

# Building Healthy Public Policy

Lynn Chiarelli, BSc, MHA<sup>1</sup>

Peggy Edwards, BA<sup>2</sup>

## ABSTRACT

Policies in literacy and health need to address two perspectives: how basic literacy skills influence the health of populations and individuals; and health literacy – the degree to which individuals have the capacity to obtain, process, and understand basic health information and services needed to make appropriate health decisions. There are three potential areas for action to improve literacy and health literacy: the health system, the education system, and within the broader sphere of culture and society. Despite some increasing attention in the last 20 years, low literacy levels remain a major problem in Canada. Policies need to be sensitive to culture, especially among Aboriginal peoples, Francophones and new Canadians. Public policies are needed to:

- improve literacy outcomes (for example, support for a pan-Canadian literacy strategy, early childhood education and family literacy programs, and efforts to reduce high school drop out)
- improve health literacy (for example, support integrated policy and program development across sectors, integrated research and knowledge translation initiatives, and efforts to build links between literacy and health networks)
- reduce disparities by strengthening levels of literacy and health literacy among vulnerable groups.

**MeSH terms:** Health literacy; health policy; health communications; literacy and health research

Canadians with limited literacy skills are more likely to report poorer health status and higher rates of chronic disease, to have less knowledge of disease management and health-promoting behaviours, and to be less likely to use preventive services.<sup>1</sup> Limited literacy rates remain high in Canada, with one in seven Canadians at the lowest level of literacy.<sup>2</sup> From a public policy perspective, literacy is a cross-cutting issue. It can be tied to numerous government sectors, including education, health, social services, employment and citizenship. Public policy that addresses the intersection between literacy outcomes and the health of individuals and communities has been broadly referred to in Canada as “literacy and health” policy. It provided the framework for one of the four themes addressed at the Second Canadian Conference on Literacy and Health.

For the purposes of this article, “literacy and health” policy will be discussed from two distinct perspectives. These two perspectives reflect what we know about the indirect and direct impacts of literacy on health. The first perspective explores policy development aimed at improving literacy outcomes through strategies for developing education and skills. This perspective recognizes the influence of basic literacy skills on the health of populations and individuals. The second perspective explores policy development aimed at improving health literacy. Health literacy is defined as a person’s ability to find, understand and use health information and resources, and ultimately to take control of their health (see Table I).<sup>3</sup>

Policies that improve basic literacy and health literacy have the potential to reduce health disparities in Canada by taking into consideration the unique barriers faced by certain population groups in acquiring literacy skills and achieving health, based on language, culture, gender and lifestyle. Although it is important to consider the two perspectives separately, a common thread of discussions at the conference addressed opportunities for integrated policy and program development, particularly across health and education sectors.

This article summarizes the presentations and discussions at the conference in terms of:

- what we know about the development of “literacy and health” policy in Canada;

1. Lynn Chiarelli is the project coordinator for CPHA’s Second Canadian Conference on Literacy and Health ([www.cpha.ca/literacyandhealth](http://www.cpha.ca/literacyandhealth)).

2. Peggy Edwards is a health promotion consultant and plain language writer based in Ottawa. She served as the Chair of the CPHA/University of Toronto Literacy and Health Research Project Advisory Committee.

**Correspondence:** Lynn Chiarelli, Canadian Public Health Association, 400-1565 Carling Ave., Ottawa, ON K1Z 8R1, Tel: 613-725-3769, ext. 112, Fax: 613-725-9826, E-mail: [lchiarelli@cpha.ca](mailto:lchiarelli@cpha.ca) or [pedwards@cyberus.ca](mailto:pedwards@cyberus.ca)

- what we need to know to build more effective policies; and,
- some recommendations for future directions in policy development to improve the health of Canadians with low literacy skills.

### What we know

This section provides an overview of the policy context in Canada and the scope of the issue, and describes some current activities presented and discussed at the conference.

Policies and programs aimed at improving literacy reflect what we know about the relationship between literacy and health. The National Forum on Health acknowledged literacy as a determinant of health in its landmark report in 1998<sup>5</sup> as did the 1999 Report on the Health of Canadians.<sup>6</sup> The latter noted that "literacy levels, which are usually, but not always related to levels of education, are important predictors of employment, active participation in the community and health status."

