1-1-2007

Developing Healthy Kids in Healthy Communities: Eight Evidence-based Strategies for Preventing High-risk Behaviour.

Gary L. Hopkins
Andrews University, ghopipad@gmail.com

Duane McBride
Andrews University, mcbride@andrews.edu

Helen H. Marshak
Andrews University

Kiti Freier
Andrews University

John V. Stevens
Andrews University

See next page for additional authors

Developing healthy kids in healthy communities: eight evidence-based strategies for preventing high-risk behaviour

Gary L Hopkins, Duane McBride, Helen H Marshak, Kiti Freier, John V Stevens Jr, Wendi Kannenberg, James B Weaver III, Stephanie L Sargent Weaver, Peter N Landless and Jonathan Duffy

ABSTRACT

- Australian youth engage in behaviour that threatens their health and wellbeing.
- National surveys report that about a third of young Australians have tried an illicit drug. High rates of substance use and risky sexual behaviour among young Australians suggest that effective prevention efforts based on empirical evidence need to be expanded.
- Church-associated organisations are an untapped resource that could be used to improve the health and welfare of young people.
- We describe eight evidence-based elements to consider in designing strategies to prevent high-risk behaviour in young people.

MJA 2007; 186: S70–S73

In common with young people in many countries, Australian youth engage in behaviour that threatens their health and wellbeing. National surveys report that about a third of young Australians have tried an illicit drug.[1] The high rates of substance use and risky sexual behaviour among young Australians suggest that effective prevention efforts based on empirical evidence need to be expanded.[2]

Church-associated organisations (CAOs) have an excellent tradition of engaging in activities designed to help individuals and communities faced with famine, disaster, health disparities and many other unfortunate circumstances.

Some CAOs have tackled difficult behavioural problems relating to young people. One example of this is the Search Institute, an applied social science research organisation based in Minneapolis, USA. Its mission includes a broad focus on the healthy development of all children and youth in multiple community settings. Through community-based research, the Search Institute has developed what it describes as "40 Developmental Assets". These assets include, for example, family support, school engagement and self-esteem.[3]

Australian CAOs that want to help prevent high-risk behaviour among young people would do well to follow the lead of the Search Institute. CAOs need to become involved in prevention activities as a part of the mission of their organisations. The literature demonstrates that Australian youth are engaged in high-risk behaviour,[4] and there is a clear need to broaden participation in prevention interventions.

CAOs are in an ideal position to foster healthy communities by encouraging positive behaviour in young people and fostering a culture of acceptance and inclusion. Research shows that young people affiliated with CAOs could also benefit from prevention efforts targeting substance use and risky sexual behaviour.[5] While there is a growing body of research demonstrating that religious involvement plays a key role in the healthy development of young people, most of that literature is on the influence of religious beliefs and youth involvement in religious activities.[6,7] Relatively little attention has been paid to how CAOs can encourage the wellbeing of adolescents in ways that go beyond traditional explanations for the relationship between religion and health.

In this article we explore eight different elements of effective prevention strategies that CAOs could adopt to discourage risky behaviour in young people. Prevention programs need to be based on empirically verifiable evidence. However, despite advances in this area, many communities continue to invest in prevention strategies of unproven effectiveness.[8] The eight elements are presented along with a short discussion of how CAOs can incorporate these elements into effective ways of preventing high-risk behaviour.

Element 1: Information — but not information alone

CAOs appear to rely primarily on information dissemination (preaching) to spread their interpretation of what they believe is "truth" as a principal method of indoctrinating church attendees into a particular belief system. The assumption is that, once a person is armed with the information gleaned from sermons, he or she will be transformed. There is little evidence to suggest that information dissemination alone is a successful strategy for preventing high-risk behaviour among adolescents.[9] A review of selected literature on HIV and AIDS serves as an example of this.

Studies show that American adolescents and college undergraduates have accurate knowledge of HIV and AIDS but that their extensive knowledge bears little or no relationship to their actual HIV-associated risk behaviour.[10] Similar findings in other studies support the conclusion that targeting knowledge alone is not an effective strategy for producing behavioural change.[11,12]

Although imparting knowledge — to correct for misconceptions and inaccurate beliefs — is an essential component of programs to prevent high-risk behaviour, other elements critical to successful intervention must be considered when designing prevention programs. Church community leaders should encourage more than information-only strategies to protect young people, as outlined in the other elements identified below.

