School-based health promotion: the physician as advocate

J. William Mackie, MD; Peter Oickle

Abstract

At the August 1995 meeting of the General Council of the CMA, a resolution supporting school-based health promotion (Comprehensive School Health) was adopted. This article briefly reviews the research supporting this integrated approach to school and community programs, applies the recommended approach to reducing tobacco use and outlines a role for physicians in promoting Comprehensive School Health in their communities.

Résumé

À sa réunion d’août 1995, le Conseil général de l’AMC a adopté une résolution en faveur de l’instauration de programmes intégrés de santé en milieu scolaire. L’article examine brièvement la recherche sur laquelle s’appuie cette approche intégrée aux programmes communautaires et scolaires, applique les mêmes principes à la réduction de l’usage du tabac et décrit comme les médecins peuvent favoriser dans leur communauté les programmes de santé en milieu scolaire.

School-based health promotion (Comprehensive School Health [CSH]) is now recognized for its value in changing the health behaviours of young people as well as coordinating the many different services and programs responding to the health needs of children and youth. Physicians should be among the community’s leaders in advocating for policy and program changes to extend this approach throughout Canada.

Several national organizations including the CMA have endorsed the use of a comprehensive approach to school-based health promotion. They have defined the term as “a broad spectrum of programs, policies, services, and activities that take place in schools and their surrounding communities.” That definition has become a central part of a World Health Organization document promoting CSH.

This comprehensive approach is best understood and applied to specific health issues. Tobacco is used in this article as an illustration, but CSH can be used to promote health through strategies such as physical activity or healthy sexuality and to prevent specific behaviours such as drug abuse.

CSH can help to change not only the health behaviours of individuals but also the environments in which students and educators live, learn and work. The policies, programs, services and activities that are delivered within this comprehensive framework are the responsibility of young people, parents, health and social services professionals, educators, institutions, agencies and governments.

The Ontario Medical Association, among others, has underlined the need for school-based programs and this comprehensive approach. Over half of the diseases, disorders and injuries suffered by Canadians can be prevented. The Canadian Institute for Child Health and Health Canada have reviewed the urgent and complex health and social risks Canadian children and adolescents face today. These include injuries from accidents, violence, stress, suicide, mental health problems, smoking, unsafe sexual practices, poor nutritional habits and inadequate physical activity. The need for a comprehensive and coordinated approach is both urgent and vitally important.
The Canadian Association for School Health\textsuperscript{6} has described the 4 goals of CSH:
- To promote health and wellness
- To prevent disease, disorder and injury
- To assist students and employees who are at increased risk
- To support students and adults who are experiencing poor health

The CSH approach integrates 4 basic mechanisms to achieve these goals:
- Formal and informal instruction about health issues
- Support services (health, social, guidance and other services for children and families) to assess needs, diagnose problems and support re-integration after treatment
- Social support from peers, parents, policy-makers in local institutions and agencies, and the local media
- A healthy physical environment within the school and the community

The emphasis in CSH is making the connections between all the government services, agencies and individuals promoting health and learning; between health promotion and disease prevention; and between the 4 basic means described above. Table 1 lists the detailed elements of the CSH approach.

**Role of physicians**

The CMA has been working with Health Canada for several years to enhance the prevention skills and practices of physicians.\textsuperscript{7} A task force of the College of Family Physicians of Canada\textsuperscript{8} published a report on adolescent health that included recommendations on CSH. The report recommended strategies that physicians can apply at the office and in the community:

**At the physician’s office**
- Acquiring knowledge and skills specific to treating adolescents
- Accommodating adolescents through youth-friendly logistics such as “drop-in” services and displays of information relevant to youth
- Paying particular attention to interview techniques and methods of examination
- Conducting annual age- and disease-appropriate screening to overcome adolescent reticence
- Placing more emphasis on counselling and active referrals
- Encouraging calls and visits by adolescents
- Launching “bring a friend” campaigns, which encourage reluctant adolescents to bring a trusted friend along to appointments.

**In the community**
- Advising schools on educational programs and materials
- Advocating for school health programs and health services for youth
- Arranging for hospitals to “adopt” a school for research and training
- Participating on school boards and in community organizations
- Contributing to awareness campaigns aimed at youth
- Advising student peer helper programs
- Advocating for policies, laws and regulations\textsuperscript{9}
- Participating in clinics on reproductive health, sports medicine clinics, health fairs and street clinics.

