

### **Advancing prevention science and practice: Challenges, critical issues, and future directions.**

Botvin GJ. *Prevention Science* 5(1): 69-72, 2004. (11 refs.) Progress in identifying effective programs and policies for preventing tobacco, alcohol, and illicit drug use has stimulated a growing sense of optimism about the potential of prevention science and practice. This paper summarizes some of the key challenges and critical issues that still need to be addressed for the advances of the past two decades of prevention research to have an impact on the nature of prevention practice and eventually translate into reductions in mortality and morbidity. In addition to identifying effective strategies for disseminating the use of evidence-based prevention programs and policies, issues related to implementation fidelity and adaptation need to be better understood as well as factors associated with institutionalization of effective prevention programs. Further advances in prevention science and practice will require a new emphasis on blended research models that involve conducting prevention research in practice settings with the active collaboration of researchers and practitioners. Copyright 2004, Kluwer Academic.

### **A survey of US chiropractors on clinical preventive services.**

Hawk C; Long CR; Perillo M; Boulanger KT. *Journal of Manipulative and Physiological Therapeutics* 27(5): 287-298, 2004. (22 refs.)

Objective: To assess attitudes of current chiropractic students, public health faculty, and practitioners toward the topics of clinical preventive and health promotion services. Design and Population: Survey of samples of students and faculty at 10 US chiropractic colleges and random sample of US chiropractors stratified by zip code region using proportional allocation. Data Analysis: Descriptive statistics were computed for all 3 samples and statistical modeling was used to explore relationships between practitioner characteristics and their responses concerning counseling on health indicators. Results: A total of 582 students, 45 faculty, and 496 practitioners were surveyed; the response rate for practitioners was 27%. Over 80% of practitioners reported providing information to patients on musculoskeletal risk reduction, exercise, diet, stress reduction, and injury prevention. Over 80% also reported obtaining information from patients on physical activity, stress, dietary habits, obesity, medication use, and occupational hazards. Concerning immunization information, a much higher proportion of faculty (91%) and students (80%) than

practitioners (62%) felt chiropractors should provide both pro and con information to patients. In general, female, younger, and more recently graduated practitioners appeared to be somewhat more likely to agree that chiropractors should provide counseling and to report providing it. An association was seen between attitudes toward health indicator counseling and respondent education. Practitioners with at least a bachelor's degree were statistically significantly more likely to report providing counseling for physical activity and to agree that chiropractors should provide counseling and to report actually providing counseling within the last month for substance abuse, responsible sexual behavior, mental health, and injury and violence prevention ( $P < .05$ ). Conclusions: Our results indicate that a substantial proportion of the US chiropractors and students who completed our survey, as well as a number of key faculty, have a positive attitude toward providing clinical preventive services, particularly those related to physical activity and diet. However, the results also suggest that there may be areas where chiropractic training is not consistently meeting the newly established national guidelines for clinical preventive services. Copyright 2004, Mosby Company.

### **Parent/child transactional processes predictive of resilience or vulnerability to "Substance abuse disorders." (review).**

Kumpfer KL; Bluth B. *Substance Use & Misuse* 39(5): 671-698, 2004. (112 refs.)

This article discusses implications of a theoretical model of resilience—the Resilience Framework, including the impact of parent/child transactional processes in moderating or mediating a child's biological or environmental risks and later substance misuse. Research is presented on behavioral and emotional precursors of substance abuse disorders in children of substance users. Detrimental processes within dysfunctional family environments are presented followed by a listing of strategies for increasing resilience in youth by improving family dynamics. The value in elucidating these interactive processes is to increase our understanding of ways to reduce the impact of risk factors. Prevention providers should use these strategies as benchmarks for selecting or developing effective family-focused prevention programs. Resources are presented for finding effective family interventions as well as an example of a family

intervention based on resilience principles, namely the Strengthening Families Program. Recommendations are made for future research and better dissemination of evidence-based family interventions. Copyright 2004, Marcel Dekker Inc.

**Processing substance abuse messages: Production pacing, arousing content, and age.**

Lang A; Schwartz N; Chung YK; Lee S. *Journal of Broadcasting & Electronic Media* 48(1): 61-88, 2004. (54 refs.)

This paper reports 2 experiments which investigate the effects of production pacing and arousing content in substance abuse public service announcements (PSAs) on adolescent and college-age viewers' physiological, cognitive, and emotional responses. Results generally support predictions made on the basis of past research using the limited capacity theory of mediated message processing. One exception is a reversal in the pacing effect on emotional arousal for arousing messages. Adolescents and college-age viewers appear to process messages similarly, with a few exceptions. In particular, adolescent viewers may be more stimulus bound, be more easily aroused, and may process fast-paced messages better than college-age viewers. Copyright 2004, Broadcast Education Association.

**Cancer in the elderly: is it preventable?**

Hajjar RR. *Clinics in Geriatric Medicine* 20(2): 293+, 2004. (100 refs.)