Element 2: Self-esteem

One of the most significant developmental tasks facing young people, particularly adolescents, revolves around their identity and self-worth. Some studies show the protective effect of healthy self-esteem in preventing or reducing high-risk behaviour, others show little or no relationship, and some show increased risky behaviour among those with high self-esteem.[13-15]

Harter and Whitesell describe global self-esteem as how much a person values him- or herself[16] — how much someone likes, accepts and respects him- or herself as a person. Prevention of high-risk behaviour should consider adolescents' self-appraisals and their ultimate ability to understand who they are and their purpose in society.

How do we encourage genuine positive self-esteem in young people? One way is to provide unconditional positive acceptance, while encouraging an accurate appreciation of their special abilities and worth.[17] This involves showing love and regard for them rather than merely judging them based on their behaviour or academic success. It is important for young people to know with certainty that we care about what they are doing.

The value of genuine high self-esteem in the realm of prevention is borne out in research. Genuine self-esteem can be an asset in preventing high-risk behaviour. Lilja and colleagues suggest that self-esteem influences how one copes in situations in which there is peer-group pressure to drink alcohol. They suggest that adolescents may manifest low self-esteem by engaging in substance misuse after experiencing a negative life experience.[9] Early research suggests that low self-esteem is related to substance use.[18] More recently, Schroeder et al reported an association between self-esteem and drug use. However, the strength of this association is not as strong as once believed. Inconsistent findings in this area may relate, at least in part, to a lack of agreement among researchers on an operational definition of self-esteem and to methodological inconsistencies in research on self-esteem and drug use.[19] Furthermore, in evaluating self-esteem, there is a need to distinguish between an inaccurately high or conceited opinion of oneself and a more valid appraisal of one's worth based on recognised competencies and worth.[17]

Members of CAOs are in an ideal position to encourage genuine self-esteem and acceptance in young people, as many religions emphasise the importance and value of the unique gifts and talents inherent in each individual.

Elements 3 and 4: Resilience and "caring others"

A powerful concept has emerged from research over the past decade, inspiring hope among researchers and educators alike: the concept of *resilience*. Resilience is the capacity to maintain competent functioning in spite of adversity or life stressors. It appears to develop over time as a result of environmental support.[20] Resilient individuals are those who, despite severe hardships and the presence of factors that place them at risk of a variety of ills, develop coping skills that enable them to succeed in life.[21]

Researchers explain resilience in terms of hardiness, and suggest that resilient individuals have a strong commitment to self and others and are willing to take action to deal with problems. They also have a positive attitude towards their social environment, hold a strong sense of purpose, and develop the internal strength that enables them to see life's obstacles as challenges that can be overcome.[22]

In reviewing research on what fosters resilience among young people, one important factor emerges over and over again: the presence of valuable, sincere, and enduring relationships in resilient individuals. Brooks has observed that "resilient youngsters all had at least one person in their lives that accepted them unconditionally, regardless of temperamental idiosyncrasies, physical attractiveness, or intelligence".[23] Similarly, Werner and Johnson have concluded that the "most precious lesson" learned from their research on resilience is that *hope* derived from relationships with caring individuals can serve as a protective buffer in the lives of vulnerable children and youths who succeed in spite of the odds.[24] Once again, CAOs can capitalise on this aspect by providing opportunities for positive, sustained relationships with at-risk young people who might not otherwise have a caring and involved person in their lives.

Element 5: After-school activities

After-school hours, when young people are out of school while parents may still be at work, are the time of day when young people are most likely to engage in risky behaviour. Studies show that often the largest proportion of drug use, sexual activity, and delinquency among young people occurs between the hours of 15:00 and 18:00.[25] Research demonstrates substance use to be lower among students engaged in after-school activities.[26] Zill and colleagues found that students who spent no time in extracurricular activities (after-school programs such as sports, clubs, music, etc) were 49% more likely to have used illicit drugs and 35% more likely to have smoked cigarettes than students who spent 1–4 hours per week in non-risky extracurricular activities.[27] Thus, finding ways to engage children during the after-school hours should be a key part of any successful prevention effort.

Members of church communities can be a significant resource in providing after-school activities for young people and keeping them engaged in positive, meaningful pursuits during that time.

Element 6: School as community

Over the past decade, research has emerged describing linkages between the social context of school and students' involvement in problem behaviour. Battistich and Hom[28] described school as a "functional community": an environment characterised by caring and supportive interpersonal relationships, in which students and teachers have the opportunity to participate in school activities and decision making, and a place where there are shared norms, goals and values. Students who had a high perception of their school as a community enjoyed school more, were more academically motivated, were absent less often, engaged in less disruptive behaviour, and had higher academic achievement than students who did not. In addition, students who perceived of their school as a community were less disruptive and used fewer drugs.