**Table 1: Elements of the Comprehensive School Health (CSH) approach**

<table>
<thead>
<tr>
<th>Instruction</th>
<th>Support services</th>
<th>Social support</th>
<th>Physical environment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comprehensive health curriculum</td>
<td>Appraisals</td>
<td>Role models</td>
<td>Safety and accident prevention</td>
</tr>
<tr>
<td>Lifestyle-focused physical education</td>
<td>Screening services</td>
<td>Peer support</td>
<td>Food services</td>
</tr>
<tr>
<td>Integration of health into other subjects</td>
<td>Early identification</td>
<td>Adult mentoring</td>
<td>Ban on tobacco use</td>
</tr>
<tr>
<td>Effective teacher inservice</td>
<td>Child protection services</td>
<td>Positive school climate</td>
<td>Restrictions on alcohol use</td>
</tr>
<tr>
<td>Preservice teacher training</td>
<td>Referral procedures</td>
<td>Staff wellness</td>
<td>Hygiene, lighting, sanitation and other environmental health standards</td>
</tr>
<tr>
<td>Appropriate instructional methods</td>
<td>Health services</td>
<td>Effective schooling</td>
<td></td>
</tr>
<tr>
<td>Opportunities for informal learning</td>
<td>Guidance services</td>
<td>Media cooperation</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Social services for students and families</td>
<td>Family involvement</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Special education and student services</td>
<td>Community involvement</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Treatment services where appropriate</td>
<td>Healthy public policy</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Support during rehabilitation</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Preservice and inservice training for school nurses, guidance</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Rationale for CSH

CSH is based on findings from well-founded and multiple investigations into behaviour change. Parcel has reviewed several theories about behavioural change, such as psychosocial influences, social learning and reasoned actions, that form the basis for a comprehensive approach to school-based health promotion.

Several models of health education and health promotion have been developed from that understanding of behavioural change, including the Health Belief Model, the Risk Reduction Model and the PRECEDE model. These models explain how individual health behaviours and environmental influences are linked in maintaining or reducing health status.

These behavioural theories and health promotion models have been applied in the school setting. Allesworth has described the “state of the art” in a review of school-related health promotion research. The Institute of Medicine in the US has presented a rationale and criteria for successful CSH approaches. Lavin and associates, of the Harvard School of Public Health, have reviewed 25 major reports and reviews that support a CSH approach. Other researchers have described how the CSH approach and theory relate to specific issues such as tobacco, sexuality and AIDS.

The benefits of school-based health instructional programs have been demonstrated in large studies in the US. Connell reported that 50 hours of well-delivered health instruction can improve student health behaviours, attitudes and knowledge. A later study, undertaken by the Metropolitan Life Foundation, found similar results.

Studies on single health issues, such as sexuality, have shown that linking classroom instruction with accessible health services increases the positive impact on behaviour outcomes such as teen pregnancy and STDs. Similarly, Parcel reported that a school-community approach to promoting cardiovascular health resulted in significant health gains. This Swedish study combined classroom instruction, community support and public policy on tobacco use.

A more recent study, conducted by the US Centers for Disease Control and Prevention, reported significant economic benefits of school-based programs. The behavioural changes were measured in relation to specific health issues such as nutrition, smoking and alcohol use. The savings in health care costs were estimated through the use of an economic model. The investigators concluded that almost $14 would be saved in health care costs for every $1 invested in school health education.

Public policy and CSH

Since 1990 several provinces in Canada have incorporated CSH into their official policies and programs. Nine provinces and both territories have formally endorsed the concept. (Quebec has not done so but practices a CSH approach through its extensive regulations and its local health centres.) In Ontario, the recent Royal Commission on Learning and the report of the Premier’s Council on Health, Social Justice and Well-being have recommended the adoption of a CSH approach by calling for a “community school” strategy for education, health and social services ministries.

More recently, the federal and provincial health ministers have agreed to pursue jointly a population health strategy and have based that policy on a determinants-of-health model. This model suggests that health is determined by (a) economic status and employment; (b) physical environment in the home, community, school and workplace; (c) social support networks; (d) genetic endowments and experiences in early childhood; (e) availability of health services; and (f) personal health practices and coping skills. The instruction, environment, services and social support mechanisms in the CSH approach are entirely consistent with the determinants-of-health model.