### About Literacy Levels and Health

Literacy levels can affect health directly, for example, when a person is unable to comply with a treatment regimen because he or she cannot read the instructions. Literacy also affects health indirectly, for example, through impacts on income, access to safe jobs and decent wages, and social status. Irving Rootman and Barbara Ronson wrote an article reviewing the direct and indirect effects of literacy on health. They examined the link between literacy and education, early childhood development, aging, personal capacity, living and working conditions, gender and culture.<sup>1</sup> They noted a strong connection between health and learning, and that literacy is in itself a strong predictor of health status. Literacy was found to be directly related to overall physical and mental health status. People with low literacy levels may be at increased risk for poor health because they have difficulty reading medication labels and other health information. Literacy may also impact health indirectly through lifestyle behaviours, such as the use of tobacco and other substances and sexual health practices. These findings were summarized in a clear language edition of their review article. It provided a foundation for discussions at the national conference.<sup>7</sup>

**TABLE I**  
**Health Literacy**

Health literacy is the degree to which individuals have the capacity to obtain, process, and understand basic health information and services needed to make appropriate health decisions.<sup>3</sup> The US Institute of Medicine report<sup>4</sup> adds to our understanding of health literacy:

- It identifies three potential areas for action to improve health literacy: the health system, the education system, and culture and society.
- It proposes that health literacy is affected by individual factors as well as by the context in which people experience health. It suggests that public health services are part of these health contexts, and therefore bear as much or more responsibility for addressing health literacy as the individuals who are affected.

**TABLE II**  
**A Story of Determination – Ellen Szita**

Ellen Szita is an adult learner and member of the Learners' Advisory Committee of the Movement for Canadian Literacy. She told her moving life story in an opening address at the conference. Ellen grew up in England without friends where she was mocked and shunned as a "dunce". Undiagnosed learning disabilities made school a nightmare. Introverted and feeling unworthy, Ellen dropped out of school and began working in a factory at the age of 14. At age 16, she made an unsuccessful suicide attempt.

Two years later, Ellen hoped to leave her pain and humiliation behind when she emigrated to Canada. It didn't work. She felt lost because she could not read signs. She was embarrassed because she could not read menus. Her inability to pay bills made her feel ashamed, and her inability to complete job application forms or prepare a resume made her feel angry.

As a wife and mother of four children, Ellen grew ever more fearful of being discovered. She became depressed. After a divorce, Ellen became a single mother. She blamed the teachers when three of her four children dropped out of school.

Finally, Ellen decided that she wanted to be a positive example for her children. She enrolled in a literacy program. Her success is told in the documentary film "Ellen's Story". Today, she sits on the boards of various literacy organizations, participates on panels, addresses conferences, and visits prisons and schools. She gives interviews to raise awareness that education is a birthright and that the long-term costs of low literacy are enormous.

Three years ago, Ellen received her diploma as a professional grief and loss counsellor. Following her lead, her three children who had dropped out returned to finish school. Two of her five grandchildren are honour students.

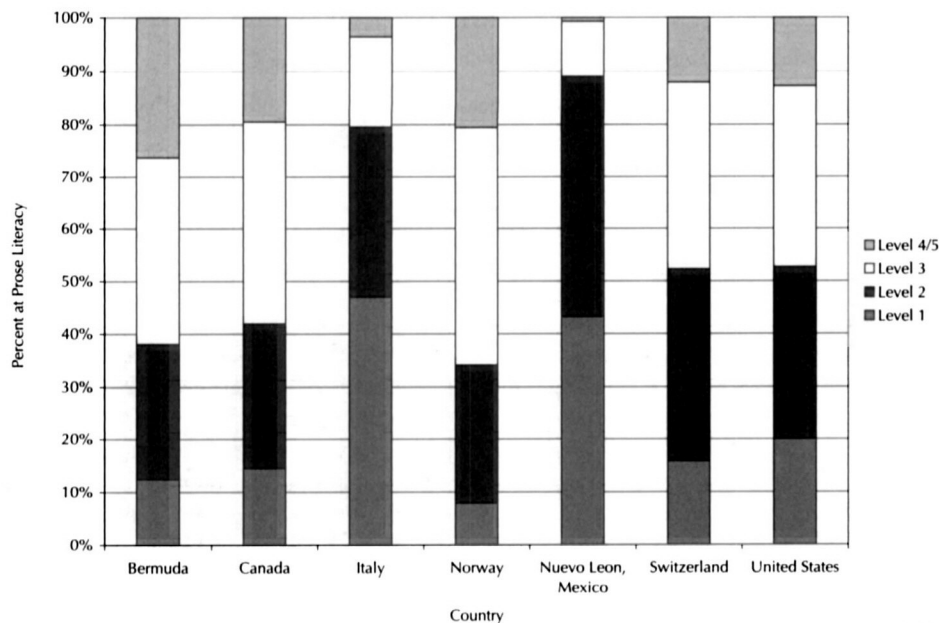
"The adult learning system is in great need of repair if it is to successfully help people like me," says Ellen. "All Canadians need to be able to look forward to the future without fear and to leave their children the legacy of freedom that education can bring. Children love as we have loved them, learn what we have taught them, and give back to society that which is given to them."