Other research has shown that when students had a perception of their school as a community they tended to read more outside of school, enjoyed reading more, liked school more, avoided work less, were more academically motivated, enjoyed helping others learn more, and had higher educational expectations. Academically, they performed better on reading and mathematical achievement tests. They also had more concern for others, had higher self-esteem, and resolved conflicts better.[29]

Resnick and colleagues found that, when students sensed a high level of connectedness at school, they were involved in fewer violent acts; were protected from use of cigarettes, alcohol and marijuana; delayed first sexual intercourse; and showed better health and healthier behaviour.[30] School connectedness arises from relationships between people, working to create meaning and happiness in the context of an interdependent community of human beings in school settings. This can be accomplished by adults engaging with students in schools and developing meaningful relationships with them.[31]

These findings have implications for CAOs to develop programs using adult volunteers engaging in school activities with students, strengthening school connectedness, and promoting a school environment that is perceived by the students as caring and concerned about their health and wellbeing.

Element 7: Service activities

Considerable attention has been directed at identifying effective approaches to reduce adolescent sexual risk-taking. Researchers have identified risk factors and protective factors related to sexual risk behaviour. Kirby[32] is at the forefront of reviewing programs for effectiveness in delaying the initiation of sexual activity and identifying features related to successful and unsuccessful interventions. He reports that service learning programs among young people are effective in reducing adolescent unprotected sex, pregnancy and childbearing. Service learning is defined as voluntary community service (working as a teacher's aide, working in retirement homes or nursing homes, helping out in daycare centres or helping fix up parks or recreation areas), with structured time for preparation and reflection before, during and after the service.

Other researchers confirm Kirby's findings. Melchior evaluated the Learn and Serve programs throughout the United States.[33] Students in these programs spent an average of 77 hours providing various community services. Pregnancy rates among participants during the year in which they participated were lower than among non-participants.

O'Donnell and colleagues evaluated the Reach for Health community youth service learning program. Student participants in the service learning program delayed initiation of sexual intercourse, reduced the frequency of sexual intercourse, increased condom use and increased the use of contraception. Those with suicidal thoughts were more likely to talk to an adult than were non-participants.[34]

Although it is not clear why service learning has such positive effects, Kirby speculates that it may be because participants develop sustained relationships with program facilitators, which may encourage resilience, as noted above, or enhanced feelings of competency and greater autonomy, along with the positive feeling that they are making a difference in the lives of others. Participating in service activities also reduces the opportunity to engage in problem behaviour, especially during after-school hours.[32]

CAO members should identify places and activities to involve young people in service learning. Creative thinking, involvement and planning could have a very positive impact on young people by getting them involved with helping others in their community.

Element 8: Communication with parents

Research highlights the fact that there are no universally ideal or "good" ways of communicating within a family.[35] Rather, parents and children tend to establish communicative behaviour that functions best within the unique context of their particular family environment.

The existence of a positive parent–child relationship — suggesting a high conversation orientation — is associated with lower incidence of risky behaviour, including that related to HIV infection.[36] For example, positive family communication is associated with lower rates of sexual intercourse among young people.[37] DiBlasio and Benda found that sexually inactive adolescents reported a feeling of closeness with their parents (high conversation orientation), while sexually active adolescents believed their parents would be upset to learn of their risky behaviour (high conformity orientation).[38] Evidence of the impact of a laissez-faire family communication environment (low conversation and low conformity orientation) emerges from research on sexual activity in 9- to 15-year-old girls who feigned contraception use. Many of these girls held the belief that their mothers would "not care" if they became pregnant.[39]

Our understanding of the interaction between parent–child communication and risky behaviour is in the formative stage. However, initial evidence suggests that there are relatively easily implemented communicative components that can significantly inhibit interest in and experience with risky behaviour. Australians who have faced the crisis of youth suicide can take some comfort in knowing that improved communication between young people, families and health service providers shows promise in preventing suicide.[40,41] Encouraging positive communication, especially among parents and children, can be a component of program efforts by members of CAOs.

Conclusion

It is important to know what the medical community expects of CAOs and what members of CAOs feel most competent or comfortable to provide. We propose that CAOs focus on the eight elements presented in this article in planning youth outreach and programs to prevent high-risk behaviour. Future research can address these elements to determine which are most important for CAOs to include in their programs.

Positive involvement of adults in the lives of young people makes a real difference. When adults are involved in youth activities provided by the community, substance use is lower. By contrast, when those activities are provided without adult supervision, risky behaviour actually increases.[26] Adults make a difference both in role modelling and in helping young people make healthy decisions. CAOs have the history, the belief system, a core of volunteers and an infrastructure that strongly facilitates their involvement in the community, and this can be tapped more fully with more effective outcomes if they use their resources to address the eight elements discussed in this article.

