

Résumé

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**La prévention du tabagisme chez les jeunes :  
une démarche concertée mobilisant les parents,  
le milieu scolaire et la société**

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L'objectif de la présente recherche était d'étudier les points de vue de différents professionnels sur la prévention du tabagisme chez les jeunes. Les chercheurs ont utilisé un modèle d'étude qualitatif et descriptif reposant sur un échantillon par choix raisonné qui consistait en un groupe de neuf professionnels composé d'enseignantes ou enseignants du niveau primaire, d'infirmières ou infirmiers de la santé publique et de spécialistes de la lutte contre l'usage du tabac provenant d'organisations non gouvernementales. Les données de l'étude ont été recueillies au moyen d'entrevues semi-dirigées et analysées de manière à en dégager les thèmes. Selon l'opinion des participants, bien que la responsabilité d'éduquer les enfants à propos du tabagisme incombe principalement aux parents, seule une démarche concertée mobilisant également le milieu scolaire et la société de façon plus générale permettra d'obtenir les meilleurs résultats. La nécessité d'une démarche globale présentant de multiples facettes et usant de plusieurs moyens de communication pourrait expliquer pourquoi les interventions isolées de prévention du tabagisme sont généralement inefficaces. Les infirmières et infirmiers de la santé publique occupent une position de premier plan pour encourager et soutenir les efforts de prévention du tabagisme déployés par les parents auprès de leurs enfants ainsi que pour promouvoir l'adoption de politiques sociales rigoureuses en matière de lutte contre l'usage du tabac ainsi que de pratiques exemplaires relativement à l'élaboration des programmes de prévention du tabagisme dans les écoles.

Mots clés : enfants, infirmières et infirmiers, tabac et santé, tabagisme, écoles, recherche qualitative

# **Smoking Prevention Among Youth: A Multipronged Approach Involving Parents, Schools, and Society**

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The purpose of this research was to examine the perspectives of professionals on youth smoking prevention. The researchers used a qualitative descriptive design with a purposive sample of 9 professionals consisting of elementary school teachers, public health nurses, and tobacco control experts from non-governmental organizations. Data were collected through semi-structured interviews and were analyzed for themes. The view of the participants was that although parents have the main responsibility for educating their children about smoking, a multipronged approach, which also includes school and society more generally, will have the greatest effect. The need for a comprehensive, multifaceted, multi-channel approach might explain why single smoking prevention interventions are often ineffective. Public health nurses are in a prime position to foster and support parents' smoking prevention interventions with their children and to advocate for strong tobacco control social policy and best practice for smoking prevention curricula in schools.

Keywords: children, nurses, tobacco and health, smoking, schools, qualitative research

Tobacco use is a leading cause of preventable illness and death worldwide and has been described as a global epidemic (World Health Organization [WHO], 2011b). One half of all long-term smokers die prematurely from tobacco-related diseases (US Department of Health and Human Services [USDHHS], 2010). Tobacco use causes personal suffering and family burden due to resulting chronic illness and disability and socio-economic burden because of health-care costs and lost productivity (USDHHS, 2010; WHO, 2008). The financial costs to nations are enormous, consuming significant proportions of the gross domestic product (WHO, 2011a). In Canada the annual economic cost of tobacco abuse has been estimated at \$17 billion (Rehm et al., 2006).

Smoking initiation typically happens in adolescence (USDHHS, 2012). Tobacco dependence occurs rapidly, even at low levels of cigarette use (Di Franza et al., 2002, 2007), and is considered a childhood condition (Hu, Muthen, Schaffran, Griesler, & Kandel, 2008). Initiation at a

young age is associated with heavy smoking (USDHHS, 2010). Tobacco use is also associated with subsequent alcohol and illicit drug use among youth and has been described as a gateway drug (National Center on Addiction and Substance Abuse at Columbia University, 2007).

Although youth smoking has declined in some economically advantaged countries in recent years, rates are high in many countries worldwide and smoking remains a major public health concern (USDHHS, 2012). In Canada 14% of adolescents aged 15 to 19 are current smokers (Health Canada, 2011) and 22% of children aged 11 to 14 have at least tried smoking (Health Canada, 2010b). However, cigarette smoking is only one part of the story, as many youths globally smoke tobacco in other forms, such as little cigars and pipes (Health Canada, 2010a, 2010b; Warren, Asma, Lee, Lea, & Mackay, 2009). Clearly, smoking prevention among youth is needed to end the epidemic, suffering, and costs to society (USDHHS, 2012).

