

MIXED MESSAGES: HOW TO CHOOSE AMONG CONFLICTING INFORMATION TO SUPPORT HEALTHY DEVELOPMENT IN YOUNG CHILDREN

Health and Learning Knowledge Centre | Canadian Council on Learning

Judging from the quality of the available advice, today's parents are better informed than any prior generation. Parents are exposed to numerous messages about healthy, active living and safety in the early childhood years. It is challenging for parents to apply these messages because they are sometimes contradictory and often difficult to incorporate into a coherent approach to parenting. In the Survey of Canadian Attitudes Toward Learning, 61% of parents of young children reported finding contradictory information from different sources of health-related information.¹

Three areas have received prominence among the many messages purporting to offer parents advice: healthy active living, hand hygiene and injury prevention. Making sensible decisions about just these three topics is likely to challenge even the most informed parent.

Healthy Active Living

Concerns about childhood obesity and fitness levels in Canada, with lifelong implications for individual and population health, have prompted calls to increase physical activity, and reduce children's screen time (i.e., television, videos, video games, etc.).²

The Canadian Paediatric Society recommends limiting screen time to one to two hours per day for older children and no screen time at all for children under two.³ Other experts recommend several short periods of vigorous physical activity throughout the day that are spontaneous, enjoyable, match children's individual skills and interests, and are outdoors whenever possible.⁴

These messages are clear and consistent. They can, however, conflict with other messages. In particular, safety messages can conflict with the prescription for spontaneous and vigorous outdoor activity.

Many parents also feel pressured to enrol their children in structured activities to ensure that their preschoolers do not fall behind their peers. While structured activities like karate and gymnastics

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may support physical fitness, there is the risk of over-scheduling young children and leaving little time for unstructured free play, which is also important for development. In short, balancing safety messages with messages focussing on intellectual development and others emphasizing fitness and physical development can present a challenge for many parents.

Hand Hygiene

Hand hygiene is another issue that illustrates the mixed messages that parents and educators may receive from local agencies such as the public health department and from advertisers marketing products to a germ-fearing public.

The routine use of alcohol-based hand rubs in hospitals and other health-care settings has led to assumptions by many that they are universally recommended. However, the Canadian Paediatric Society points out that alcohol-based rubs kill both helpful and harmful bacteria and they do not recommend them for routine use in child care.⁵ These products are useful when a sink is not available for handwashing, but washing with mild soap and running water is generally preferable. Due to high alcohol content, care must be taken with children, as alcohol rubs are flammable and can be harmful if swallowed.

Health Canada and the Canadian Paediatric Society have concluded that there is absolutely no germ-killing advantage, nor any additional health benefits from the triclosan found in antibacterial products used for regular personal hygiene or household purposes. Antimicrobial chemical agents may be used selectively in the home in specific high-risk scenarios, for example in the case of individuals receiving medical care at home. It is also unnecessary to purchase toys that are impregnated

1 2006 Survey of Canadian Attitudes toward Learning: Health-related Learning. Retrieved May 16, 2008.

2 Boyce, W.T. and D.P. Keating (2004). Should we intervene to improve childhood circumstances? In D. Kuh and Y. Ben-Shlomo (eds), *A Life Course Approach to Chronic Disease Epidemiology* (Second Ed. pp. 415-445) Oxford UK; Oxford University Press.

3 Canadian Paediatric Society (2003). Impact of media use on children and youth. *Paediatrics & Child Health*; 8(5): pp. 301-306. Retrieved May 16, 2008.

4 Timmons, B.W., P. Naylor and K.A. Pfeiffer (2007). Physical activity for preschool children – How much and how? *Applied Physiol. Nutr. Metab.* 32: pp. s122-s134.

