's limitations are noted. Copyright 2009, Taylor & Francis.

**Universal school-based substance abuse prevention programs: Modeling targeted mediators and outcomes for adolescent cigarette, alcohol and marijuana use.**

Stephens PC; Sloboda Z; Stephens RC; Teasdale B; Grey SF; Hawthorne RD et al. *Drug and Alcohol Dependence* 102(1/3): 19-29, 2009. (29 refs.)

Objective: We examined the relationships among targeted constructs of social influences and competence enhancement prevention Curricula and cigarette, alcohol and marijuana use outcomes in a diverse sample of high school students. We tested the causal relationships of normative beliefs, perceptions of harm, attitudes toward use of these substances and refusal, communication, and decision-making skills predicting the self-reported use of each substance. In addition, we modeled the mediation of these constructs through the intentions to use each substance and tested the moderating effects of the skills variables on the relationships between intentions to use and self-reported use of each of these Substances. Methods: Logistic regression path models were constructed for each of the drug use outcomes. Models were run using the Mplus 5.0 statistical application using the complex sample function to control for the sampling design of students nested within schools: full information maximum likelihood estimates (FIML) were utilized to address missing data. Results: Relationships among targeted constructs and outcomes differed for each of the drugs with communication skills having a potentially iatrogenic effect on alcohol use. Program targets were mediated through the intentions to use these substances. Finally, we found evidence of a moderating effect of decision-making skills on perceptions of harm and attitudes toward use, depending upon the outcome. Conclusions: Prevention curricula may need to target specific drugs. In addition to normative beliefs, perceptions of harm, and refusal

and decision-making skills, programs should directly target constructs proximal to behavioral outcomes such as attitudes and intentions. Finally, more research on the effects of communication skills on adolescent substance use should be examined. Copyright 2009, Elsevier Science.

**A review of drug prevention system development in Romania and its impact on youth drug consumption trends, 1995-2005. (review).**

DeGi CL. *Drug and Alcohol Review* 28(4): 419-425, 2009. (21 refs.)

Issues. A tremendous growth occurred in the reported drug use and abuse in Romania from 1995 to 1999. Lack of concern by government and little policy attention contributed to the surprising delay of drug policy and drug prevention system development. General public stigmatize drug users and drug consumption is considered a matter of personal fault and responsibility. There is some but not sufficient research and evaluation on drug use, abuse problem. Approach. Drug use, abuse and prevention are discussed from research-based, user-focused and prevention system development perspectives. Prevalence and trends of drug use, abuse in the past decade (1995-2005) are summarized. Prevention issues are discussed based on research data from adolescents, parents and teachers. The Romanian primary drug prevention system has been evaluated based on our experiences in drug use prevention activities carried out in schools and recreational environments. Key Findings. Public and scientific perspectives on drug consumption in Romania, between 1995 and 1999, were dominated by an idealistic, non-realistic perception. Since 1995, drug use among adolescents increased almost four times in less than 4 years. The first law against drug traffic and consumption was issued only in 2000. Now primary drug prevention strategies are in action, but in general they are lacking standard evaluation procedures. Implications/Conclusion. Conclusions are drafted for new perspectives in prevention activities. More long-term, user-focused, demand-centred prevention activities should be carried out in more and more diversified settings and evaluation should be thoroughly considered. Copyright 2009, Wiley-Blackwell Publishing.

**Mass media for smoking cessation in adolescents.**

Solomon LJ; Bunn JY; Flynn BS; Pirie PL; Worden JK; Ashikaga T. *Health Education & Behavior* 36(4): 642-659, 2009. (36 refs.)

