

Editorial: Prevention in Child Health Psychology and the *Journal of Pediatric Psychology*

Kenneth P. Tercyak, PhD

Lombardi Comprehensive Cancer Center, Georgetown University Medical Center, WA, USA

Statement of Purpose

Prevention science is a cornerstone of the field of public health. Consistent with that view, it is a science seeking to reduce and avoid the development of illness and lifestyle-related health risks (Institute of Medicine, 2002). Prevention is sometimes defined by where its activities take place in the illness process, and at other times by the level of risk in the population of interest. When defined by the illness process, three levels of prevention are commonly referred to. These levels are *primary*, *secondary*, and *tertiary* prevention.

Primary prevention emphasizes prevention activities taking place prior to the onset of illness, secondary prevention emphasizes prevention activities taking place among those at risk for illness (e.g., enhancing opportunities to prevent illness progression), and tertiary prevention emphasizes prevention activities taking place after illness diagnosis (e.g., preventing or slowing further progression, restoring functioning, and reducing morbidity) (Commission on Chronic Illness, 1957). When defined by population risk, *universal* prevention emphasizes activities promoting health or decreasing illness for all individuals regardless of their risk status, *selective* prevention emphasizes activities targeting at risk groups or those showing early illness signs, and *indicated* prevention refers to activities preventing illness progression among those in the very highest risk categories (Mrazek & Haggerty, 1994). Other forms of prevention include education, counseling, laws, policies, and environmental regulations—all of which are designed to protect public health and welfare (Friis & Sellers, 2004).

With these definitions in mind, potential topics falling within the prevention science section of the *Journal of Pediatric Psychology* are those most likely addressed by one or more national prevention frameworks, such as Healthy People (www.healthypeople.gov) or the Preventive Services Task Force (www.ahrq.gov/clinic/uspstfix.htm),

or by organizations such as the American Academy of Pediatrics (www.aap.org), and that seek to promote and improve health in the young. Examples of these topics include social and biobehavioral aspects of alcohol, tobacco, and substance use, mental health, HIV/AIDS, violence, injuries and accidents, pregnancy, suicide, delinquency, sexually transmitted diseases, obesity, diet/nutrition, and physical activity, and topics focusing on prevention theory, methods, and related matters (e.g., structure, process, and content of prevention efforts, as well as discussion of the timing, measurement, duration, reach, moderation, and mediation of prevention). Recognizing that the targets of prevention efforts are often multifaceted and include biological, social, environmental, psychological, and behavioral processes, work that seeks to better define, elucidate, model, and understand these influences and their interactions are especially important.

Background

It is widely recognized that childhood is an optimal time in human development in which to prevent illness and promote health through a combination of preventive health care and good self-care (Wurtele, 1995). When viewed from a developmental perspective, these lifelong care behaviors and influences may begin in utero, extend into infancy and toddlerhood, and track through childhood into adolescence and beyond (Gluckman, Hanson, & Beedle, 2007; Jozan, 1991; Wurtele, 1995). Changes may be facilitated by many agents and resources, including the child's family, school, health care system, and community—and all of which may serve as focal points for prevention efforts. The costs of failing to adequately prevent illness are significant, and ultimately lead to excess morbidity and mortality throughout the lifespan.

All correspondence concerning this article should be addressed to Kenneth P. Tercyak, PhD, Cancer Control Program, Lombardi Comprehensive Cancer Center, Georgetown University Medical Center, 3300 Whitehaven Street, NW, Suite 4100, District of Columbia, Washington 20007-4104, WA, USA. E-mail: tercyak@georgetown.edu.

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Among the leading causes of death in the US are cardiovascular disease, cancer, and diabetes (Mokdad, Marks, Stroup, & Gerberding, 2004). However, actual causes of death, which are defined as behavioral risk factors, are tobacco use, poor diet and physical inactivity, alcohol consumption, and others. As these behaviors are typically initiated during childhood (Wurtele, 1995), there is a need to more effectively prevent their onset and reform public health approaches to prevention (Mokdad, Marks, Stroup, & Gerberding, 2004). Consistent with this call for increased prevention early in the lifespan, Healthy People 2010—a comprehensive nationwide health promotion and disease prevention agenda—has established behavioral objectives relevant to the health and well-being of children. In the health care arena, the US Preventive Services Task Force—a panel of prevention and primary care experts—the American Academy of Pediatrics, and others continue to lead the way in children's screening recommendations.

