

# Library Watch on prevention

www.projectcork.org

Spring 2005

## **Preventing substance use and disordered eating: Initial outcomes of the ATHENA (Athletes Targeting Healthy Exercise and Nutrition Alternatives) Program.**

Elliot DL; Goldberg L; Moe EL; DeFrancesco CA; Durham MB; Hix-Small H. *Archives of Pediatrics & Adolescent Medicine* 158(11): 1043-1049, 2004. (54 refs.)

**Objectives:** To implement and to assess the efficacy of a school-based, sport team-centered program to prevent young female high school athletes' disordered eating and body-shaping drug use. **Design and Setting:** Prospective controlled trial in 18 high schools, with balanced random assignment by school to the intervention and usual-care control conditions. **Participants:** We enrolled 928 students from 40 participating sport teams. Mean age was 15.4 years, 92.2% were white, and follow-up retention was 72%. **Intervention:** The ATHENA (Athletes Targeting Healthy Exercise and Nutrition Alternative) curriculum's 8 weekly 45-minute sessions were incorporated into a team's usual practice activities. Content was gender-specific, peer led, and explicitly scripted. Topics included healthy sport nutrition, effective exercise training, drug use and other unhealthy behaviors' effects on sport performance, media images of females, and depression prevention. **Main Outcome Measures:** We assessed participants by confidential questionnaire prior to and following their sport season. We determined program effects using an analysis of covariance-based approach within the Generalized Estimating Equation framework. **Results:** Experimental athletes reported significantly less ongoing and new use of diet pills and less new use of athletic-enhancing substances (amphetamines, anabolic steroids, and sport supplements) ( $P < .05$  for each). Other health-harming actions also were reduced (less riding with an alcohol-consuming driver [ $P = .051$ ], more seat belt use [ $P < .05$ ], and less new sexual activity [ $P < .05$ ]). The ATHENA athletes had coincident positive changes in strength-training self-efficacy ( $P < .005$ ) and healthy eating behaviors ( $P < .001$ ). Reductions occurred in intentions toward future use of diet pills ( $P < .05$ ), vomiting to lose weight ( $P < .05$ ), and use of tobacco ( $P < .05$ ) and muscle-building supplements ( $P < .005$ ). The program's

curriculum components were altered appropriately (controlling mood [ $P < .005$ ], refusal skills [ $P = .051$ ], belief in the media [ $P < .0051$ ], and perceptions of closest friends' body-shaping drug use [ $P < .001$ ]). **Conclusions:** Sport teams are effective natural vehicles for gender-specific, peer-led curricula to promote healthy lifestyles and to deter disordered eating, athletic-enhancing substance use, and other health-harming behaviors. Copyright 2004, American Medical Association.

## **Promoting positive adult functioning through social development intervention in childhood: Long-term effects from the Seattle Social Development Project.**

Hawkins JD; Kosterman R; Catalano RF; Hill KG; Abbott RD. *Archives of Pediatrics & Adolescent Medicine* 159(1): 25-31, 2005. (43 refs.)

**Objective:** To examine the long-term effects of the Seattle Social Development Project intervention in promoting positive adult functioning and preventing mental health problems, crime, and substance use (including tobacco, alcohol, and other drugs) at 21 years of age. **Design:** This nonrandomized controlled trial followed up participants to 21 years of age, 9 years after the intervention ended. We compared the following 3 intervention conditions: a full 6-year intervention (grades 1 through 6); a late 2-year intervention (grades 5 and 6 only); and a no-treatment control condition. **Setting:** Eighteen public elementary schools serving diverse neighborhoods, including high-crime neighborhoods, of Seattle, Wash. **Participants:** A sex-balanced, multiethnic sample of 605 participants across the 3 conditions who completed interviews at 21 years of age (94% of the original sample in these conditions). **Interventions:** Teacher training in classroom instruction and management, child social and emotional skill development, and parent training. **Main Outcome Measures:** Self-reports of functioning in school and work, emotional and mental health, and crime and substance use at 21 years of age and official court records. **Results:** Broad significant effects on functioning in school and work and on emotional and mental health were found. Fewer significant effects on crime and substance use were found at 21 years of age. Most outcomes had a consistent dose effect, with the

strongest effects in subjects in the full-intervention group and effects in the late-intervention group between those in the full-intervention and control groups. Conclusions: A theory-guided preventive intervention that strengthened teaching and parenting practices and taught children interpersonal skills during the elementary grades had wide-ranging beneficial effects on functioning in early adulthood. Copyright 2005, American Medical Association.

