HEALTH LITERACY AND IMMIGRANT POPULATIONS

Dr. Laura Simich

Scientist, Social Equity and Health Research
Centre for Addiction and Mental Health
Toronto, Ontario, Canada

Assistant Professor, Department of Psychiatry and Department of Anthropology,
University of Toronto

Health and Wellbeing Domain Leader
Ontario Metropolis Centre (CERIS), Toronto

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HEALTH LITERACY AND IMMIGRANT POPULATIONS POLICY BRIEF

1.0 INTRODUCTION

Keeping up with the latest health issues and what they mean in our daily lives is challenging for everyone—all the more so for newcomers with limited English proficiency and little experience of the Canadian health care system. This policy brief provides an overview of recent research and policy implications of *health literacy* for immigrant populations in Canada.[1]

Good health, defined as functioning well and feeling good in daily life, is a key outcome of successful immigrant settlement and integration. How well immigrants are able to stay mentally and physically healthy is important, not just for newcomers, but for everyone in Canada.

Health literacy is a strong predictor of health status and an important means of promoting and maintaining health for all populations. A relatively new concept, the term "health literacy" describes the ability to obtain, understand *and use* health information (Rootman et al., 2007). Health literacy is a function of basic literacy and education, but it is much more. Today, definitions of health literacy are broad in scope, holding more potential for policy innovation and implementation.

The basic idea behind health literacy is simple: the greater a person's ability to learn about health, the better that person's health. Health literacy, however, is not just a personal attribute or a one-way process that depends upon an individual's ability to comprehend written information. Rather, it is a multidimensional communication process. It also involves health care providers' competencies, the "legibility" of the health care system for diverse groups and appropriate policy and programs to achieve effective communication.

Results of the International Adult Literacy and Skills Survey (IALSS), which tested 23,000 Canadians, show that 60% of adults in Canada lack the capacity to obtain, understand and act upon health information and services and to make appropriate health decisions (Canadian Council on Learning 2007). The survey assessed individual and collective health literacy skills in the areas of health promotion, health protection, disease prevention, healthcare maintenance and system navigation.
Literacy and health literacy are related directly and indirectly to health outcomes. Those with lower literacy skill levels are 1.5 to 3 times more likely to experience negative health outcomes, although it is difficult to disentangle the effects of poor literacy and poor access to health care (DeWalt et al. 2004). Other outcomes of low literacy and health literacy include lower incomes and less community engagement-- outcomes that are also associated with poorer health and quality of life.

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How then is health literacy different from general literacy or health promotion? Having good health literacy skills involves understanding health issues, knowing how to use the health care system, having the ability to advocate for health care and having access to information and resources that help to promote physical and mental health in everyday life. Health literacy is "a complex interaction that goes beyond reading and it is mediated by education, culture, and language" (Institute of Medicine, 2004).

Critical health literacy describes the ability to use health information to exert greater control over life situations, and sees health literacy as a right and an issue of equity and citizenship that empowers people to achieve and maintain wellbeing (Nutbeam 2000; Kickbusch et al. 2005). Attention should be paid to health literacy among immigrants, because these are the very areas in which immigrants are especially disadvantaged (Rootman and Gordon-El-Bihbety 2008).

Immigrants arrive in Canada with variable knowledge of health issues and health care experiences. The resettlement experience produces new health challenges and new opportunities for knowledge exchange about health, in family life, schools, neighbourhooods and workplaces. Enhancing health literacy applies not only to medical settings, but also to a variety of everyday settings and across the life course; hence, its relevance to immigrant settlement and integration.

2.0 WHAT DO WE KNOW ABOUT HEALTH LITERACY AND IMMIGRANTS?

According to recent health literacy surveys, Canadians with the lowest health literacy scores are 2.5 times as likely to perceive themselves as being in fair or poor health as those with higher health literacy scores. This relationship holds even after removing the impact of age, gender, education, mother tongue, immigration and Aboriginal status (Canadian Council on Learning 2008).

The impact of health literacy is even greater for immigrants, among other sub-groups. Recent immigrants, those with lower levels of education and with low French or English proficiency, seniors and people receiving social assistance tend to have lower levels of literacy and health literacy (Rootman & Gordon-El-Bihbety, 2008: 21). About 60% of immigrants fell below Level 3 in prose literacy (considered the minimum level for coping with the demands of everyday life and work in a knowledge economy) compared to 37% for the Canadian-born population (CPHA 2006: 27). This proportion does not vary by length of stay in Canada.