Traditionally, smoking prevention efforts have largely been directed at adolescents. However, primary prevention should include younger children before they are at the vulnerable adolescent stage. Little is known about the perspectives of professionals in the field with respect to smoking prevention efforts for younger children. Therefore, the following question was addressed in this research: *What are the perceptions of professionals whose work involves smoking prevention concerning youth smoking, social influences on youth smoking, and smoking prevention, especially among pre-adolescents?* Insight obtained from professionals in the field could inform smoking prevention interventions for that cohort of children. This research was part of a larger study (Small, Eastlick, Kushner, & Neufeld, 2012) on parents' communication with their children about smoking.

## **Method**

The study was approved by the two affiliated ethics review boards and informed written consent was obtained from the participants. The research took place in a city in eastern Canada. A qualitative descriptive design was used.

### ***Sample***

Participants were recruited through administrators in elementary schools (kindergarten through grade 6), a community health authority, and non-governmental organizations (NGOs) with a smoking prevention mandate. The administrators were given information about the study and the need for a sample of professionals who had expertise in the area of youth smoking or had experience working with youth, including

smoking prevention. The administrators were asked to inform suitable employees about the study. Nine employees expressed an interest and were selected to participate. Data analysis was begun concurrent with data collection and revealed sufficient data from these participants to capture their perspectives on the subject. Hence, the purposive sample consisted of two teachers from a public elementary school in a middle-class neighbourhood, two public health nurses (PHNs), and five employees of three NGOs. The teachers had a number of years' experience teaching children in elementary schools, teaching different grades and subject matter, including health. The PHNs had extensive public health experience. They had been involved in providing smoking education and cessation programs for youths and others. The NGO employees had academic backgrounds in education, arts, or health promotion. They had varied experience in such areas as smoking prevention education, anti-smoking advocacy, antismoking social marketing, and smoking cessation counselling.

### ***Data Collection and Analysis***

Data were collected through semi-structured interviews. An interview guide was used to elicit the perceptions of participants. Broad open-ended questions were used, such as *What social factors influence children to smoke (not to smoke)? What programs are currently in place to prevent children from smoking? What can be done to prevent smoking in children? What factors are helpful for an effective approach (barriers to an effective approach)?* The responses were probed for detail. The interviews were conducted in person and in private by the first author. They were audiorecorded and transcribed verbatim to form the text for data analysis.

The analysis was carried out principally by the first author, with team meetings to discuss the findings and finalize the results. The approach used was "conceptual ordering" as proposed by Strauss and Corbin (1998), whereby data are organized into distinct categories, called themes, based on their characteristics. Description was used to delineate these themes and associated relationships. The procedures for data analysis were also based on the work of Strauss and Corbin (1998) and involved coding, comparison, memo-writing, and diagramming. Open coding with a sentence-by-sentence approach was used to identify concepts and their properties. Incidents in the data were compared for similarities and differences both within and across interviews. Those that were conceptually similar were combined to form themes. Memos were written to help derive the concepts, themes, and relationships. Diagrams were drawn and refined to illustrate the themes and how they were connected.

## Findings

The view of the participants was that smoking prevention among youth requires strong and sustained effort by three key players: parents, schools, and society. Although each player can make a contribution, it is the link among them and the combined effort that have the greatest effect. Parents have the main responsibility for educating their children about smoking. Schools have a responsibility to reinforce the antismoking message. Ideally, the efforts of parents and schools are mutually supportive. Society has a responsibility to support both parents and schools through social policy. Provision of resources for parents is important. One participant concluded, “Parents work together with teachers, and I think society is responsible as well.” The perspectives of the participants are represented by the theme *smoking prevention requires a multipronged approach involving parents, schools, and society*.

### ***Parents Have the Main Responsibility for Educating Their Children About Smoking***

The participants thought that parents are a young child’s greatest “influence” and that smoking prevention education should come from them first and foremost. Although they did not have direct knowledge, the PHNs and NGO professionals thought that many parents might not address smoking with their young children. They surmised that parents fail to address smoking early for any number of reasons: They do not know the facts about youth smoking; they do not view smoking as a relevant issue for young children; they think that it is being dealt with in school; they simply do not “feel equipped” to address smoking or do not know what approach to take — this could especially be the case for parents who smoke.