Theory-driven, mass media interventions prevent smoking among youth. This study examined effects of

a media campaign on adolescent smoking cessation. Four matched pairs of media markets in four states were randomized to receive or not receive a 3-year television/radio campaign aimed at adolescent smoking cessation based on social cognitive theory. The authors enrolled 2,030 adolescent smokers into the cohort ( $n = 987$  experimental;  $n = 1,043$  comparison) and assessed them via annual telephone surveys for 3 years. Although the condition by time interaction was not significant, the proportion of adolescents smoking in the past month was significantly lower in the experimental than comparison condition at 3-year follow-up when adjusted for baseline smoking status. The media campaign did not impact targeted mediating variables. A media campaign based on social cognitive constructs produced a modest overall effect on smoking prevalence among adolescents, but the role of theory-based constructs is unclear. Copyright 2009, Sage Publications.

**The impact of national smoking prevention campaigns on tobacco-related beliefs, intentions to smoke and smoking initiation: Results from a longitudinal survey of youth in the United States.**

Davis KC; Farrelly MC; Messeri P; Duke J. *International Journal of Environmental Research and Public Health* 6(2): 722-740, 2009. (27 refs.)

The National Truth (R) campaign has exposed U. S. youth to antismoking messages since 2000. Tobacco industry-sponsored campaigns, such as. Think. Don't Smoke. (TDS), have also aired nationally. We examine the effects of recall of the truth (R) and TDS campaigns on changes in tobacco-related beliefs, intentions, and smoking initiation in a longitudinal survey of U. S. youth. Recall of truth (R) was associated with increased agreement with antismoking beliefs, decreased smoking intentions, and lower rates of smoking initiation. Recall of TDS was associated with increased intentions to smoke soon but was not significantly associated with tobacco beliefs or smoking initiation among youth overall. Copyright 2009, Molecular Diversity Preservation.

**Building Xperience: A multilevel alcohol and drug prevention intervention.**

Diamond S; Schensul JJ; Snyder LB; Bermudez A; D'Alessandro N; Morgan DS. *American Journal of Community Psychology* 43(3/4): 292-312, 2009. (117 refs.)

"Xperience" is an innovative alcohol and drug prevention program that has adopted a multilevel, community-based strategy to promote drug-and-alcohol free social activities, venues and norms among

urban youth ages 14-20. The intervention aims to strengthen protective factors and reduce risk factors for alcohol and other substance use among high school age youth by addressing multiple factors at the individual, peer, community and city level. The purpose of this paper is to discuss the process of building the different levels of this intervention during the 3-year formative phase. We will explain: (1) Why we chose to adopt a multilevel and participatory strategy, (2) Formative research leading to the intervention model, (3) The theoretical framework underlying the methodology, (4) Pilot intervention development (Years One and Two), (5) Current program methods and outcome goals, and lastly, (6) Some of the lessons learned, goals achieved, and plans for the future. This descriptive account of building a multilevel intervention aims to serve as a useful guide for others wishing to develop similar approaches, and for theorizing about some of the common challenges involved in this process. Copyright 2009, Springer .

**Defensive responses to an emotive anti-alcohol message.**

Brown S; Locker E. *Psychology & Health* 24(5): 517-528, 2009. (51 refs.)

We investigated the idea that emotive imagery used in health promotion advertising can facilitate a defensive response that adversely affects risk perceptions. One hundred student drinkers were exposed to either a printed message accompanied by images designed to maximise emotional distress or the same message presented using less emotive images. A three-way interaction was found, whereby the presentation of distressing images caused lower personal risk estimates in participants higher in denial and vulnerability to alcohol-related problems. This effect may have been mediated by lower reading times, suggesting that participants avoided the messages. Moderation by denial suggests that the effect is attributable to defensiveness, whilst moderation by vulnerability suggests that it is threat specific. These findings suggest that emotive images might trigger defensive avoidance responses that reduce risk estimates in some audience sub-populations. Copyright 2009, Taylor & Francis.

**Effective methods to improve recruitment and retention in school-based substance use prevention studies.**

Bruzzese JM; Gallagher R; McCann-Doyle S; Reiss PT; Wijetunga NA. *Journal of School Health* 79(9): 400-407, 2009. (39 refs.)