Competing interests

None identified.

Author details

Gary L Hopkins, MD, DrPH, Director, Center for Prevention Research, and Associate Director[1]
Duane McBride, PhD, Professor and Chair of Behavioral Science, and Executive Director[1]
Helen H Marshak, PhD, Associate Professor of Health Promotion and Education[2]
Kiti Freier, PhD, Associate Professor of Psychology and Pediatrics[3]
John V Stevens Jr, JD, Drug Policy Consultant and Associate Director[4]
Wendi Kannenberg, MPH, Research Associate[1]
James B Weaver III, PhD, Research Scientist[5]
Stephanie L Sargent Weaver, PhD, Research Scientist[5]
Peter N Landless, MMed, FCP(SA), FACC, Executive Director[6]
Jonathan Duffy, BEd, MPH, Director[7]

1 Institute for Prevention of Addictions, Andrews University, Berrien Springs, Mich, USA.
2 School of Public Health, Loma Linda University, Loma Linda, Calif, USA.
3 School of Science and Technology and School of Medicine, Loma Linda University, Loma Linda, Calif, USA.
4 Center for Media Impact Research, Andrews University, Berrien Springs, Mich, USA.

5 Center for AIDS Research, Department of Behavioral Science and Health Education, Emory University, Atlanta, Ga, USA.
6 International Commission for the Prevention of Alcoholism and Dangerous Drugs, Silver Springs, Md, USA.
7 Adventist Health, South Pacific Division, Sydney, NSW.
Correspondence: ghopkins@sandpoint.net