*Parents aren’t sure . . . when, at what age, to [broach] the subject . . . Lack of communication is a big barrier [to smoking prevention]. A lot of . . . parents don’t necessarily know how to talk to their kids [about smoking] . . . they don’t know how to tell their kids how [to] say no to a peer group.*

Those professionals had made the observation that although their organizations had services and resources concerning smoking, rarely had parents sought help to proactively talk with their children. That observation supported their view that parents might not be dealing with the issue:

*In 18 years, I don’t remember ever having been contacted by a parent to say . . . “I have young children and what resources are available for me to educate them on the risks of smoking.” I’ve never had those questions.*

When parents sought help, it usually was because they had discovered that their children already were smoking and they wanted to know what they could “do to help their kids,” which is a late point for intervention. The view of the participants was that parents could have an effect, and a long-lasting one, by using an approach that entails both proactively talking with their children about smoking and displaying behaviour that is consistent with an antismoking message, such as having non-smoking homes and vehicles.

**Talking with children about smoking.** Participants contended that parents should start speaking about it as soon as the children are old enough to understand. “Even a toddler can get some message around it”; “The earlier the intervention the better . . . like preschoolers . . . [if] they’re taught . . . the negative things about smoking . . . [they] just grow up knowing that.” Parents should continue to talk about smoking “often” throughout childhood using a “casual” approach. Such an approach involves taking advantage of everyday “opportunities” — for example, using an antismoking advertisement on television to raise the topic and convey key messages. It is not necessary to have a scheduled or formal discussion, and it is important not to overdo it. Talk about it “without smothering the child”; “Bring it up a lot in casual conversation. . . . It’s okay to talk about it a lot if it’s in casual conversation.”

*I think using the teachable moments with children all along, integrating it into their everyday life, not sitting down and having a special session: “Now we’re going to talk about why you shouldn’t smoke.” Just . . . using all the times that parents . . . have to put in the key messages about not smoking. . . . And then of course [it] needs to be constantly reinforced at those teachable moments.*

The participants thought that parents should use “open dialogue” and engage their children in discussion. Telling children not to smoke or using an authoritarian approach might not work and could backfire if children choose to rebel against parental authority as they get older. “I think keeping that open dialogue, because . . . when you get into those teenage years you want to rebel and you want to do your own thing and you want to discover who you are.”

*Not attacking them about the negatives of it . . . some of the kids will want to rebel against that: “You said it’s no good, but, really, is it?” So just try and get their opinions on it. . . . If they see people smoking, they’re obviously going to be curious and want to know what that is . . . maybe the smell from a smoker is enough to kind of turn them off. . . . Work with them to get them to see the true effects of smoking and the danger of smoking. I don’t know if you need to . . . preach to them. . . . If you make*

*a child, even a 5-year-old, feel important and feel that they're contributing to a conversation . . . they learn better or they learn to react the right way. . . . just going at it positively and not taking a lecture style, a scolding type approach.*

The participants thought that the message should be age-appropriate, “depending on their developmental level.” Young children need only a simple message about the health “benefits of not smoking. . . . ‘If you don’t smoke, then you can be more healthy and do more fun activities . . . you can run and play longer’ . . . Put kind of a positive spin on it.” Older children, pre-adolescents and adolescents, need more detail about the health consequences. They are better able to cope with “candid” messages about health effects or messages with “shock value” than younger children, who could become “scared.” Older children need to know about the factors that influence children to begin smoking, especially peer pressure, and be given guidance on how to resist it. They need to understand about addiction and how difficult it is to quit smoking once a person begins. Parents who smoke should talk in an “open” and “honest” way about their smoking and addiction. They should make it clear to their children that they are aware of the “contradiction” they are living and that they would like to quit smoking:

*It's really important . . . for the smoking parent to be saying, “I'm addicted to this” . . . “This is a drug” . . . “This is something that I'm desperate to stop” . . . “I'm addicted and I'm having trouble, and that's why I'm doing it away from you, because I really don't want you to be influenced by that” . . . rather than “It's my choice” and “I just want to” and “I really like it” and . . . “I need a cigarette because I need to relax” and all of those other little messages that parents can send to children about why they're smoking.*

**Having non-smoking homes and vehicles.** Participants asserted that parents should also show that smoking is unhealthy and unacceptable by having non-smoking homes and vehicles. This is especially important in homes where there is a parent who smokes: “You can say all you want, but the practice is really what sends the message.”