Barriers to health literacy, such as lack of meaningful information about health issues or how to access preventive services, may contribute to the deterioration in health status of immigrants over time (Zanchetta and Poureslami 2006). Developing health literacy skills among immigrants in Canada, however, can enhance immigrant health and adaptation and general population wellbeing.

Relatively little research has been done on health literacy and immigrants in Canada, but it is becoming clear that health literacy is an underestimated problem. Immigrants experience many linguistic and cultural barriers to accessing health care in Canada, but we do not know enough about how these barriers affect health outcomes or the role that health literacy may play. Understanding health literacy among immigrants is challenging because it entails the need to

accommodate different cultural views of the world, science and health (for example, differing interpretations of risk). In short, it involves understanding "different realities" among service providers and immigrants (Zanchetta and Poureslami 2006:S26).

Many health care providers have very limited understanding of immigrants' health needs. These include the need to improve trust and communication in addition to providing health information, which highlights the two-way nature of the health literacy process (Anderson et al. 2003; Vissandjee & Dupere 2000; Weerasinghe 2001). Policies that promote cultural competency training for health and social service providers, and therefore more effective services, may be helpful.

Some evidence suggests practical ways to enhance immigrants' health literacy skills. These include using clear and multiple forms of communication, using community-based development and delivery methods and increasing cultural competence in health and social services. Some evidence also supports the idea that developing policies to address health literacy problems among immigrants can have a positive impact on individual, community and population health in Canada. As background to future policy discussions, the sections below describe some known relationships of health literacy to population characteristics, chronic diseases, and social and cultural determinants of health.

2.1 HEALTH LITERACY, LANGUAGE PROFICIENCY AND GENDER

Variations in literacy skills lead to a wide range of differences in social and economic outcomes. International studies consistently show that adults with less than a high school education perform well below adults with higher education in many areas of life. Immigrants score lower at all literacy levels than the Canadian-born, with large differences by gender, even though recent immigrants tend to be better educated.

Immigrant women have been assumed to have lower health literacy than immigrant men because of their lower literacy scores. The 2003 International Adult Literacy and Skills Survey (IALSS), estimated that 32% of foreign-born women have extreme difficulty with and only limited use of printed materials, compared to 24% of foreign-born men and approximately one-tenth of Canadian-born women and men (Rootman & Gordon-El-Bihbety, 2008:17). Addressing immigrant women's lower level of health literacy is important, because women often play a central care giving role in families and other social networks.

In fact, results of analysis of the Longitudinal Survey of Immigrants to Canada (LSIC) also have shown that poor language proficiency is associated with poor self-reported health at both 6 months and 2 years after arrival, and that this association primarily involved women and refugees (Pottie et al. 2008). Using the LSIC data, researchers also found that self-reported poor health was significantly related to lack of improvement of language proficiency over time for both immigrant men and immigrant women (Ng et al. 2008b).

Regression analysis of IALSS data also has shown that European immigrants scored higher in health literacy than non-European immigrants in Canada after controlling for age, sex, income, region and period of immigration (Ng and Omariba 2008). Maternal education, own education, daily literacy practice and participation in education and training were found to contribute to

health literacy. These findings point to the need for more research into factors that contribute to health literacy, including patterns of access to health information and gender.

These associations have obvious implications for language training as well as health care. A lack of affordable English or French as a second language programs for adults is a barrier for newcomers to Canada who wish to improve their literacy and health literacy skills, which in turn promote social integration and wellbeing. Without basic literacy skills, new immigrants have difficulty becoming health literate enough to manage health-relevant information within the context of the Canadian health system (Rootman & Gordon-El-Bihbety, 2008: 26).

The paucity of language programs is also a concern for enhancing health literacy among immigrant children. For example, in Ontario between 2000 and 2007, there was a 29% increase in the percentage of elementary schools with English as a Second Language (ESL) students, while the percentage of schools with ESL teachers declined by 23% (People for Education, 2007).

Identifying and addressing such social and structural disparities can directly affect health and settlement outcomes for immigrants. For example, the effect of education on health is stronger for immigrants than for non-immigrants (Macdonald and Kennedy 2004). In fact, longitudinal research has shown that English fluency among Southeast Asians was a significant determinant of both depression and employment, especially for women; the study further found that women who participated in language training benefited more than did men (Beiser and Hou 2001).