References

1 Holt M. Young people and illicit drug use in Australia. Social Research Issues Paper No. 3. National Centre in HIV Social Research, University of New South Wales. http://nchsr.arts.unsw.edu.au/pdf%20reports/SRIP03.pdf (accessed Mar 2007).
2 Lynskey M, White V, Hill D, et al. Prevalence of illicit drug use among youth: results from the Australian School Students' Alcohol and Drugs Survey. *Aust N Z J Public Health* 1999; 23: 519-524.
3 Search Institute. The 40 Developmental Assets for Adolescents. http://www.search-institute.org/assets (accessed Mar 2007).
4 Duff D. Drugs and youth cultures: is Australia experiencing the "normalization" of adolescent drug use? *J Youth Stud* 2003; 6: 433-446.
5 Hopkins GL, Hopp JW, Marshak HP, et al. AIDS risk among students attending Seventh-day Adventist schools in North America. *J Sch Health* 1998; 68: 141-145.
6 Furrow JL, King PE, White K. Religion and positive youth development: identity, meaning, and prosocial concerns. *Appl Dev Sci* 2004; 8: 17-26.
7 Wagener LM, Furrow JL, King PE, et al. Religious involvement and developmental resources in youth. *Rev Relig Res* 2003; 44: 271-284.
8 Hawkins JD, Catalano R, Arthur MW. Promoting science-based prevention in communities. *Addict Behav* 2002; 27: 951-976.
9 Lilja J, Larsson S, Wilhelmsen BU, et al. Perspectives on preventing adolescent substance use and misuse. *Subst Use Misuse* 2003; 38: 1491-1530.
10 Gray LA, Saracino M. AIDS on campus: a preliminary study of college students' knowledge and behaviors. *J Couns Dev* 1989; 68: 199-202.
11 Babikian T, Freier MC, Hopkins GL, et al. An assessment of HIV/AIDS risk in higher education students in Yerevan, Armenia. *AIDS Behav* 2004; 8: 47-61.
12 Kim N, Stanton B, Li X, et al. Effectiveness of the 40 adolescent AIDS-risk reduction interventions: a quantitative review. *J Adolesc Health* 1997; 20: 204-215.
13 Salazar LF, Crosby RA, DiClemente RJ, et al. Self-esteem and theoretical mediators of safer sex among African American female adolescents: implications for sexual risk reduction interventions. *Health Educ Behav* 2005; 32: 413-427.
14 Gerard JM, Buehler C. Cumulative environmental risk and youth maladjustment: the role of youth attributes. *Child Dev* 2004; 75: 1832-1849.
15 Paul C, Fitzjohn J, Herbison P, et al. The determinants of sexual intercourse before age 16. *J Adolesc Health* 2000; 27: 136-147.
16 Harter S, Whitesell NR. Beyond the debate: why some adolescents report stable self-worth over time and situation, whereas others report changes in self-worth. *J Pers* 2003; 71: 1027-1058.
17 Baumeister RF, Campbell JD, Krueger JI, et al. Does high self-esteem cause better performance, interpersonal success, happiness, or healthier lifestyles? *Psychol Sci Public Interest* 2003; 4: 1-44.
18 Wright LS, Moore R. Correlates of reported drug abuse problems among college undergraduates. *J Drug Educ* 1982; 12: 65-73.
19 Schroeder DS, Laflin MT, Weis DL. Is there a relationship between self-esteem and drug use? Methodological and statistical limitations of the research. *J Drug Issues* 1993; 23: 645-665.
20 Kaplan CP, Turner S, Norman E, et al. Promoting resilience strategies: a modified consultation model. *Social Work Educ* 1996; 8: 158-168.
21 Werner EE. Resilience in development. *Curr Dir Psychol Sci* 1995; 4: 81-85.
22 Hébert TP. Portraits of resilience: the urban life experience of gifted Latino young men. *Roeper Review* 1996; 19: 82-91.
23 Brooks R. Children at risk: fostering resilience and hope. *Am J Orthopsychiatry* 1994; 64: 545-553.
24 Werner EE, Johnson JL. The role of caring adults in the lives of children of alcoholics. *Subst Use Misuse* 2004; 39: 699-720.
25 United States Department of Education. Safe and smart. Making after-school hours work for kids. Jun 1988. http://www.ed.gov/pubs/SafeandSmart/index.html (accessed Nov 2005).
26 VanderWaal CJ, Powell LM, Terry-McElrath YM, et al. Community and school drug prevention strategy prevalence: differential effects by setting and substance. *J Prim Prev* 2005; 26: 299-320.
27 Zill N, Nord CW, Loomis LS. Adolescent time use, risky behavior and outcomes: an analysis of national data. Sep 1995. http://www.aspe.hhs.gov/hsp/cyp/xstimuse.htm (accessed Nov 2005).
28 Battistich V, Hom A. The relationship between students' sense of their school as a community and their involvement in problem behaviors. *Am J Public Health* 1997; 87: 1997-2001.
29 Battistich V, Solomon D, Watson M, et al. Caring school communities. *Educ Psychol* 1997; 32: 137-151.
30 Resnick MD, Bearman PS, Blum RW, et al. Protecting adolescents from harm: findings from the National Longitudinal Study on Adolescent Health. *JAMA* 1997; 278: 823-832.
31 Resnick MD, Harris LJ, Blum RW. The impact of caring and connectedness on adolescent health and well-being. *J Paediatr Child Health* 1993; 29 Suppl 1: S3-S9.
32 Kirby D. Effective approaches in reducing adolescent unprotected sex, pregnancy and childbearing. *J Sex Res* 2002; 39: 51-57.
33 Melchior A, project director. Summary report. National evaluation of Learn and Serve America. http://www.learnandserve.gov/pdf/lsa_evaluation.pdf (accessed Nov 2005).
34 O'Donnell L, Stueve A, Wardlaw D, O'Donnell C. Adolescent suicidality and adult support: the reach for health study of urban youth. *Am J Health Behav* 2003; 27: 633-644.
35 Koerner AF, Fitzpatrick MA. Family communication pattern theory. In: Braithwaite DO, Baxter LA, editors. Family communication pattern theory: a social cognitive approach. Thousand Oaks, Calif: Sage Publications, 2006: 50-65.
36 Holtzman D, Rubinson R. Parent and peer communication effects on AIDS-related behavior among US high school students. *Fam Plann Perspect* 1995; 27: 235-240.
37 Newcomer SF, Udry JR. Parent-child communication and adolescent sexual behavior. *Fam Plann Perspect* 1985; 17: 169-174.
38 DiBlasio FA, Benda BB. Adolescent sexual behavior: multivariate analysis of a social learning model. *J Adolesc Res* 1990; 5: 449-466.
39 Stanton B, Li X, Black M, et al. Sexual practices and intentions among preadolescent and early adolescent low-income urban African-Americans. *Pediatrics* 1994; 93 (6 Pt 1): 966-973.
40 Mann L. Youth suicide: can primary health care help? *Aust Nurs J* 1997; 4(7): 20-24.
41 O'Donnell L, Stueve A, San Doval A, et al. The effectiveness of the Reach for Health Community Youth Service learning program in reducing early and unprotected sex among urban middle school students. *Am J Public Health* 1999; 89: 176-181.

(Received 19 Oct 2006, accepted 18 Mar 2007) ❑