*It's all in how it's handled. If a parent is . . . allowed to smoke in the house wherever they want, while doing whatever they want, that's a totally different message that you're giving your kids [from] you have a parent that's smoking but they have to go outdoors . . . they have to make sure that there are no cigarettes around the house . . . even if it's a blizzard outside they're still not allowed to smoke in the house . . . they're banished, sort of thing. That's a totally different message . . . [from] Here we are in the house. You're in the smoke. I'm in the smoke. It's fine. It's*

*okay. . . . Designating a smoke-free home and a smoke-free car . . . sends a message to kids that, yeah, Dad does this but it's not a good thing . . . Mom doesn't like it and he's not allowed to do it around me and he's not allowed to do it around Mom. . . . It's that whole impression that you're giving. . . . It's how you place it. You can either place it as normal or . . . as abhorrent and away from us and not near us.*

### ***Schools Have a Responsibility to Reinforce the Antismoking Message***

The participants thought that schools have an important “role to play” in prevention education but that without parental support a school's efforts might be less successful. They thought that the relationship between parents and the school should be a two-way one, with parents setting the foundation for smoking prevention and schools bolstering it:

*I think it should come from both . . . it needs to come from home first and for the school to reinforce it. Like with everything . . . you teach your child their letters before they [go] to school and of course [teachers] reinforce that. Most parents do. . . . I think it needs to come from home. [Teachers] can only play the role so far.*

In turn, parents need to be tuned in to what their children are learning in school and strengthen the message at home. “Parents need to be on side . . . parents and teachers should be working together . . . which is ideal.”

*[Parents should] be aware of what [their children] are actually being taught within the school system . . . speak to them about that. Talk to them about those particular things they're learning and again ask them, “What's your understanding?” Because it's not always about you telling them . . . [It's also] them telling you.*

Although participants thought that smoking prevention education should come primarily from the home, they acknowledged that this may not necessarily be the case and that for children who do not receive it at home, education at school is essential. However, their sense was that prevention education is not as strong in schools as it could be. The teachers confirmed that, in their jurisdiction, smoking prevention education was a component of the curriculum in elementary school (grades 4 to 6) but not primary school (kindergarten to grade 3). They believed that, for grades 4 to 6, it was limited to a topic in the health curriculum. Their impression was that smoking was not a priority for instruction and therefore might not receive much attention. They explained that pressure to meet objectives in core subjects and teacher preference often determine the extent to which smoking is covered in elementary school.



Participants thought that, although more emphasis might be placed on prevention education in junior high and high school, this might be too late, as some children start smoking early. They believed that the earlier smoking prevention is introduced the better. It needs to start from day one and be “integrated” into the curriculum, throughout the grades. It should not be isolated, occasional, random presentations on the topic: “It needs to be repeated . . . start at a very early age . . . the message needs to be throughout the entire school process, kindergarten right through grade 12.” However, the teachers raised concerns about causing emotional reactions, such as anxiety or fear, in children who have family members, especially parents, who smoke. For those children smoking can be a “sensitive topic” and educators need to be “delicate” in their approach:

*As an educator I have to be very careful how I approach it, because the students who have parents that smoke can be easily hurt or offended or even scared for the parents’ safety and health. I have to be cautious about that . . . so that’s a factor for an educator to consider.*

They agreed that, to avoid undue concern among children, the focus of education in the lower grades should be on “health in general,” not the serious illnesses. They thought that the best approach is to emphasize overall healthy living, with non-smoking being one thing among many that make people more healthy:

*The main thing . . . is focusing on the health, making it a part of a healthy lifestyle. . . . It becomes a way of life. It becomes a part of being healthy. Physical activity is a part of being healthy. Non-smoking is a part of being healthy . . . if it’s kind of taken under that umbrella it’s not going to be as frightening. But also I think we have an opportunity with children to say some factual things like about the . . . coughs and about the bad smell and about the dirty teeth and all that . . . those are the kinds of things that I don’t think [are] frightening . . . they’re observations.*

### ***Society Needs to Provide a Supportive Environment***

The participants thought that, while interventions by parents and schools are vital, a “supportive environment” at the societal level is also essential. Smoking prevention requires a “community effort,” a “coordinated voice” involving all three players, so that the message conveyed is prominent and consistent across sources. One participant declared, “If [anti-smoking] messages are everywhere, then that helps to instil those messages they have at home.”