**General practitioners' role in preventive medicine: Scenario analysis using alcohol as a case study.**

Doran CM; Shakeshaft AP; Fawcett JE. *Drug and Alcohol Review* 23(4): 399-404, 2004. (23 refs.)

The purpose of this analysis is threefold: first, to extract from the literature, current levels of GP detection of at-risk drinking by their patients, rates at which general practitioners (GPs) offer an intervention; and the effectiveness of these interventions; secondly, to develop a model based on this literature to be used in conjunction with scenario analysis; and thirdly, to consider the cost implications of current efforts and various scenarios. This study deals specifically with Australian general practice. A two-step procedure is used in the scenario analysis, which involves identifying opportunities for detection, intervention, effectiveness and assigning probabilities to outcomes. The results suggest that increasing rates of GP intervention achieves greatest benefit and return on resource use. For every 5% point increase in the rate of GP intervention, an additional 26 754 at-risk drinkers modify their drinking behaviour at a cost of \$231.45 per patient. This compares with a cost per patient modifying drinking behaviour of \$232.60 and \$208.31 for every 5% point increase in the rates of detection and effectiveness, respectively. The knowledge, skill and attitude of practitioners toward drinking are significant, and they can be the prime motivators in persuading their patients to modify drinking behaviour. Copyright 2004, Carfax Publishing.

**Learning by doing: 'Initiated Abstinence', a school-based programme for the prevention of addiction.**

Kalke J; Raschke P. *European Addiction Research* 10(2): 88-94, 2004. (21 refs.)

(.53) at short-term (less than or equal to 1 year) but rapidly decreased (.19) at long-term (> 1 year). Behavioral effect was the most meaningful, being persistent over a 3-year period (.19 at less than or equal to 1 year;.18 at 1 to 3 years). Adolescent smoking reduction rates were increased by using either cognitive behavior or life skills program modalities,

and/or a school-community-incorporated program setting. Copyright 2004, Sage Publications.

**"Fighting Back" against substance abuse: The structure and function of community coalitions.**

Lindholm M; Ryan D; Kadushin C; Saxe L; Brodsky A. *Human Organization* 63(3): 265-276, 2004. (23 refs.)

The Robert Wood Johnson Foundation's Fighting Back (FB) program was one of the first efforts to develop "community coalitions" to reduce drug and alcohol problems. The challenges of coalition building are described and analyzed based on fieldwork from 10 of the 14 urban communities where the program operated. The possibilities and limits of broad-based participation in decision making and interagency collaboration are described. The program triggered a vertical dynamic in its effort to integrate grassroots and elite participation. This dynamic involved negotiation for control within the local program. Structures that encouraged more grassroots-elite integration in the local programs were: 1) relative cohesion and political strength among grassroots leadership; and 2) a grantee agency with resources to distribute and relative freedom from constraints imposed by having to compete in the local political arena and with other service providers. The program initiated a horizontal dynamic in its effort to rationalize the delivery of services. Competition, segmentation, and the mandate to be broadly inclusive were barriers to effective collaboration. Short-term collaboration among agencies emerged around concretely defined, shared goals. Longer-term collaboration was infrequent but emerged on a smaller scale around grant writing, legislative advocacy, and educational events for professionals. Coordination proved difficult because relevant policies were typically set by state legislatures rather than in local communities. Copyright 2004, Society for Applied Anthropology.

**It's not what you say, it's how many different ways you can say it: Links between divergent peer resistance skills and delinquency a year later.**

Wright AJ; Nichols TR; Graber JA; Brooks-Gunn J; Botvin GJ. *Journal of Adolescent Health* 35(5): 380-391, 2004. (35 refs.)