The American Cancer Society aims to decrease cancer mortality by 50% and cancer incidence by 25% in the United States by 2015. This requires intervention at the primary (incidence) and secondary (mortality) prevention stages, and concerted effort by practitioners, government, interest groups, and the public. Primary care practitioners must counsel about cancer risks and prevention and provide support on diet, exercise, and alcohol abuse and smoking cessation. The population must adopt a healthier lifestyle. None of this is easy, but educated patients have a powerful incentive to change. Smoking cessation success shows that large-scale lifestyle change is possible. The association of age and cancer risk will continue, but need not be as consequential. Cancer risk reduction has a definite role in aging successfully. Copyright 2004, WB Saunders Co.

**Dental hygienists and oral cancer prevention: Knowledge, attitudes and behaviors in Italy.**

Nicotera G; Gnisci F; Bianco A; Angelillo IF. *Oral Oncology* 40(6): 638-644, 2004. (16 refs.)

This study explored knowledge of risk factors and diagnostic procedures for oral cancer, attitudes and behavior among dental hygienists in Italy. A random sample of 500 dental hygienists received by mail a questionnaire focusing on

demographics and practice characteristics, knowledge, attitudes and behaviors regarding oral cancer assessment practices. Almost all dental hygienists correctly indicated tobacco usage and having a prior oral cancer lesion as risk factors. Although 88.8% knew that the tongue is one of the two most common sites of oral cancer, only 13.5% identified the floor of the mouth. Less than half (42.8%) recognized that an early oral lesion usually is a small, painless and red area and only 4.2% knew the examination procedures of the tongue. Results of the multiple logistic regression showed that those dental hygienists who worked a higher number of hours and treated a lower number of patients in a week were more likely to indicate tobacco and alcohol use as risk factors for oral cancer. Higher number of years in practice, scientific journals and associations as sources of information about oral cancer, and knowledge that ventral lateral border of tongue is the most common site for oral cancer, significantly predicted compliance with oral cancer examination. Dental hygienists' sex, age, and years in practice were associated with a positive attitude towards oral cancer prevention. Further educational interventions in order to early detect and prevent oral cancer are strongly needed. Copyright 2004, Pergamon-Elsevier.

**Reasons for teachers' adaptation of substance use prevention curricula in schools with non-white student populations.**

Ringwalt CL; Vincus A; Ennett S; Johnson R; Rohrbach LA. *Prevention Science* 5(1): 61-67, 2004. (47 refs.)

In this study we investigate reasons why teachers adapt substance use prevention curricula in the nation's middle schools. We hypothesize that these reasons will be most salient in schools with racially and ethnically diverse student populations, for whom teachers may believe it appropriate to tailor their curricula. The study sample comprised a nationally representative sample of lead substance use prevention teachers in the nation's middle schools. Respondents answered questions concerning eight student problems or needs that constituted reasons why they might adapt their prevention lessons. Controlling for a variety of school and teacher characteristics, we found that teachers in high minority schools were more likely to adapt curricula in response to three of the eight characteristics presented: youth violence, limited English proficiency, and various racial/ethnic or cultural groups. We suggest that curriculum developers make a systematic effort to understand how teachers are adapting their curricula in high minority schools and incorporate these modifications, if found effective, into their curricula. Copyright 2004, Kluwer Academic.

### **Prevention of smoking-related deaths in the United States.**

Rivara FP; Ebel BE; Garrison MM; Christakis DA; Wiehe SE; Levy DT. *American Journal of Preventive Medicine* 27(2): 118-125, 2004. (73 refs.)

Background: Tobacco is the leading cause of death in the United States. The majority of people who smoke begin before age 18. Objective: Determine the number of smoking-attributable deaths and years of potential life lost (YPLL) in adults that might be saved through interventions to reduce smoking prevalence among children and adolescents. Methods: Calculation of the smoking-attributable mortality and years of potential life lost by age 85 among the cohort of people aged 18 in 2000. Results: By age 85, there would be 127,670 smoking-attributable deaths among women and 284,502 deaths among men, for a total 412,172 smoking-attributable deaths in the United States among the cohort of 3,964,704 people aged 18 years alive in 2000. Through large-scale multimedia campaigns and a \$1 increase in the price per pack of cigarettes, smoking prevalence could be reduced by 26% and would result in an annual savings of 108,466 lives and 1.6 million YPLL. Conclusions: Interventions to decrease smoking prevalence among children and adolescents can have large effects on adult mortality. Copyright 2004, Elsevier Science.

### **A look at an interactive classroom-based drug abuse prevention program: Interactive contents and suggestions for research.**

Sussman S; Rohrbach LA; Patel R; Holiday K. *Journal of Drug Education* 33(4): 355-368, 2003. (29 refs.)

Interactivity has been shown to be a critical element of effective drug abuse prevention programs. This study examined the contents of Project Towards No Drug Abuse, a program that has revealed strong effects only when delivered in a highly interactive version. Types of teacher and student interactive messages were identified. It is speculated that explicit action on the part of the teacher to have students make statements and ask questions of one another may be the essence of effective drug education program delivery. Suggestions for future research on interactivity were made. Copyright 2003, Baywood Publishing Co., Inc.