2.2 HEALTH LITERACY AND CHRONIC DISEASES

Being able to understand written medical information, follow instructions, ask questions about treatments and communicate about ongoing health concerns is important in chronic disease management. Self-management and shared decision-making requires that patients fully understand their health problems, the concept of risk, treatment options, and how to access care. The trend toward increased self-management and patient-directed care makes it necessary for patients and their families to be able to understand more complex information, which is an added difficulty for some immigrants whose English or French language proficiency and knowledge of health issues and the Canadian health care system may be limited.

Low health literacy has serious implications with respect to the costs of preventing chronic diseases in Canada (Canadian Public Health Association 2006). Many studies in North America have shown that limited literacy is associated with higher rates of chronic disease, and that minority and ethnocultural groups have less awareness of health promoting behaviours, face more barriers in accessing preventative health care, and experience linguistic and cultural barriers to existing services. There is some evidence that culturally and linguistically tailored programs, for example, for cancer screening, can be helpful in countering these problems (Ahmad et al. 2005).

Some chronic diseases disproportionately affect immigrant sub-groups. For example, diabetes is highly correlated with health literacy and immigrant status in Canada (Glazier and Booth 2007). This disease disproportionately affects some immigrant groups, such as South Asians, who have higher rates of diabetes than the Canadian-born population. When chronic diseases such as asthma require more intensive interventions, immigrants also may be at greater risk for

inadequate or inappropriate care (Poureslami et al 2007b). Studies in the U.S. have shown that low health literacy compounds the risk of asthma for patients presenting in emergency departments.

2.3 HEALTH LITERACY, POVERTY AND EMPLOYMENT

Health literacy is an important social determinant of individual and population health. As such, it interacts with many other factors that contribute to differential social outcomes and health disparities. Social determinants of health such as education, poverty, and social networks are even more critical for minority, immigrant and refugee populations than for the population in general (Dunn and Dyck 2000).

Disentangling effects of immigration, ethnicity and poverty is difficult, because many high recent-immigration urban areas are also low-income areas. A study of hospitalizations of recent immigrant in Toronto found that rates of admission were higher in certain areas of the city with high proportions of recent immigrants and that income was associated with hospitalization (Glazier et al. 2004). One explanation is that recent immigrants have less knowledge of, and access to, preventative and primary health care services and information—that is, lower health literacy. Other studies show that visible minorities in Canada visit physicians and access cancer screening services *less* frequently than 'white' people (Quan et al 2006), which also points to health literacy gaps and unaddressed barriers to navigating the health care system. These studies suggest that locating health information and referral services in immigrant communities is crucial.

There is little information about the relationship of employment and literacy among immigrants, although we know that literacy is an important component of economic integration for immigrants. A recent analysis of survey data by Statistics Canada demonstrates that that there are significant differences in earnings outcomes for immigrants and non-immigrants due to measurable literacy skills (Ferrer et al. 2004). The analysis does not suggest how literacy limitations should be overcome, but we may assume that job-related literacy initiatives, including health literacy during employment training and in the workplace, could make a positive contribution.

Unemployment and poor conditions of employment impact health directly and indirectly. Economic hardship, unmet expectations and underemployment among immigrants and refugees are significantly related to psychological distress (Simich et al. 2006). Precarious or temporary work situations also affect access to preventative health services and information (Oxman-Martinez et al. 2005).

2.4 CULTURAL AND LINGUISTIC BARRIERS TO HEALTH LITERACY

Common sense suggests that providing written information alone is never enough to ensure good health. Social and cultural context, ways of communicating health information and timing also matter. Health literacy integrates participatory approaches to communication and addresses structural inequalities, in contrast to traditional health education that is often one-way and individually based.

A narrow understanding of health literacy as functional verbal skills unfortunately still prevails among service providers. When this approach is applied to immigrants in Canada who are not proficient in official languages, the social and cultural context of communication practices are neglected and the meanings of important messages are lost. Consideration of cultural diversity must extend beyond language to a broader appreciation of cultural values, help-seeking beliefs and community engagement.

Immigrants report more barriers to health care—particularly language barriers (Bowen 2001)--than non-immigrants and perceive that existing health services and information are not sensitive to cultural, faith, language or literacy needs of diverse communities. Qualitative factors are critical in explaining health literacy problems for immigrant populations and in designing effective health literacy interventions that break down communication barriers. Factors that affect health literacy for immigrants may include language proficiency, prior education about health issues in the country of origin, cultural beliefs about illness, familiarity with the health care system in Canada and perceptions of cultural awareness among health service providers and institutions. There is growing recognition that safe and effective health care requires the provision of trained cultural or community interpreters in all health care settings (Abraham and Rahman 2008).