Purpose: To examine whether generation of 'socially appropriate' responses or divergent responses to continued peer pressure is a more effective deterrent of actual delinquency. Methods: The sample of 129 urban adolescents included both boys and girls (51.9% male) and was predominantly black (48%) and Hispanic

(28.7%). They were studied longitudinally from seventh to eighth grade in New York City from 2000-2001. Resistance strategies to offers to smoke and to shoplift were assessed in two separate videotaped role-plays. Socially appropriate responses were defined as assertive and nonaggressive, including the use of a simple no; direct, declarative statements; and offering prosocial alternatives. Divergent responses were defined as multiple unique response types within the same situation regardless of appropriateness. Data were analyzed using hierarchical logistic regressions. Results: High use of divergent responses was consistently associated favorably with changes in delinquency from seventh to eighth grade. High use of divergent responses was associated with lowered likelihood to vandalize, steal or shoplift, and commit multiple acts of any type of delinquency, even after controlling for seventh grade delinquency. Socially appropriate responses showed little association to any delinquent behavior. Conclusions: Different social pressure situations and contexts may require different responses. As trying to teach effective responses for every single potential peer pressure situation would be impossible, promoting divergent thinking may be an attractive alternative. Copyright 2004, Society for Adolescent Medicine.

**Early intervention for alcohol use prevention and vehicle safety skills: Evaluating the Protecting You/Protecting Me curriculum.**

Bohman TM; Barker ED; Bell ML; Lewis CM; Holleran L; Pomeroy E. *Journal of Child & Adolescent Substance Abuse* 14(1): 17-40, 2004. (53 refs.)

The present study reports the evaluation results of the "Protecting You/Protecting Me" (PY/PM) alcohol use prevention and safety curriculum for third, fourth, and fifth graders when taught by high school peer leaders. The primary goal of the PY/PM prevention program, developed by Mothers Against Drunk Driving (MADD) is to prevent injury and death of children due to underage consumption of alcoholic beverages and vehicle-related risks, especially as passengers in vehicles in which the driver is not alcohol-free. Two classrooms for each grade were randomly assigned to receive either the Intervention or serve as a Comparison in four sites in Texas. From pre-test to post-test, 259 surveys were matched (Intervention n = 128, Comparison n = 131). A 6-week follow-up survey was also completed with 120 Intervention students. The results showed the Intervention group made significant improvements, relative to the Comparison group, in Vehicle Safety Skills, Intentions not to Ride

with an Alcohol Impaired Driver, Media Literacy, and Knowledge about Brain Development. Additional findings showed some individual differences by gender and grade and that the intervention's effect varied in a few areas depending on pre-test score, gender, and grade. Overall, the curriculum benefits students by influencing their attitudes toward advertisements, increasing their intentions not to ride with a driver who has been drinking, developing their skills to protect themselves when they have no other option but to ride with an alcohol impaired driver, and improving their knowledge about the developing brain. Copyright 2004, Haworth Press.

**The buffering effects of connectedness: Teen Club intervention for children of substance abusing families.**

Campbell-Heider N; Tuttle J; Bidwell-Cerone S; Richeson GT; Collins SE. *Journal of Addictions Nursing* 14(4): 175-182, 2003. (38 refs.)

This paper will trace the clinical evolution and demonstrated efficacy of Teen Club--a community-based nursing intervention designed to reduce high-risk behaviors in female teens who are children of substance abusing families. Special emphasis is on the relevance of connectedness as a theoretical underpinning for support group interventions. The paper also describes the clinical applications of this research for practice and the team's plans for further testing the Teen Club program in other inner city high-risk adolescent populations. Copyright 2004, Taylor & Francis.

**Can government policies help adolescents avoid risky behavior?**

Bishai DM; Mercer D; Tapales A. *Preventive Medicine* 40(2): 197-202, 2005. (34 refs.)