Considerable attention has been paid to smoking prevention in Canada in recent years through measures such as legislation (e.g., raising

the legal age for the purchase of tobacco products to 19 years, restricting promotion and advertising of tobacco products, and requiring graphic warnings on tobacco products), public policy (e.g., smoke-free school premises), and public education (e.g., mass-media campaigns directed at youth smoking and the health effects of smoking). However, the participants said that youth smoking is still too prevalent: “It isn’t as normal as it used to be but . . . is still very prevalent when you look at . . . how many kids are actually still smoking.” The NGO professionals specified that more needs to be done, as youths are still accessing cigarettes and still being exposed to pro-smoking messages in society. They singled out movies as an important source of these messages. Stricter social policies to curb such influences would validate and strengthen the messages of parents and teachers. Participants also indicated that parents need direct support. The nursing and NGO professionals noted that there are few if any resources targeting parents. They believed that parents would benefit from information about youth smoking that they could use to educate their children: “I really think educating parents is where we have to go, and then that will transfer to the children.”

*If they know more about it, they’re more inclined to tell their children about it. So I think maybe an education process . . . [to] help them to help their children . . . the facts about children and smoking . . . there’s still the risk and . . . most concerned parents will want to know more about how they can help their children.*

Participants suggested that resources in the form of lay print and electronic information could be made available through health-care providers such as PHNs and various agencies. Some thought that because parents tend not to seek help for smoking prevention, providers could promote the resources through a “widespread campaign” — for example, through “schools, maybe at curriculum night” — since schools are “the biggest link to parents.”

*Maybe there can be something done through public health or in the schools [to] get the ball rolling with parents to discuss this, something that can be sent home through the school that the kids can give to their [parents] . . . That might be a way to open up the door . . . It’s almost like they have to be pushed.*

## **Discussion**

The perspective of the professionals who participated in this study, that parents are a young child’s most important influence with respect to smoking, corresponds with the position of authorities on smoking prevention, that parents can be a powerful influence on children’s decision

to smoke and should take preventive measures (Centers for Disease Control and Prevention [CDC], 2010; Health Canada, 2008). Indeed, in the literature on parenting it is generally accepted that parents can make a difference in children's behavioural outcomes (Baumrind, 1993; Duncan, Coatsworth, & Greenberg, 2009; Galambos, Barker, & Almeida, 2003). Although our participants believed that parents have the main responsibility for educating their children about smoking, they believed that many parents might not address it with their young children. Little is known about parental smoking-specific communication in the period prior to adolescence. In our study with parents of school-age children (5–12 years), however, we found that most parents had addressed the topic often with their children, some had done so periodically, and a few had done so only minimally (Small et al., 2012). In studies concerning pre-adolescent and adolescent children, there is evidence that many parents at least raise the topic with their children (e.g., Baxter, Bylund, Imes, & Routsong, 2009; Bush et al., 2005; Muilenburg & Legge, 2009; Wyman, Price, Jordan, Dake, & Telljohann, 2006). It is difficult to tell, from most of those studies, the degree to which parents talk with their children.

Whether or not parents are involved in smoking prevention, the following approaches suggested by the professionals who took part in our study are consistent with recommendations in the literature (e.g., American Academy of Pediatrics, 2009; Health Canada, 2008; USDHHS, 2009). Parents should start speaking with their children about smoking at an early age; bring up the topic often; use an open communication style and engage children in a discussion about smoking; take a casual approach; use age-appropriate messaging; talk about health effects and factors that encourage children to smoke, especially peer pressure and addiction; provide guidance on how to resist peer pressure; and, if the parents smoke themselves, speak about their experience with smoking and their addiction. Much of the research conducted on the effectiveness of parental discussion for smoking prevention has involved adolescents. Inconsistency of findings across studies and differences in study methods make it difficult to draw conclusions, but there is some evidence that parental discussion about smoking is effective (den Exter Blokland, Engels, Harakeh, Hale, & Meeus, 2009; Otten, Engels, & van den Eijnden, 2007).