5 Canadian Paediatric Society (Infectious Diseases and Immunization Committee) (2006). Antimicrobial products in the home: The evolving problem of antibiotic resistance. *Paediatrics & Child Health*, 11(3): pp. 169-173. Retrieved May 16, 2008.

with antimicrobial agents. Where appropriate, alcohol, bleach or peroxidase-based agents are preferred because they dissipate readily and are less likely to exert prolonged antimicrobial pressure.⁶

Recent concerns about epidemics like SARS or the threat of a pandemic flu have heightened public concern about germs. Companies have created a multitude of hygiene products and marketing ploys exploiting and promoting these fears. The public's extensive use of these products may be inadvertently contributing to problems such as antibacterial resistance. In addition, alcohol-based hand rubs are not effective if hands are soiled, which is often the case for young children.

Notwithstanding the above statements deterring routine use of hand rubs and antibacterial products in most homes and child-care centres, many public health department personnel across the country give the use of alcohol-based hand rubs equal status to handwashing through strategies such as requiring them for use on the playground and giving posters demonstrating their use prominent wall space.⁷ Staff and parents in child-care programs may have conflicting opinions and practices around this issue, and recommendations or requirements from their local public health agency that contradict the Canadian Paediatric Society position.

Injury Prevention

A mismatch between public messages and public policy can also result in the perception of mixed messages among parents and educators.

For example, bicycle accidents are a leading cause of injury among children aged 10 to 14, and bicycle helmets are known to reduce the incidence of brain injuries by 88%.⁸ Based on these data, the Canadian Paediatric Society strongly recommends the use of helmets for all children on bicycles. Yet, in Canada, seven provinces and territories do not have any legislation on bicycle helmets and, therefore, fail to signal clear messages about helmets and safety.

The Canadian Paediatric Society (2007) also recommends booster seats for children between 18 and 36 kg, as statistics indicate that children in that weight range wearing only a seat belt are 3.5 times more likely to suffer a serious injury and four times more likely to suffer a head injury if involved in a motor vehicle collision. This message conflicts with the public policy message: only three provinces have legislation with a booster seat requirement. As a result, only 28% of children who should be in booster

seats are properly restrained when being driven in a motor vehicle.⁹ In contrast, there are clear and consistent public policy messages regarding seat belt use (all provinces and territories have seat belt laws), and Transport Canada reports a 90% seat belt compliance rate across Canada.¹⁰

Lessons in Learning: How to Ensure That Parents and Educators Receive Clear and Consistent Messages

Reliable Web sites

In 2007, 85% of Canadian households had access to broadband internet services. Among parents who were interviewed at a large Canadian paediatric emergency department, over 90% reported home internet access and over 50% reported using the internet for health-related information.¹¹

The internet can be a tremendous source of information for parents and educators. However, the sheer volume of information can be overwhelming and difficult to evaluate for reliability. As well, the internet can be a significant source of mixed and inconsistent messages. To avoid these problems, parents and educators who know where to look can find reliable information on Web sites hosted by reputable organizations. For example, the Canadian Paediatric Society maintains a site devoted to guiding parents in their search for high-quality health information on the internet (www.cps.ca/english/statements/cp/practicepoint.htm).

Health Canada (www.hc-sc.gc.ca/hl-vs/jfy-spv/parents_e.html) offers extensive health information for parents on its Web site. Topics range from childhood diseases and illnesses to healthy environments and healthy living. Similarly, some provinces provide extensive, user-friendly, health information. For example, Saskatchewan Health's Healthline Online (www.health.gov.sk.ca/healthline-online) and British Columbia's Health Guide (www.bchealthguide.org) allow users to browse a number of topics related to childhood health. Ontario's Best Start Program has a resource guide (www.beststart.org/resources/hlthy_child_dev/index.html) which provides information on health-related issues to the early childhood learning and child-care sectors.

Not-for-profit organizations also have a web presence. Canadian Association of Family Resource Programs (www.parentsmatter.ca/index.cfm), an organization that promotes the well-being of families through leadership, consultation and resources, maintains a Web site that includes an annotated list (www.parentsmatter.ca/index.cfm?fuseaction=page.viewpage&pageid=618#Health) of reliable family health-related Web sites.