Across the entire population, the benefits of prevention can be easily seen. Recent advances in the prevention of chronic illness include a vaccine against cervical cancer (Food and Drug Administration, 2006), antiretroviral therapies to avoid mother-to-child HIV transmission (Thorne & Newell, 2007), and the emergence of vaccines to ward off nicotine addiction (Maurer & Bachmann, 2006). Attempts have also been made to prevent the onset of type 1 diabetes (Type 1 Diabetes Study Group, 2002), type 2 diabetes (Knowler et al., 2002), and cardiovascular disease (Winkleby, Taylor, Jatulis, & Fortmann, 1996). As many of these large scale, national prevention efforts incorporate approaches commonly utilized in the field of behavioral medicine, the contributions of health psychology to prevention cannot be overstated (Bernard & Krupat, 1994).

Child Health Psychology

In the field of child health psychology, prevention science is clearly reflected in the mission statements of both the Society of Pediatric Psychology and its flagship journal, the *Journal of Pediatric Psychology*. Briefly reviewing three decades worth of archives of the *Journal*, prevention science articles can be located both recently and in its past. For example, in 1976, the very first year in which the *Journal* was published, a paper by Gil appeared that addressed the prevention of child maltreatment (Gil, 1976). Ten years later, in 1986, Roberts introduced an important series of papers appearing in the *Journal*—all of which dealt with key aspects of prevention

(Roberts, 1986). In 1996, an article by Peterson and colleagues focused on injury prevention (Peterson, Saldana, & Heiblum, 1996), and in 2006, Tercyak and Tyc reviewed the state of the science in cancer and chronic disease prevention and control (Tercyak & Tyc, 2006).

Though other examples of the *Journal's* prevention focus may be found as well, unfortunately their numbers do not compare to the magnitude of the problem at hand (Boxer, Goldstein, Musher-Eizemann, Dubow, & Heretick, 2005; Caballero, 2004; Kumpfer & Alvarado, 2003; Tanski, Prokhorov, & Klein, 2004). This may reflect broader issues both within (Black, 2002) and outside (Roberts, 1994) the field, and the relative lack of intervention research and efforts spanning research to practice in child health psychology more generally (Tercyak et al., 2006). It is hoped that by establishing a special section on prevention within the *Journal of Pediatric Psychology* that this may serve to reinvigorate thought and interest in this important area. Adolescents are especially deserving of closer attention with respect to the range of prevention activities targeted toward this age group (Williams, Holmbeck, & Greenley, 2002), and specific behaviors and objectives that could serve as a focus of child health psychology prevention activities with adolescents has been articulated (Table 1). Among the

Table 1. Adolescent Prevention Objectives

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1. Proportion with disabilities reported to be sad, unhappy, or depressed
 2. Pregnancy among adolescent females
 3. Number of cases of HIV infection
 4. Deaths caused by motor vehicle crashes
 5. Nonuse of safety belts
 6. Homicides
 7. Physical fighting
 8. Weapon carrying on school property
 9. Deaths
 10. Suicide rate
 11. Suicide attempt rate
 12. Untreated mental health problems
 13. Overweight and obesity
 14. Lack of vigorous physical activity
 15. *Chlamydia trachomatis* infections
 16. Sexual intercourse and unprotected sexual intercourse
 17. Deaths and injuries from alcohol- and drug-related motor vehicle crashes
 18. Riding with a driver who has been drinking alcohol
 19. Use of illicit substances
 20. Binge drinking of alcoholic beverages
 21. Tobacco use
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Note. These 21 health objectives were identified by an expert working group as being critical to reduce for adolescent health, safety, and well-being across the nation (www.healthypeople.gov).

most pressing concerns for teenagers are sexual activity, violence, diet and nutrition, weight and physical activity, and tobacco and substance use. All of these behavioral risk factors hold potential for well-designed prevention interventions by child health psychologists. Furthermore, they are important to health and well-being in adulthood.

Conclusion

In sum, there is a pressing need to readdress prevention efforts targeted toward our nation's young people and their families (Forum on Child and Family Statistics, 2006). Core activities in these areas include education and counseling around chronic illness and lifestyle-related health risks. These skills draw heavily upon research and training in developmental, clinical, and health psychology, and public health—making child health psychologists well-poised to advance this plan.

Conflict of interest: None declared.