Given what we know about the links between literacy and health, the results of the 2003 Adult Literacy and Life Skills (ALLS) survey should be of interest to policy-makers concerned with the health of Canadians and the Canadian economy. According to the survey, there has been little change in literacy levels since 1994, with one in seven Canadians at the lowest level of literacy.<sup>2</sup> Only 58% of all Canadians had literacy skills at the level needed to cope with the demands of life and work in our current knowledge society and information economy.

The economic and social implications of low literacy have been outlined in numerous studies, calling for a national strategy to enhance basic literacy skills and support lifelong learning.<sup>8-11</sup> Presenters at the conference reinforced the notion that investments in learning are needed across the lifespan. Lucie Lemieux and Peter Calamai both pointed to the need for renewed efforts at the secondary school level to

improve the rate of high school completion and to improve literacy levels among new graduates.<sup>12,13</sup> Johanne Laverdure suggested that policies need to support integrated early childhood programs that improve children's readiness to learn by supporting at-risk families with young children, from birth to school-age.<sup>14</sup> Ellen Szita, a literacy advocate, demonstrated the high social and economic costs of low literacy. She illustrated the potential impact of investments in adult education (see Table II).

Investing in literacy is an important tool for addressing health disparities among Canada's vulnerable populations. Certain population groups have higher rates of low literacy.<sup>15</sup> In Canada, they include people who have completed few years of formal education, seniors, people with learning disabilities, some ethnocultural groups, Aboriginal peoples and Francophones. The new information economy may increase the marginalization of some groups and increase the gap in income levels and other



**Figure 1.** Percent of populations aged 16 to 65 at each skills level (prose literacy) Adult Literacy and Life Skills Survey, 2003

social determinants of health.<sup>16</sup> Other articles in this supplement explore the importance of considering language and culture in policy development aimed at improving both literacy and health outcomes.<sup>17-19</sup>

Figure 1 provides a picture of the level of prose literacy in the seven countries surveyed in the 2003 ALL survey.<sup>2</sup> Canada falls in the middle of the pack, based on a measurement of prose literacy. This is the knowledge and skills needed to understand and use written information, such as news stories or brochures.

The ALL survey also shows that in countries where adult learning is given importance in policy circles, there was a large increase in participation in adult education and training programs between 1994 and 2003. Policy-makers in Canada may learn from the experience of countries such as Norway, where people of all literacy levels participate in adult learning and training programs. Norway has a long tradition of adult learning and popular education. It has policies in place to increase the participation of adults with low literacy skills who are hard to reach.

#### About Health Literacy

The second policy perspective moves from a focus on basic literacy skills to look more specifically at health literacy. Policy developments addressing health literacy in the United States and other countries have implications for Canada.