6 *Ibid.*

7 Sample poster available at: http://www.toronto.ca/health/pdf/sleeve_sneeze_hand_sanitizing.pdf. Retrieved May 16, 2008.

8 Canadian Paediatric Society (Community Paediatrics Committee) (2007). Guiding parents in their search for high-quality health information on the Internet. *Paediatrics & Child Health*, 12(3): pp. 239-240.

9 Leitch, K. (2007). *Reaching for the Top: A Report by the Advisor on Healthy Children and Youth*, Health Canada. Ottawa: Cat. No. H21-296/2007E. Retrieved May 16, 2008.

10 *Transport Canada's Survey of Seat Belt Use in Canada 2004-2005*. Retrieved May 16, 2008.

11 Goldman, R.D., and A. Macpherson (2006). Internet health information use and e-mail access by parents attending a paediatric emergency department. *Emergency Medical Journal*, 23(5), pp. 345-348.

Safe Kids Canada (www.sickkids.ca/safekidscanada), the national injury prevention program of The Hospital for Sick Children (SickKids), also maintains a Web site with information for parents on child safety. The Web sites of both of these organizations are examples of accessible ways for families to find evidence-based parenting information including health and safety in the home and the community.

Communities

Community organizations have an important role to play in providing reliable health information to parents of young children and in dispelling mixed messages. These organizations are often well positioned to deal with the health concerns of a community. The Community Action Program for Children (www.phac-aspc.gc.ca/dca-dea/programs-mes/capc_goals_e.html), founded by the Public Health Agency of Canada, provides long-term funding for community coalitions to promote the health and the development of vulnerable young children. For example, Family Place in Nova Scotia, Kids R First in Prince Edward Island, and Wolseley Family Place in Manitoba are primarily parent-support initiatives but include a health-information component in their programming. Parenting programs in general are a good arena in which to provide reliable health information, especially for at-risk families with low literacy and lack of access to the internet.

The Health Council of Canada's 2006 Report, *Their Future Is Now*¹², lists and describes several communities of all sizes that have organized with a vision for healthy children. Responding to the United Nations launch of the Child Friendly Cities Initiative, a number of Canadian communities, led by municipal governments like the city of Greater Sudbury, or by non-profit organizations like The Society for Children and Youth of British Columbia, have embarked on changes to the physical and social environments that promote health. Accessibility to safe pedestrian networks, free or low-cost recreation, affordable healthy food, and other responsive changes meet the stated needs of children and families. There are hundreds of groups across Canada that are working together as communities, often with common language, culture or needs. Communities are not necessarily geographic, but have common goals which promote consistency for children and families.

Governments

The Health Canada report, *Reaching for the Top*¹³ calls for a National Injury Prevention Strategy that would take a comprehensive view and support provinces and territories in delivering public programs and clear messages. The strategy would call for Health Canada to work with the provincial and territorial governments, health-care experts, NGOs, and community organizations to develop and fund a five-year national, evidence-based strategy for injury prevention in children and youth.

Numerous current education initiatives in consumer product safety – such as the lead risk-reduction strategy – are available to parents, but few parents are aware of the tools or how to utilize them. A National Injury Prevention Strategy could incorporate these initiatives and develop improved social marketing and communication strategies so that Canadian children and families can benefit from work that has already been done.

Parents are faced with a bewildering amount of information regarding how to promote the health of their young children. Without reliable tools to access and comprehend this information, parents' ability to influence positively the health of their young children remains compromised. The issue of mixed messaging in health information will likely remain, especially with the proliferation of health advice over the internet. Ensuring easy access to reliable sources of information is the best way of deciphering the mixed messaging.

About the Author

The Canadian Council on Learning's Health and Learning Knowledge Centre serves as a national network linking expertise about the vital connections between the learning and health of Canadians.

12 Health Council of Canada (2006). *Their Future is Now*. Retrieved May 16, 2008.

13 Leitch, K. (2007). *Reaching for the Top: A Report by the Advisor on Healthy Children and Youth*, Health Canada. Ottawa: Cat. No. H21-296/2007E. Retrieved May 16, 2008.