Settlement workers also need more training to provide health information and referrals as part of meeting the needs of newcomers in the short- and long-term. Integrating health literacy programs into existing settlement programs may help bridge service providers' and immigrants' needs. Both formal social service and health organizations and informal community networks can serve as means for exchanging information and enhancing health literacy among immigrants.

Building health literacy is a long-term process, beginning during early settlement and continuing throughout adaptation and integration. A recent pilot study of immigrant's information needs, uses and seeking behaviours found that health information is among the top needs of longer established immigrants (Caidi 2007). Barriers identified by immigrants include fear of speaking English; suspicion of authority; isolation and sense of being an outsider; reliance on children, who may have inadequate experience and language proficiency themselves, to find accurate information; lack of familiarity with Canadian information sources; cultural differences; and not knowing how to ask for services (Caidi 2007).

2.5 MENTAL HEALTH LITERACY AMONG IMMIGRANTS

Mental health promotion is critical for population health and for long-term immigrant settlement and integration. Lack of public awareness and stigma concerning mental illnesses are widespread problems in the Canadian population, so mental health literacy promotion must be both broad and inclusive (Bourget and Chenier 2007; Standing Senate Committee 2006). The Canadian Alliance on Mental Illness and Mental Health (2008) has identified new Canadians as a priority group for mental health literacy interventions. In multicultural focus groups, they found that new Canadians tended to identify life stress, such as the challenges of cultural adaptation, as the primary cause of mental health problems (CAMIMH 2008:21).

Mental health literacy may be defined as knowledge and beliefs about mental disorders which aid their recognition, management or prevention (Jorm 2000). Mental health literacy entails knowledge and beliefs about mental health disorders that emerge from general pre-existing belief systems. Lack of mental health literacy results in delays seeking appropriate treatment and creates difficulties communicating with health professionals.

Research suggests that lay people generally have a poor understanding of mental illness. They are unable to identify mental disorders, do not understand what causes them, are fearful of those who are perceived as mentally ill, have incorrect beliefs about treatment, are often reluctant to seek help for mental disorders and are not sure how to help others. In some languages, there are no specific equivalent terms for mental illnesses.

Although new immigrants in general tend to suffer from mental illness in lower proportions than the Canadian-born, refugees may have acute unmet needs for mental health care because of traumatic pre-migration experiences. Resettlement stresses such as family separation and discrimination experienced after arrival in Canada also tend to increase mental health risks (Beiser 2005). Immigrants and refugees, however, have less access to mental health information and services when they need them.

This disparity in mental health services is partly due to lack of familiarity with, and mistrust of, mental health practitioners in Canada. It is also due to linguistic barriers and lack of culturally competent mental health services in the Canadian mental health care system. Mental health literacy could play an important role in addressing this disparity. Mental health promotion and public education campaigns must therefore engage more actively with immigrant and established ethnolinguistic communities.

Culture is of particular interest with regard to mental health literacy because there are significant cultural variations in how people recognize, explain, experience and respond to mental disorders. These are often closely connected to social conditions, such as resettlement stresses, social support networks, and differing perceptions of appropriate informal and formal health care. People with mental health problems frequently see mental health as a private matter because they fear the deleterious effects of shame, which can delay help-seeking behaviour or cause failure to adhere to treatment.

Current research on mental health experiences in ethnocultural and immigrant communities in Canada strongly suggests that newcomer communities would like to have greater access to culturally-informed, mental health information and services; community-based and collaborative (community organizations and health care institutions) mental health promotion initiatives are non-existent but are considered desirable (Simich et al 2009). Government agencies could play a more effective role by integrating mental health literacy initiatives in existing immigrant health and settlement policy and programs and by exploring ways to collaborate across the mental health and settlement sectors.

The Mental Health Commission of Canada, mandated to articulate a national mental health strategy, opens an important window for collaboration and policy innovation targeting underserved immigrants and ethnocultural groups. Immigrant groups also are becoming

priority populations in provincial mental health planning intended to address issues of equity and cultural diversity.

2.6 A ROLE FOR HEALTH LITERACY IN SETTLEMENT AND INTEGRATION

Enhancing mental and physical health literacy among immigrants is congruent with well-planned immigrant settlement and integration and can potentially reduce health inequities. Analysis of determinants of health literacy (including education attainment, mother tongue, immigrant status and the intensity of the skill used) explain roughly 60% of the observed variance in health-literacy skill in Canada. This means that differences in health literacy are generally predictable and amenable to intervention.