Rima Rudd<sup>20</sup> noted that the topic of health literacy has moved to a more prominent place on the US agenda as a result of three major reports: *Health Literacy: A Prescription to End Confusion*,<sup>4</sup> *Literacy and Health Outcomes: Evidence Report/Technology Assessment*,<sup>21</sup> and *Literacy and Health in America*.<sup>22</sup> The first report from the US Institute of Medicine expanded the definition of health literacy, moving it out of the context of medical institutions and into the home, the workplace, and the community. It recognized that health literacy takes place in a context mediated by education, culture, language and the communication skills of the the "lay" person and the health practitioner.<sup>3</sup> The second report from the Agency for Health Care Research and Quality reviewed nearly 700 articles. The Agency reported that low literacy, as measured by poor reading skills, is associated with poorer health. The studies measured outcomes such as the use of health services, health knowledge, and preventive health practices.<sup>21</sup> The third report from the (US) Policy Center of the Educational Testing Service reinforced the limitations of measuring health literacy through an exclusive focus on written or printed texts.<sup>22</sup>

Ilona Kickbusch extended current thinking about health literacy by suggesting that access to health information and services is a basic right and that health literacy is a key action area for health promotion.<sup>23</sup> She

noted that health literacy enables people to navigate the system; find information; understand their rights; and make choices that prevent and improve disease outcomes, and enhance quality of life. While education and literacy are important determinants of health, health literacy is becoming increasingly important for social and economic development. She recommended investments in measuring health literacy, understanding the impact of health literacy on health, and improving the health literacy of population groups through public health interventions.

In previous articles, Kickbusch and Donald Nutbeam emphasized the potential of health literacy to enable individuals and communities to take control of their health.<sup>24,25</sup> Other presenters explored the concept of health literacy and empowerment. This is summarized in the article by Heather Hemming and Lisa Langille.<sup>26</sup>

Miriam Rossi offered the example of a diabetes prevention control program for black communities in Toronto. She called for policies that support culturally sensitive health information in plain language and the participation of community members in designing and delivering public health programs. Marcia Drew Hohn highlighted the role that the adult education sector can play in improving health literacy. She cited the success of participatory program models that improve the health literacy among students at an immigrant learning centre.<sup>27</sup>

#### About Current Activities

To improve overall literacy and health literacy in Canada, policy-makers need to look beyond a focus on the public health sector or any other single sector.<sup>25,27</sup> The conference delegates called for intersectoral collaboration, particularly between the education and health sectors, at the national, provincial/territorial and local levels. To date, some constructive steps have been taken towards integrated policy and program development across these two sectors.

At the national level, strategies to improve school health have been endorsed by a Joint Council of Ministers of Education and Deputy Ministers of Health. The Canadian Council on Learning has established a Health and Learning Knowledge Centre (see Table III). In addition to formal recognition of literacy as a determinant of health, in

2004, the Minister of State for Public Health spoke about the importance of literacy and health literacy to the health of Canadians in a speech at the closing session of the conference.<sup>28</sup> The CPHA's National Literacy and Health Program (NLHP) has brought together 27 national health associations to raise awareness about the links between literacy and health and continues to provide opportunities for intersectoral networking, information exchange and project development.<sup>29</sup>

At the regional level, Marg Rose described a project of Literacy Manitoba. The project brought together health and literacy workers in regional workshops called "One Day Wonders". This project recognized the overlap in client groups seen by health service providers and adult educators. It aimed to help health educators break down the barriers preventing them from reaching hard-to-reach clients, to encourage literacy practitioners to incorporate health topics in their curricula and to encourage partnerships and working relationships between literacy and health workers.<sup>30</sup>

While supporting intersectoral collaboration is one approach, community-based, participatory approaches can also inform policy development. Doris Gillis presented lessons learned in rural Nova Scotia. In this province, a community health board organized planning workshops with learners, coordinators of literacy programs, health practitioners and other key informants. Through this process, practitioners are becoming agents of change. Health literacy has found its way into provincial health policy dialogue.<sup>31</sup> Similarly, Linda Shohet discussed an action research project at the McGill University Health Centre, in partnership with the Center for Literacy of Quebec. This project laid the groundwork for a proposed new patient education policy and a new professional development program following a series of focus groups with patients, professionals, family members, and support staff. It became clear in these focus groups that the health education needs of some patients were not being met as a result of literacy barriers.<sup>32</sup>

Policies that support the collaborative training and education of health professionals have the potential to improve health literacy. College and university programs that prepare physicians, nurses and