Our participants also believed that parents should take action to reduce their children's exposure to smoking. In addition to the harmful health effects of smoking, it has been established that exposure to smoking is a risk factor for youth because of modelling and the acceptability that exposure suggests. Young people who are exposed to smoking receive messages that contradict the prevention messages about smoking

norms that they receive from other sources (Alesci, Forster, & Blaine, 2003; CDC, 2000; Corbett, 2001). To reduce exposure to smoke and smoking, it is recommended that homes and vehicles be smoke-free and that parents who smoke not do so in the presence of their children (American Academy of Pediatrics, 2009; Health Canada, 2008). There is some research evidence to support the importance of not exposing children to smoking. In a number of studies, home restrictions on smoking were found to be protective against youth smoking (e.g., Bernat, Erickson, Widome, Perry, & Forster, 2008; Ditre, Coraggio, & Herzog, 2008; Rainio & Rimpela, 2007).

In addition to the parental role, the view of our participants was that schools have an important role to play in smoking prevention; they believed that prevention education should be integrated into the curriculum from kindergarten through grade 12. There is evidence that parents hold a similar view (Small et al., 2012; Wyman et al., 2006). The teachers' concern about the possibility of prevention education causing emotional upset in young children is similar to the concern voiced by teachers in another study (Spratt & Shucksmith, 2006). Those teachers thought that working in a meaningful way with children from homes where there are adults who smoke is problematic and calls for sensitivity; most reported treading carefully when presenting information on long-term health effects and being cautious about saying anything that could be construed as critical of parental behaviour. The professionals in our study thought that the issue could be reconciled by focusing on health rather than illness when providing prevention education in the lower grades.

That smoking prevention education should be carried out in schools has been the recommendation of health authorities for many years. For instance, the CDC recommends that developmentally appropriate, comprehensive prevention education be provided in kindergarten through grade 12. Smoking prevention should be reinforced in all grades to ensure that it does not dissipate over time. Further, it can be delivered as a single focus or embedded in broader health curricula as long as it meets the recommended standard (CDC, 1994, 2008). The latter is consistent with what the professionals in the present study suggested for the lower grades — that is, an integrated health approach.

Despite the recommendation that smoking prevention education be implemented in schools, the participants in the present study believed that it might not receive much attention in curricula. The literature indicates that getting schools to adopt effective prevention programs is not easy due to competing pressures and the demands placed on schools for academic achievement (Flay, 2009; Reid, 1999). Although we lack information on the extent to which recommended smoking prevention education is being adopted by schools, it is thought that implementation

is not widespread and that curricula are less than complete (CDC, 2000; Flay, 2009).

Numerous studies have been conducted to test various school-based interventions, including such approaches as information-giving, affective education, social influence education, and social skills training, and several systematic reviews and meta-analyses have been carried out to examine their effectiveness. It has been proposed that effective school-based prevention programs could accrue substantial cost-benefits in terms of economic returns and health-related quality of life (Flay, 2009). However, although some studies, mainly for social influences intervention, report short-term positive effects of school intervention on children's smoking behaviour, we lack strong evidence of smoking prevention among youth in the long term (e.g., Dobbins, DeCorby, Manske, & Goldblatt, 2008; Thomas & Perera, 2006). This speaks to the need for interventions that are complementary and effective over the long term.

The professionals in our study expressed satisfaction with societal initiatives taken in recent years to deter youths from taking up smoking. However, they said that more could be done and identified youth access to tobacco products, exposure to smoking in film, and educational resources for parents as areas needing attention. Access is an issue (Warren et al., 2009), even in countries such as Canada that have legislation prohibiting the sale of tobacco products to minors. In a recent Canadian survey, 64% of adolescents aged 15 to 19 who were underage in their jurisdictions purchased tobacco products from a retail source (e.g., a corner store). The others obtained their cigarettes from social sources (e.g., friends, relatives, individual sellers) (Health Canada, 2010a). Social sources were more prevalent among younger children — 85% of children in grades 6 to 9 who smoked obtained their cigarettes in this way (Health Canada, 2010b). Access is a function not only of legislation forbidding sale to minors but also of enforcement of the legislation and availability through social sources. Interventions are needed to address all of these factors.