This simple fact invites innovation (Rootman and Gordon-El-Bihbety 2008), but health literacy innovations should be both policy- and community-driven. A critical health literacy perspective emphasizes the active role that immigrant communities and service providers can play. As a form of empowerment, health literacy encourages continuing public health education and civic participation that can benefit immigrant families, communities and the population as a whole.

2.7 GOOD PRACTICES

Based on the limited evidence available, some good practice examples, policy implications and strategic directions may be suggested. Shohet and Renaud (2006) distinguish three domains of good health literacy practices: clear writing; oral communication (between patients and health care professionals, training for health professionals targeting low-literate groups); and visual tools (such as video and other non-written means of communication).
An emerging literature describes promising health promotion and community-based interventions with established immigrant communities. The most promising practices combine multitasking approaches and direct inter-personal communication, usually by a health educator who is linguistically competent and culturally acceptable to the community involved. For example, it is effective to combine easy-to-read written patient education materials with oral instruction, use of existing social networks, cultural interpreters and community facilitators (Elder et al. 2005). In addition, relying on a variety of public outreach sites are important for immigrant communities for which community health centres, schools, ethnic associations, places of worship and shopping malls are often points of contact.

Evidence from both Canada and the U.S. shows that using participatory educational methods for learners to identify, research and learn about health issues results in improvement to most aspects of health literacy (National Collaborating Centre for Determinants of Health 2007). Projects using qualitative methodologies, participatory and collective engagement practices have been found to be the most successful. One example of an interactive health promotion program that involves immigrants directly is a six-week course in chronic disease management called *Journey to Wellbeing*, which offers peer leadership training in health promotion for different ethnolinguistic communities. This program is being provided in some hospitals in England, the U.S., British Columbia and Ontario in Tamil, Chinese and Farsi.

Several initiatives related to health literacy in Canada use a broad range of approaches, including communication, education, community development, organizational and network development as well as the development and implementation of policies. They target a broad range of groups, including older adults, people with disabilities, Aboriginal peoples, literacy learners, and people with mental illness. One Canadian project in particular has creatively used a photonovella about nutrition as a health literacy tool with ESL-speaking immigrant women (Nimmon 2007).

The British Columbia Health Literacy Research Team has carried out projects focusing on Farsi-speakers (Poureslami et al. 2007a) and has begun to study ways to help Spanish-speaking immigrants develop health literacy skills. This work has shown that using culturally-relevant videos is an effective means of increasing awareness and use of health services. Most existing health literacy practice examples do not focus specifically on recent immigrants, which suggests that more can be done with immigrants in the early years of settlement.

One successful mental health literacy resource is the booklet, *Alone in Canada: 21 Ways to Make it Better,* produced by the Centre for Addiction and Mental Health in 18 languages and available in print and on line. The content for *Alone in Canada,* a self-help guide that focuses on ways to reduce mental distress during settlement, was developed in collaboration with immigrants and refugees, who shared their personal experiences and adaptive strategies in focus groups during research for the booklet (Simich et al. 2005). The research and development of this compelling booklet was funded by Citizenship and Immigration Canada, Ontario, and it is often used in newcomer ESL language classes. Alone in Canada and other multilingual resources can be found on line at:
http://www.camh.net/About_Addiction_Mental_Health/Multilingual_Resources/index.html.

2.8 EVALUATION AND ASSESSMENT OF HEALTH LITERACY

Health literacy interventions appear to help counteract factors such as lack of culturally and linguistically relevant health services, unequal access to quality health services and lack of preventive health care. Most documented health literacy interventions have involved accessing and understanding written health information, and few have been focused on understanding oral or other non-written communication. Nevertheless, a participatory educational approach appears to be effective (NCCPH 2007).

Most evaluations of health literacy interventions have measured preference or satisfaction rather than usability. Evaluation studies also have excluded those who have a level of education lower than 9th grade and who do not speak English as a first language (Shohet and Renaud 2006); therefore, generalizations to populations with limited literacy are unreliable.

Some tools to assess cultural appropriate health education have been developed. One tool, called the Suitability Assessment of Materials (SAM), scores patient education materials on "readability, cultural appropriateness and how well they enhance the reader's self-efficacy" (Weintraub et al.2004). In a study to assess prostate cancer education materials, the researchers found that most such materials scored poorly.