TABLE III

## Canadian Council on Learning: Health and Learning Knowledge Centre

The Canadian Council on Learning will be an important partner in literacy and health policy development in Canada. Cooperation between the health and education sectors will be strengthened through the Council's Health and Learning Knowledge Centre. The Centre is composed of a consortium of organizations led by the Faculty of Education at the University of Victoria. It serves as a national network linking expertise about the vital connection between the learning and health of Canadians. Health literacy is one of the main themes that will be explored by the Centre. For more information about the Health and Learning Knowledge Centre, contact: [healthandlearning@ccl-cca.ca](mailto:healthandlearning@ccl-cca.ca)

allied health professionals for the field are important targets for policy development.<sup>4</sup> Elizabeth Diem described one example of practicum training for community nursing students at the University of Ottawa. Students are placed in language instruction classrooms for new Canadians, meeting weekly with the English as a Second Language (ESL) students to identify health issues. They then share information and facilitate discussions about health topics such as nutrition, accessing health services, mental health and exercise. The initial evaluation found that the nursing students learned to understand the socio-environmental determinants of health, to apply the standards of nursing practice in a community setting, to deal, in real time, with real people who want to learn about health, to build solid relationships with community members, and to better understand cultural perspectives.<sup>33</sup> Other health disciplines could look to this and other training models to better prepare professionals to work with our growing and increasingly diverse multicultural society.

While these initiatives are promising, there is a need for systematic evaluation to better inform policy decisions. This is also the case concerning strategies to increase the use of plain language, which has been the primary strategy to date to improve health literacy.<sup>34</sup> Plain language applies not only to print material, but to media messages and e-learning, a medium that currently is not reaching individuals and groups with literacy barriers who may benefit the most.<sup>35</sup>

Complicated language that is hard to understand is particularly problematic in health protection, patient safety and patient education. Different populations need health information, specific to them, in plain language. They also could benefit from measures that support personal capacity to act on health information. For example, Carol Henry suggested that new policies are required to improve knowledge

about food safety and food label literacy. She presented the results of the Thought for Food Project of Human Resources and Skills Development Canada. This project found that individuals and groups who most needed information about food and nutrition have limited access to this health information.<sup>36</sup> Nancy Hughes presented results of a Health Canada study showing that communicating health risks to low literacy adults through traditional messaging is not effective.<sup>37</sup> In addition to adapting tobacco messages on cigarette packages into plain language, other factors were identified as important to creating effective health messages. These include the relevance of the message to the audience and the capacity to put the message into practice.

Plain language is also critical to the marketing and packaging of pharmaceuticals. Drugs are the fastest growing sector of the health care system and more money is currently being spent on prescriptions than on physicians.<sup>38</sup> There is an unprecedented demand for accurate, understandable and easy-to-access information on medications. Millicent Toombs noted that accessible medication information in plain language will benefit those with low literacy levels, and every Canadian, including physicians. Policies are needed to address industry standards for labeling and packaging, access to medication information for consumers, and health system standards to support the correct, safe use of medication. Andrew Aitkens discussed the Therapeutic Products Directorate of Health Canada project to develop a template for product monographs requiring the use of plain language guidelines in patient information. He noted that while this represents an important step, policies are also required that institute national standards for labeling and packaging products.

Beyond the use of plain language, the US Institute of Medicine expert panel review on health literacy recommends developing best practice guidelines to more

broadly address consumer health and patient safety within the health system. Rootman noted that the Institute of Medicine review provides a useful model that may inform policy development in Canada. The report presents directions for system change that include:<sup>4</sup>

- ensuring that providers have adequate time for educating patients;
- ensuring that providers have adequate personal communication and education skills;
- providing clear and attractive written materials, that are tailored to language, culture and literacy level;
- using approaches such as videos, computer-based technology and popular education to share health information; and,
- introducing standards of accreditation for health care organizations that assess health literacy practices.

In summary, we know that low literacy has both a direct and indirect impact on health. There is sufficient evidence to warrant the consideration of new policies in Canada aimed at improving both basic literacy skills and health literacy. The next section suggests some of the additional information required to inform policy decisions and future directions for “literacy and health” policy.