The Council of Ministers of Education, Canada (CMEC) has recently participated in a project on the integration of services for children using the school as a “hub” within the community. The CMEC is also preparing a status report on the extent to which a CSH approach is being used in provinces and local school districts and agencies to prevent HIV infection and AIDS.

Applying the CSH approach: reducing tobacco use

The best way to understand CSH is to apply the approach to specific health issues. Tobacco is used here to show how a theory-based model can be applied in practice. The increasing use of tobacco among young people, particularly girls, is an emerging concern for Canadians. Consequently, it is not surprising that Health Canada is using the CSH approach as one of its anti-tobacco strategies. Table 2 shows how the CSH approach can be applied in this area at the local level. The CSH framework identifies specific actions by agencies and professionals that should be coordinated.

Health Canada has supported a variety of initiatives that implement this CSH approach to tobacco reduction. Physicians can contact the Canadian Association for School Health (tel. 604 535-7664) for information on the resources and research available. They can also become active in local school health coalitions.

One such anti-tobacco initiative is a diffusion project centred on “improving the odds.” The project involves a unique CD-ROM and print-based teaching resource...
aimed at filling the gaps in current educational prevention programs. To promote a coordinated CSH approach and to disseminate new educational resources, Health Canada has formed a partnership with the Canadian Cancer Society and the Canadian Association for School Health in order to launch a national diffusion strategy for school-based tobacco programs relating to youth. To find out how physicians can participate in this strategy contact your provincial office of the Canadian Cancer Society.

The CMA has been active in anti-tobacco activities for several years. It has an overall tobacco policy and supports a program called Clinical Tobacco Intervention, which encourages physicians to reduce tobacco use by their patients systematically. This is an example of how physicians can promote health through community awareness and health promotion. Other case studies and reports on such physician practices promoting school health can be found in articles by Downey and associates, the Alberta Medical Association, Joffe, Lathrop and Smith, and Malus.

Physicians are seen as community leaders in matters of health. Promoting a comprehensive school-based health approach to issues like smoking is an important part of the professional responsibility and community role of physicians. Physicians can do 2 things. First, they can adapt their professional practices as suggested in the literature cited in this article. Second, they can become advocates for using a CSH approach within their schools and communities. Several sources presented in this article suggest ways for physicians to become involved.

A patient’s health is not determined in the physician’s office. Nor does the role of the physician end there. Working with schools is one way that physicians can support the communities that they serve. CSH offers both an effective strategy and a practical checklist for getting started.

References


Table 2: Example of how the CSH approach can be used to coordinate school and community efforts to prevent and reduce tobacco use*

<table>
<thead>
<tr>
<th>Location</th>
<th>Instruction</th>
<th>Services</th>
<th>Social support</th>
<th>Physical environment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Classroom</td>
<td>(T) Improve content and materials used in prevention program</td>
<td>(T) Add smoking to school peer helper program or start peer program</td>
<td>(D,P,PH,M) Encourage parents to quit smoking</td>
<td></td>
</tr>
<tr>
<td>Home</td>
<td>(A) Involve parents in take-home activities</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>School</td>
<td>(S) Organize showing of anti-smoking ads in cafeteria</td>
<td>(PH) Conduct tobacco health needs assessment in community</td>
<td>(A) Create friendly place in school for youths to hang out</td>
<td></td>
</tr>
<tr>
<td>Neighbourhood</td>
<td>(D) Support peer and youth programs; support health fairs and workshops</td>
<td>(PH,C,S) Monitor tobacco sales to minors in local stores</td>
<td>(A) Organize information meeting for parents; (D) volunteer as speaker</td>
<td></td>
</tr>
<tr>
<td>School district</td>
<td>(SB) Approve mandatory health curriculum</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Community</td>
<td>(PH,C) Offer cessation programs for youth; (D) refer adolescents to cessation programs</td>
<td>(PH,L) Organize community awareness activities</td>
<td>(C) Advocate for smoke-free public spaces</td>
<td></td>
</tr>
</tbody>
</table>

*Reprinted, with permission, from reference 28; T = teachers, A = administrators, D = physicians, P = parents, PH = public health officials, M = local media, S = students, C = community organizations, SB = school board.