BACKGROUND: Poor recruitment and high attrition may invalidate results of research studies. This paper

describes successful recruitment and retention strategies in a school-based substance use prevention trial and explores factors associated with intervention attendance and retention. **METHODS:** A total of 384 parent-child dyads from 15 schools in the New York Metropolitan area participated in a control trial, testing the efficacy of parent-training to prevent youth substance use. Assessments were completed immediately post-intervention and 6-, 12-, and 24-month postintervention. Logistic regression analyses were used to determine which familial and study characteristics predicted attendance in the intervention and retention by parents and youth. **RESULTS:** 84% of intervention parents attended 4 of the 5 workshops; 83% of control parents attended their single workshop. Intervention attendance was predicted by parent job status, but this was not significant after controlling for other family factors. Retention rates ranged from 87% to 91% over the 2 years. No family characteristics predicted retention, but time since baseline and attendance at treatment workshops and the control workshop did. For children, age at baseline and ethnicity predicted retention, but this did not remain significant in the adjusted model. **CONCLUSION:** Intervention attendance was high and retention rates far exceeded the minimum standard of 70% retention in behavioral studies. Recruitment and retention strategies were effective for different family constellations. Efforts to maximize participation in both treatment and control interventions are critical to retention in longitudinal trials. Copyright 2009, Wiley-Blackwell.

**Enforcement of underage sales laws as a predictor of daily smoking among adolescents: A national study.**

DiFranza JR; Savageau JA; Fletcher KE. *BMC Public Health* 9(article 107), 2009

**Background:** With a goal to reduce youth smoking rates, the U. S. federal government mandated that states enforce laws prohibiting underage tobacco sales. Our objective was to determine if state compliance with tobacco sales laws is associated with a decreased risk of current daily smoking among adolescents. **Methods:** Data on tobacco use were obtained from a nationally representative sample of 16,244 adolescents from the 2003 Monitoring the Future survey. The association between merchant compliance with the law from 1997-2003 and current daily smoking was examined using logistic regression while controlling for cigarette prices, state restaurant smoking policies, anti-tobacco media, and demographic variables.

**Results:** Higher average state merchant compliance from 1997-2003 predicted lower levels of current daily smoking among adolescents when controlled for all other factors. The odds ratio for daily smoking was reduced by 2% for each 1% increase in merchant compliance. After controlling for price changes, media campaigns and smoking restrictions, a 20.8% reduction in the odds of smoking among 10th graders in 2003 was attributed to the observed improvement in merchant compliance between 1997 and 2003. A 47% reduction in the odds of daily smoking could be attributed to price increases over this period. **Conclusion:** Federally mandated enforcement efforts by states to prevent the sale of tobacco to minors appear to have made an important contribution to the observed decline in smoking among youth in the U. S. Given similar results from long-term enforcement efforts in Australia, other countries should be encouraged to adopt the World Health Organization Framework on Tobacco Control strategies to reduce the sale of tobacco to minors. Copyright 2009, BioMed Central.

**If parents establish a no-smoking agreement with their offspring, does this prevent adolescents from smoking? Findings from three Dutch studies.**

Blokland EAWD; Engels RC; Harakeh Z; Hale WW; Meeus W. *Health Education & Behavior* 36(4): 759-776, 2009. (29 refs.)

Data from three studies were used to investigate whether the establishment of a no-smoking agreement is related to lower odds of adolescent smoking. The prevalence of a no-smoking agreement was first explored by using a national sample involving 4,501 Dutch adolescents. Second, data from a longitudinal study among 595 early adolescents and their parents were used to test whether establishing a no-smoking agreement prevents adolescents from smoking. Third, the authors tested among 856 early- and mid-adolescents and their parents, whether in addition to the establishment of a no-smoking agreement, the frequency and quality of communication on smoking issues had an effect on adolescent smoking. The findings do not support that establishing a no-smoking agreement is an effective deterrent with regard to adolescent smoking. Parents who want to prevent smoking might consider focusing their efforts on establishing a good quality of communication on smoking issues whereas parents who just talk a lot about smoking issues without considering the quality of their communication might do more harm than good. Copyright 2009, Sage Publications.