### What we need to know

Policy change requires a recognition that a problem exists, clear evidence about the extent and consequence of the problem, the development of feasible policy options and solutions, and political will. With this in mind, we need to build knowledge in the following areas:

- evaluation to identify best practices in literacy and health;
- knowledge translation of research and best practices into language, tools, and resources that policy-makers and practitioners can use; and,
- effective ways for different levels of government to collaborate on literacy and health literacy issues across jurisdictions. More specifically, we need more information on:
  - **The cost of low literacy.** Research suggests a link between literacy and increased health care costs, but further study is required to understand this relationship.<sup>1,4,21</sup> The economic costs of low

literacy have been studied to a limited extent, estimating costs of low literacy in the workplace at \$4 billion per year.<sup>39</sup> We need more information on the cost and effectiveness of various programs to improve health through increasing literacy or health literacy in Canada. We also need information about factors that affect health care costs, such as the use of prevention and treatment services, and the quality of care and health outcomes for people with low literacy levels, especially seniors, people with disabilities, Aboriginal peoples, Francophones, and new Canadians.

- **The links between education and health, and lifelong learning and health.** Policy-makers need to consider what changes to the educational system for young people will have the greatest impact on literacy and health outcomes. We also need a better understanding of how to build and support adult education and training systems that support lifelong learning.
- **Strategies for special population groups in Canada.** Francophones, Aboriginal peoples and immigrants and refugees tend to have lower literacy scores than the population as a whole.<sup>15</sup> Other chapters explore the importance of language and culture in developing policies and programs. Policies should also be developed to build the capacity of other population groups with literacy barriers, such as children with special needs, alienated and isolated youths, and seniors.

Policies and programs that support families with young children are required because of the importance of early child development to learning and well-being. Evaluating integrated family literacy programs across the country will help guide policy development by providing evidence about both literacy and health outcomes.

Policies to improve the literacy levels of young people are also important. Between 1994 and 2003, there was a decline in literacy skills among young people aged 16 to 25.<sup>2</sup> Canada can draw from the experience of other countries, such as Norway, where inequality in literacy skills is the least among young people with different parental backgrounds in education.

Policy approaches that respect the distinct needs of special population groups

and build on their strengths to improve literacy and health literacy have the potential to make the greatest contribution to reducing health disparities.

### Future directions

The concluding article in this supplement contains the specific recommendations that were made at the conference. This section suggests three overall goals for policy development to improve literacy and health, and the major activities required to support these goals.

1. Policies that improve literacy outcomes.
  - Implement a pan-Canadian literacy strategy to improve adult basic skills and develop a lifelong learning system integrating learning opportunities in schools, the workplace and community.
  - Support early childhood education and family literacy programs.
  - Support efforts to reduce rates of high school drop out.
2. Policies that improve health literacy.
  - Support integrated policy and program development across sectors by enabling collaboration among health, education and other sectors.
  - Encourage and fund knowledge translation initiatives about literacy and health that reach practitioners, policy-makers and researchers (for example, through a clearinghouse, and by providing information and training).
  - Support strategies that bring together literacy practitioners and health professionals with adult learners through participatory research and program development.
  - Maintain national-level efforts in literacy and health to raise awareness among health professionals and to build links between literacy and health networks.
3. Policies that reduce disparities by strengthening literacy and health literacy levels among vulnerable groups.
  - Fund culturally sensitive, participatory research and knowledge translation efforts in the area of literacy and health identified in the previous section “What we need to know”.
  - Support leaders in Aboriginal, Francophone and ethnocultural

communities in their efforts to identify and implement strategies that respect language and cultural realities.

This approach to policy development will lead us to a uniquely pan-Canadian strategic policy agenda that addresses literacy as a determinant of health and health literacy as an important factor in improving the health of all Canadians.