The prevalence of positive images of smoking in movies is supported in the literature (Dalton et al., 2002; Sargent, 2005). In many instances smoking is modelled by movie stars (Sargent, Dalton, Heatherton, & Beach, 2003). Motivational factors for smoking by screen characters, such as agitation, sadness, happiness, and relaxation, and situations in which smoking occurs, such as while socializing or engaging in risky behaviour, are consistent with those for tobacco use in society generally. Negative reactions to and negative consequences of tobacco use are rare in film (Dalton et al., 2002). It is agreed that pro-smoking messages in media to which children are exposed are an important influence (Dalton et al., 2009; Sargent, 2005; Wellman, Sugarman, DiFranza, & Winickoff, 2006).

A ban on depiction of smoking in movies is warranted (Wellman et al., 2006).

Consistent with the view held by the professionals in our study, there is evidence in the literature that at least some parents think they would benefit from having resources to use in their smoking prevention efforts. Parents report that it would be helpful to have information on youth smoking, prevention strategies, and effective communication with children about smoking (King, Wagner, & Hedrick, 2002; Small et al., 2012). However, the participants in our study noted that parents rarely requested help in talking with their children about smoking. This finding is consistent with parents' own reports that they do not seek resources for intervening with their children about smoking (Small et al., 2012). This suggests that despite parents' desire for resources, they might not seek them out on their own initiative or look to professionals for assistance. Our participants believed that parents could be reached with resources dispensed by community agencies, public health nurses, or schools. Although we found no studies examining the effect on parents of simple provision of resources, there is some evidence that parents prefer resources that can be mailed home or brought home from school (Tilson, McBride, Albright, & Sargent, 2001) as well as parent-directed interventions that they are able to access at home (Beatty & Cross, 2006). Interventions with parents to promote their participation in prevention efforts have been found to result in more smoking-related discussions with their children (Beatty, Cross, & Shaw, 2008; Jackson & Dickinson, 2003; Mahabee-Gittens, Huang, Slap, & Gordon, 2007).

Taken together, the perspectives of professionals on the role of parents, schools, and society represent a multipronged approach to smoking prevention. This is consistent with the socio-ecological approach to health promotion, wherein a combination of strategies is used to target multiple levels of a system (Edwards, Mill, & Kothari, 2004). Specific to smoking prevention, the view of authorities is that a comprehensive, multi-message, multichannel approach that is sustained over time is more effective than single-component interventions. It is argued that a combination of strategies is synergistic and should include school-based education, community-based activities, interventions that engage parental influence, youth-oriented mass-media campaigns, regulations for product promotion and sale to minors, policies for smoke-free environments, and price inflation (American Academy of Pediatrics, 2009; CDC, 2007; National Cancer Policy Board, Institute of Medicine, & National Research Council, 2000). Even though one strategy might not produce an effect independently, a combination might do so through interaction. The need for a comprehensive, multifaceted, sustained approach might help to explain why single strategies have been shown to yield disap-

pointing results. In recent years the trend in many countries has been to implement a comprehensive strategy for smoking prevention, and the decline in smoking in these countries is attributed to this strategy (Health Canada, 2006; National Cancer Policy Board et al., 2000).

### **Implications for Practice and Research**

The findings of this study are based on a small, select sample of professionals and therefore are not generalizable. However, the perspectives of the participants are consistent with the views of smoking prevention authorities and with recommendations in the literature. The findings have implications for health education practice, advocacy, and future research.

Although health professionals should encourage parents to proactively talk with their children about smoking according to recommendations in the literature, little is known about the effectiveness of such communication. Research is needed to establish the effectiveness of parental communication for smoking prevention. Parents might not seek resources for smoking prevention measures with their children. Therefore, resources to guide them should be readily available and offered to them as a matter of course. However, research is needed to determine what resources would be the most useful to parents in their smoking prevention efforts and how best to reach parents with those resources.

Because school smoking prevention curricula might not be sufficiently strong and comprehensive, professionals should be aware of what is offered in their jurisdictions and advocate for best practice. School PHNs are in a prime position to exert influence. Research to document the extent to which schools comply with guidelines would be helpful for advocacy. We also need research to determine which school programs have a long-term effect (beyond high school). Although considerable efforts have been made in many countries in recent years, in terms of social policy to prevent smoking, youth smoking is still prevalent and continues to be cause for concern. PHNs are encouraged to work with other professionals and to advocate for strong social policies. In particular, regulations restricting access to tobacco products and exposure to pro-smoking messages need to be strengthened and enforced.

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