A similar Cultural Sensitivity Assessment Tool (CSAT) was use to assess cancer articles in English-language ethnic newspapers in Jewish, Black/Caribbean, First Nations and East Indian ethnic groups and found that articles did not refer to all ethnic groups and the majority of those referring to East Indian groups were not culturally sensitive (Friedman and Hoffman-Goetz 2006). The authors found that the CSAT provides quick, useful, but superficial assessments.

When assessing health literacy initiatives, policy makers should consider whether intended groups are represented in the outreach materials, whether the groups are considered high-risk, if the information sources are considered credible and whether the prevention and treatment options are both understandable and appropriate. As Weintraub (2004) also suggests, whether the material promotes self-efficacy by including models of the same ethnic background is very important.

3.0 POLICY AND PROGRAM IMPLICATIONS

Enhancing mental and physical health literacy for immigrants in Canada in the near future will mean that public health and health promotion efforts will take immigrants' current health literacy skills into account and act to fill existing gaps. Similarly, the immigration sector will be able to promote immigrant health and adaptation, and therefore Canadian population health, by integrating health literacy initiatives into settlement programs. Increasing cross-sectoral linkages will reflect the fact that achieving immigrant health, settlement and integration are in reality inseparable objectives. Optimally, there should be national, provincial and local involvement to reflect the various levels of government action required.

Beginning with the evidence reviewed in this policy brief, specific areas that need immediate attention are these:

- Focusing on immigrant women's and refugees' health literacy needs;
- Bridging early and mid-settlement health information needs for immigrants;
- Ensuring that mental health promotion and chronic disease prevention initiatives are targeted to immigrant groups and use participatory, community-based strategies;
- Working with employers and particularly with educational institutions to enhance immigrants' health literacy about health promotion and preventive health;
- Supporting efforts to increase the cultural competence of health and social service providers to develop health literacy skills and deliver programs effectively to immigrants, including providing mandatory cultural interpreter services
- Funding more basic and applied research on health literacy and immigrant groups.

3.1 EXAMPLES OF PRACTICAL HEALTH LITERACY APPROACHES FOR IMMIGRANTS

3.1.1 Using plain language

Using plain language does not mean just using simple words, but rather communication that engages and is accessible to the intended audience (Stableford and Mettger 2007). Plain language is only one of many broad-based solutions needed to address low health literacy that

benefits everyone.

3.1.2 Requiring good translation practices

Medical translation is a complex process involving far more than mechanically converting one language to another (Elhadad 2006). Attention to translation procedures can improve the quality of care for limited English proficient patients (Garcia-Castillo D. Fetters MD. 2007). Studies have shown that printed educational materials are often culturally insensitive and do not take into account people with low literacy or the ESL population (Guidry and Walker 1999; Mohrmann et al. 2000). The best translation practices include cultural experts in the process of developing relationships and educational resources.

3.1.3 Using pictures, theatre and videos

Pictures closely linked to written or spoken text can, when compared to text alone, markedly increase attention to and recall of health education information (Austin et al. 1995; Dowse 2004; Dowse and Ehlers 2005; Houts et al. 2006; Osborne 2006). In printed educational material for example it has been shown that the visual images are not inclusive of the increasing multicultural population of our societies.

Theatrical and other dramatic presentations may be effective (Hovey et al. 2007) in combination with other health literacy approaches. For example, a cervical screening video, *The Preservation of Traditions,* has been produced in the Khmer language to target Cambodian-American women (Mahloch et al.1999). Cultural context was provided, use of biomedical terminology minimized and role modeling emphasized. A video has also been developed as the product of a hepatitis B control intervention for Vietnamese immigrants (Burke et al. 2004).

One video targeting newcomers in particular, *Navigating the US health care system,* was produced at the University of Nebraska Medical Center and tells the story of a boy who goes to the doctor for his school physical (Bobal et al. 2007). Knowing that the health information needs of ESL student can be extensive, Kate Singleton, a healthcare social worker and ESL instructor, has developed instructional tools using picture stories for adults, with titles such as "Emergency," "A Doctor's Appointment" and "Stressed Out," which build vocabulary and critical thinking and life skills (Centre for Adult English Language Acquisition 2008).

In Canada, culturally sensitive video clips that were the product of a study with the Iranian community, were aired on local television channels of the Greater Vancouver Area. The study showed that the Iranian community, like many immigrant communities, tends to exchange health information by word of mouth and emphasizes the importance of trust. The video depicted short dramas in which actors as members of the target community engaged in solving health problems with the BC Health Guide services.

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