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References

- Bernard, L. C., & Krupat, E. (1994). *Health psychology: Biopsychosocial factors in health and illness*. New York: Harcourt Brace College Publishers.
- Black, M. M. (2002). Society of pediatric psychology presidential address: Opportunities for health promotion in primary care. *Journal of Pediatric Psychology, 27*, 637–646.
- Boxer, P., Goldstein, S. E., Musher-Eizenman, D., Dubow, E. F., & Heretick, D. (2005). Developmental issues in school-based aggression prevention from a social-cognitive perspective. *Journal of Primary Prevention, 26*, 383–400.
- Commission on Chronic Illness. (1957). *Chronic illness in the United States. Vol. 4, Chronic illness in a large city*. Cambridge, MA: Harvard University Press.
- Caballero, B. (2004). Obesity prevention in children: Opportunities and challenges. *International Journal of Obesity and Related Metabolic Disorders, 28*, S90–S95.
- Diabetes Prevention Trial—Type 1 Diabetes Study Group. (2002). Effects of insulin in relatives of patients with type 1 diabetes mellitus. *New England Journal of Medicine, 346*, 1685–1691.
- Food and Drug Administration. (2006). New vaccine prevents cervical cancer. *FDA Consumer Magazine, 40*, 37.
- Forum on Child and Family Statistics. (2006). *America's children in brief: Key national indicators of well-being*. Washington, DC: Author.
- Friis, R. H., & Sellers, T. A. (2004). *Epidemiology for public health practice* (3rd ed.). Sundbury, MA: Jones and Bartlett Publishers.
- Gil, D. G. (1976). Primary prevention of child abuse: A philosophical and political issue. *Journal of Pediatric Psychology, 1*, 54–57.
- Gluckman, P. D., Hanson, M. A., & Beedle, A. S. (2007). Early life events and their consequences for later disease: A life history and evolutionary perspective. *American Journal of Human Biology, 19*, 1–19.
- Institute of Medicine. (2002). *The future of the public's health in the 21st century*. Washington, DC: National Academy Press.
- Jozan, P. (1991). The epidemiological future. *Health Policy, 19*, 19–32.
- Knowler, W. C., Barrett-Connor, E., Fowler, S. E., Hamman, R. F., Lachin, J. M., Walker, E. A., et al. (2002). Reduction in the incidence of type 2 diabetes with lifestyle intervention or metformin. *New England Journal of Medicine, 346*, 393–403.
- Kumpfer, K. L., & Alvarado, R. (2003). Family-strengthening approaches for the prevention of youth problem behaviors. *American Psychologist, 58*, 457–465.
- Maurer, P., & Bachmann, M. F. (2006). Therapeutic vaccines for nicotine dependence. *Current Opinion in Molecular Therapeutics, 8*, 11–16.
- Mokdad, A. H., Marks, J. S., Stroup, D. F., & Gerberding, J. L. (2004). Actual causes of death in the United States, 2000. *JAMA, 291*, 1238–1245.
- Mrazek, P. J., & Haggerty, R. J. (Eds). (1994). *Reducing risks for mental disorders: Frontiers for preventive intervention research*. Washington, DC: National Academy Press.
- Peterson, L., Saldana, L., & Heiblum, N. (1996). Quantifying tissue damage from childhood injury: the minor injury severity scale. *Journal of Pediatric Psychology, 21*, 251–267.
- Roberts, M. C. (1986). Health promotion and problem prevention in pediatric psychology: an overview. *Journal of Pediatric Psychology, 11*, 147–161.
- Roberts, M. C. (1994). Prevention/promotion in America: Still spitting on the sidewalk. *Journal of Pediatric Psychology, 19*, 267–281.

- Tanski, S. E., Prokhorov, A. V., & Klein, J. D. (2004). Youth and tobacco. *Minerva Pediatrics*, *56*, 553–565.
- Tercyak, K. P., & Tyc, V. L. (2006). Opportunities and challenges in the prevention and control of cancer and other chronic diseases: Children's diet and nutrition and weight and physical activity. *Journal of Pediatric Psychology*, *31*, 750–763.
- Tercyak, K. P., Sampilo, M., Green, M. B., Beck-Heyman, M., Brown, A., Kitessa, D., et al. (2006). Applying a behavioral epidemiology framework to research phases in child health psychology: Toward promoting better health and preventing disease. *Journal of Clinical Psychology in Medical Settings*, *13*, 191–196.
- Thorne, C., & Newell, M. L. (2007). HIV. *Seminars in Fetal & Neonatal Medicine*. doi:10.1016/j.physlethb.2003.10.071.
- Williams, P. G., Holmbeck, G. N., & Greenley, R. N. (2002). Adolescent health psychology. *Journal of Consulting and Clinical Psychology*, *70*, 828–842.
- Winkleby, M. A., Taylor, C. B., Jatulis, D., & Fortmann, S. P. (1996). The long-term effects of a cardiovascular disease prevention trial: the Stanford Five-City Project. *American Journal of Public Health*, *86*, 1773–1779.
- Wurtele, S. K. (1995). Health promotion. In M.C. Roberts (Ed.), *Handbook of pediatric psychology* (2nd ed., pp. 200–216). Washington DC: American Psychological Association.