## REFERENCES

1. Rootman I, Ronson B. Literacy and health research in Canada: Where have we been and where should we go? *Can J Public Health* 2005;96(Suppl. 2):S62-S77.
2. Statistics Canada and the Organization for Economic Cooperation and Development. *Learning a Living: First Results of the Adult Literacy and Life Skills Survey*. Ottawa and Paris: Statistics Canada and OECD Publishing, 2005.
3. Ratzan SC, Parker RM. Introduction. In: Selden CR, Zorn M, Ratzan SC, Parker RM (Eds.), *National Libraries of Medicine Current Bibliographies in Medicine: Health Literacy*. Vol. NLM Pub. No. CBM 2000-1. Bethesda, MD: National Institutes of Health, US Department of Health and Human Services.
4. Nielsen-Bohlman L, Panzer A, Kindig DA (Eds.). *Health Literacy: A Prescription to End Confusion*. Report of the Institute of Medicine Committee on Health Literacy. Washington, DC: National Academy Press, 2004;101-2.
5. National Forum on Health. *Canada Health Action: Building on the Legacy, Volume 1. The Final Report of the National Forum on Health*. Ottawa, ON: National Forum on Health, 1997.
6. Federal, Provincial and Territorial Advisory Committee on Population Health. *Toward a Healthy Future: Second Report on the Health of Canadians*. Ottawa: Health Canada, 2000.
7. Rootman I, Ronson B, Petch E. Clear Language Edition of Literacy and Health in Canada: Where Have We Been and Where Should We Go? 2000. Available online at: [http://www.cpha.ca/literacyandhealth/documents/Literacy\\_e.pdf](http://www.cpha.ca/literacyandhealth/documents/Literacy_e.pdf) (Accessed March 2005).
8. Standing Committee on Human Resources Development and the Status of Persons with Disabilities. *Raising Adult Literacy Skills: The Need for a Pan-Canadian Response*. June 2003.
9. Human Resources Development Canada. *Knowledge Matters: Skills and Learning for Canadians*. 2002. Available online at: <http://www.innovationstrategy.gc.ca> (Accessed March 2005).
10. Organization for Economic Cooperation and Development and Statistics Canada. *Literacy, Economy and Society: Results of the First International Adult Literacy Survey*. Ottawa and Paris: Statistics Canada and OECD Publishing, 1995.
11. Organization for Economic Cooperation and Development and Statistics Canada. *Literacy in the Information Age: Final Report of the International Adult Literacy Survey*. 2000. Available online at: [www.statcan.ca/english/freepub/89-588-XIE/about.htm](http://www.statcan.ca/english/freepub/89-588-XIE/about.htm) (Accessed March 2005).
12. Calamai P. From speech "A Wake-Up Call for Canadian Literacy". Available online at: <http://www.cpha.ca/literacyandhealth/speeches2.htm#Awakeup> (Accessed March 2005).
13. Lemieux L. Commentary in roundtable discussion, "Implications pour la recherche et le transfert des connaissances en alphabétisation et santé en français" at the Second Canadian Conference on Literacy and Health, 2004. Available online at: <http://www.cpha.ca/literacyandhealth/finalreport.html> (Accessed March 2005).
14. Laverdure J. From speech "Integrating Services for At-Risk Children in Quebec". Available online at: <http://www.cpha.ca/literacyandhealth/speeches2.htm#Integrating> (Accessed March 2005).
15. Statistics Canada. The Daily, International Adult Literacy and Skills Survey, November 9, 2005. Available online at: <http://www.statcan.ca/Daily/English/051109/d051109a.htm> (Accessed May 2005).
16. Oxman-Martinez J, Hanley J. *Health and Social Services for Canada's Multicultural Population: Challenges for Equity*, a discussion paper prepared for Canadian Heritage for the Canada 2017 Policy Forum, March 2005.
17. Bouchard L, Gilbert A, Landry R, Deveau K. Social capital, health, and Francophone minorities. *Can J Public Health* 2006;97(Suppl. 2):S16-S20.
18. Smylie J, Williams L, Cooper N. Culture-based literacy and Aboriginal health. *Can J Public Health* 2006;97(Suppl. 2):S21-S25.
19. Zanchetta MS, Poureslami IM. Health literacy within the reality of immigrants' culture and language. *Can J Public Health* 2006;97(Suppl. 2):S26-S30.
20. Rudd R. Presentation on "Literacy and Health in America". Available online at: <http://www.cpha.ca/literacyandhealth/BuildingKnowledge.htm#Rudd> (Accessed March 2005).