### **Effectiveness of mass media campaigns for reducing drinking and driving and alcohol-involved crashes - A systematic review. (review).**

Task Force Community Preventive; Elder RW; Shults RA; Sleet DA; Nichols JL; Thompson RS; Rajab W. *American Journal of Preventive Medicine* 27(1): 57-65, 2004. (45 refs.)

of the effectiveness of mass media campaigns for reducing alcohol-impaired driving (AID) and alcohol-related crashes was conducted for the Guide to Community Preventive

Services (Community Guide). In eight studies that met quality criteria for inclusion in the review, the median decrease in alcohol-related crashes resulting from the campaigns was 13% (interquartile range: 6% to 14%). Economic analyses of campaign effects indicated that the societal benefits were greater than the costs. The mass media campaigns reviewed were generally carefully planned, well executed, attained adequate audience exposure, and were implemented in conjunction with other ongoing prevention activities, such as high visibility enforcement. According to Community Guide rules of evidence, there is strong evidence that, under these conditions, mass media campaigns are effective in reducing AID and alcohol-related crashes. Copyright 2004, Elsevier Science.

### **Brief family intervention effects on adolescent substance initiation: School-level growth curve analyses 6 years following baseline.**

Spoth R; Redmond C; Shin C; Azevedo K. *Journal of Consulting and Clinical Psychology* 72(3): 535-542, 2004. (32 refs.)

This study examines the effects of 2 brief family-focused interventions on the trajectories of substance initiation over a period of 6 years following a baseline assessment. The 2 interventions, designed for general-population families of adolescents, were the 7-session Iowa Strengthening Families Program (ISFP) (Molgaard & Spoth, 2001) and the 5-session Preparing for the Drug Free Years Program (PDFY) (Catalano, Kosterman, Haggerty, Hawkins, & Spoth, 1999). Thirty-three rural public schools were randomly assigned to the ISFP, the PDFY, or a minimal-contact control condition. The authors evaluated the curvilinear growth observed in school-level measures of initiation using a logistic growth curve analysis. Alcohol and tobacco composite use indices -- as well as lifetime use of alcohol, cigarettes, and marijuana-and lifetime drunkenness, were examined. Significant intervention-control differences were observed, indicating favorable delays in initiation in the intervention groups. Copyright 2004, American Psychological Association.

### **Effects of an advocacy intervention to reduce smoking among teenagers.**

Winkleby MA; Feighery E; Dunn M; Kole S; Ahn D; Killen JD. *Archives of Pediatrics & Adolescent Medicine* 158(3): 269-275, 2004. (33 refs.)

Objectives: To test whether high school students' participation in advocacy activities related to the advertising, availability, and use of tobacco in their communities would prevent or reduce their own tobacco use. Design: Ten continuation high schools in northern

California, randomly assigned to a semester-long program in which students either carried out advocacy activities to counter environmental-level smoking influences in their communities (treatment) or learned about drug and alcohol abuse prevention (control). Participants: Eleventh and 12th grade high school students; 5 (advocacy) treatment and 5 control schools over 4 semesters from 2000 through 2002. Main Outcome Measures: Self-reported smoking defined as nonsmokers (those who had never smoked tobacco or those who were former smokers), light smokers (those who smoked <1 pack per week), or regular smokers (those who smoked greater than or equal to 1 pack per week), and confirmed by carbon monoxide level readings. The following 3 constructs related to social cognitive theory—perceived incentive value, perceived self-efficacy, and outcome expectancies—were assessed. Results: There was a significant net change from baseline to the end of the semester (after the intervention) between treatment and control schools for students who were regular smokers, but not for students who were nonsmokers or light smokers. Regular smoking decreased 3.8% in treatment schools and increased 1.5% in control schools ( $P < .001$ ). Regular smoking continued to decrease at 6 months after the intervention in treatment schools, with a total change in prevalence from 25.1% to 20.3%. Involvement in community-advocacy activities and the 3 social constructs—perceived incentive value, perceived self-efficacy, and outcome expectancies also showed significant net changes

between treatment and control schools (all  $P$  values  $< .01$ ). Conclusion: Student engagement in community-advocacy activities that addressed environmental influences of cigarette smoking resulted in significant decreases in regular smoking. Copyright 2004, American Medical Association.

**Adolescent substance use: Reviewing the effectiveness of prevention strategies.**

Skiba D; Monroe J; Wodarski JS. *Social Work* 49(3): 343-353, 2004. (85 refs.)

U.S. youths continue to use alcohol, tobacco, and other drugs at alarmingly high rates despite a temporary downward trend in the 1980s. Among an average 500,000 individuals affected annually by substance use, youths (ages 12 to 18) rank as one of the highest groups in morbidity and mortality rates, resulting in many negative consequences. As a result the effectiveness of many prevention strategies has been called into question. This article reviews the extent and social cost of adolescent substance use; standard prevention strategies; prevention under criticism; and salient aspects of successful prevention strategies. Special attention is given to the social influence model of prevention as an effective and amenable model for social work professionals. Copyright 2004, National Association of Social Workers.