Background. This study examines the extent to which policies influence participation of adolescents in alcohol and tobacco consumption and in unsafe sex. Methods. Data were obtained from the 1995 Youth Risk Behavior Surveys (YRBS) conducted by 20 different states and cities in the U.S. These data were combined with state data on cigarette taxes, vending machine laws, beer taxes, and family planning clinic availability. A model of teenage risk taking suggested that the three risk behaviors were codetermined by a common latent risk-taking propensity. We used a structural equation model (SEM) accounting for this shared latent propensity to estimate the extent of participation in terms of frequency of smoking, drinking, and the number of sex partners. Results. Estimating simultaneous equations for all three risk

behaviors was statistically more efficient than equation-by-equation estimates of each behavior. Estimates indicated significant deterrent effects of beer taxes, vending machine restrictions, and increased density of family planning clinics on teenage risk behavior. Conclusions. State policies, such as taxes on beer, and restrictions on location of cigarette vending machines, and placement of family planning clinics influence adolescents' behavior. Because there is interrelationship between these behaviors, systems estimators, can offer improved estimates of these effects. Copyright 2005, Elsevier Science.

**Pricing policy and some other predictors of smoking behaviours: An analysis of French retrospective data.**

Peretti-Watel P. *International Journal of Drug Policy* 16(1): 19-26, 2005. (32 refs.)

In France as in other developed countries, cigarette smoking has been acknowledged as the most preventable cause of death and disability. Tobacco control has become a priority for the French government, which decided a 20% rise of the cigarette price at the end of 2003 and plans further rise in 2004. This study adopted a life-course perspective with retrospective data extracted from a national telephone survey for assessing the impact of pricing policy and some other predictors on smoking behaviours in France during the period 1965-1999. Our findings suggest that during a period marked by cultural trends favouring more frequent and earlier initiation of cigarette smoking, pricing policy has been a poor deterrent to youth smoking. Such findings highlight the necessity to implement simultaneously other preventive strategies, including restrictions on tobacco advertising, youth access and smoking in public places, as well as mass media campaigns and school-based educational interventions. Copyright 2005, Elsevier Science.

**A general causal model to guide alcohol, tobacco, and illicit drug prevention: Assessing the research evidence. (review).**

Birkmayer JD; Holder HD; Yacoubian GS; Friend KB. *Journal of Drug Education* 34(2): 121-153, 2004. (250 refs.)

The problems associated with the use of alcohol, tobacco, and other drugs (ATOD) exact a significant health, social, and economic toll on American society. While the field of substance abuse prevention has made great strides; during the past decade, two major challenges remain. First, the field has been

disorganized and fragmented with respect to its research and prevention practices; that is, there are often separate ATOD prevention "specialists." Second, both the prevention researchers who test the efficacy of specific prevention strategies and the practitioners who implement prevention efforts often lack an overall perspective to guide strategy selection. To address these limitations, we present an ATOD causal model that seeks to identify, those variables (Domains) that are theoretically salient and empirically connected across alcohol, tobacco, and illicit drugs. For the researcher, the model demonstrates important commonalities, as well as gaps, in the literature. For the practitioner, the model is a means to recognize both the complexity of the community system that produces ATOD problems and the multiple intervention points that are possible within this system. Researchers and practitioners are thus challenged to work synergistically to find effective and cost-effective approaches to change or reduce ATOD use and associated problems. Copyright 2004, Baywood Publishing.

**Teacher training in norm setting approaches to drug education: A pilot study comparing standard and video-enhanced methods.**

Dusenbury LA; Hansen WB; Giles SM. *Journal of Drug Education* 33(3): 325-336, 2003. (19 refs.)

Norm setting has been shown to be a crucial element of effective drug education. The purpose of this study was to examine the degree to which a videotape describing concepts and methods for establishing positive norms would enhance standard training. Participants included 35 teachers and 64 health education students who were randomly assigned to 'the' standard training condition or the video-enhanced training. Participants completed pretest and posttest measures of beliefs, attitudes, and knowledge concerning prevention methods. Both the standard and the video-based instruction produced improved understanding of norms and norm setting prevention methods. However, the video-based instruction resulted in several notable improvements beyond what was achieved in standard instruction. Video training can be an important tool its research-based drug abuse prevention achieves wide-scale dissemination. It offers a way of standardizing training and has the potential to increase the fidelity with which prevention programs are implemented. Copyright 2003, Baywood Publishing.