21. Agency for Health Care Research and Quality. *Literacy and Health Outcomes: Evidence Report/Technology Assessment*, 2004, Number 87. Available online at: <http://www.ahrq.gov/clinic/epcms/litsum.pdf> (Accessed March 2005).
22. Rudd R, Kirsh I, Yamamoto K. *Literacy and Health in America*. Policy Centre of the Educational Testing Service, 2004. Available online at: <http://www.ets.org/research/pic> (Accessed March 2005).
23. Kickbusch I. From speech "Health Conscious Societies in the 21<sup>st</sup> Century: Implications for Health Literacy and Canada". Available online at: <http://www.cpha.ca/literacyandhealth/speeches2.htm#Healthconscious> (Accessed March 2005).
24. Kickbusch I. Health literacy: Addressing the health and education divide. *Health Promot Int* 2000;16(3):289-97.
25. Nutbeam D. Health literacy as a public health goal: A challenge for contemporary health education and communication strategies into the 21<sup>st</sup> century. *Health Promot Int* 2000;15(3):259-67.
26. Hemming HE, Langille L. Building knowledge in literacy and health. *Can J Public Health* 2006;97(Suppl. 2):S31-S36.
27. Drew Hohn M. *Empowerment Health Education in Adult Literacy: Guide for Public Health and Adult Literacy Practitioners, Policy-makers and Funders*, 1998. Available online at: <http://www.nifl.gov/nifl/fellowship/reports/hohn/HOHN.HTM#org> (Accessed March 2005).
28. Bennett C, Minister of State for Public Health. Speech at the Second Canadian Conference on Literacy and Health, October 19, 2004. Available online at: <http://www.cpha.ca/literacyandhealth/speeches2.htm#ClosingR> (Accessed March 2005).
29. Wilson R. *A Retrospective Evaluation of the National Literacy and Health Program*, September 2004. Available online at: <http://www.nlhp.cpha.ca/clhrp/evalu-e/Evaluation%20of%20NLAHP.Final%20Report.pdf> (Accessed March 2005).
30. Rose M, Moody C. Presentation on "One Day Wonders" project. Available online at: <http://www.cpha.ca/literacyandhealth/BestPractices.htm#Rose> and *Literacy and Health: Defining Links and Developing Partnerships*. Available online at: <http://www.health.mb.literacy.ca/> (Accessed March 2005).
31. Gillis D. Presentation on the results of Health Literacy in Rural Nova Scotia Research Project, 2004, Taking off the Blindfold, Seeing How Literacy Affects Health. Available online at: <http://www.cpha.ca/literacyandhealth/BuildingHealthyPublicPolicy.htm#Hohn>. The full report is available at: <http://www.nald.ca/healthliteracystfx/links.htm> (Accessed March 2005).
32. Centre for Literacy of Quebec. Health Literacy Project, Phase 1: Needs Assessment for the Health Education and Information Needs of Hard-to-Reach Patients, Part 2 - Report on the Needs Assessment, 2001.
33. Diem E. Presentation on Lessons Learned from Community Health Nursing in the ESL Classroom. Available online at: <http://www.cpha.ca/literacyandhealth/BestPractices.htm#Diem> (Accessed March 2005).
34. Shohet L, Renaud L. Critical analysis on best practices in health literacy. *Can J Public Health* 2006;97(Suppl. 2):S10-S13.
35. Balka E. Presentation on Opportunities and Challenges: Using the Internet as a Tool. Available online at: <http://www.cpha.ca/literacyandhealth/BuildingKnowledge.htm#Balka> (Accessed March 2005).
36. Henry C. Presentation on Literacy and Health in the Food Sector: A report on Essential Skills in Both Market and Community. Available online at: <http://www.cpha.ca/literacyandhealth/BuildingHealthyPublicPolicy.htm#Henry> (Accessed March 2005).
37. Hughes N. Presentation on Adapting Health Canada's Tobacco Package Warnings for Less Literate Canadians. Available online at: <http://www.cpha.ca/literacyandhealth/BuildingHealthyPublicPolicy.htm#Hughes> (Accessed March 2005).
38. Aitkens A, Harrington G, Mackenzie L, Toombs M. Panel Discussion on Medication Information for Consumers: A Plain Language Prescription. Available online at: <http://www.cpha.ca/literacyandhealth/BuildingHealthyPublicPolicy.htm#Aitkens> (Accessed March 2005).
39. Canadian Business Task Force on Literacy, Measuring the Costs of Illiteracy in Canada. In: *Literacy and Health: A Forum for Collaboration*. Calgary, AB: Calgary Adult Literacy Awareness Project, 1998.