Sitting across from me in the crowded examining room of an inner-city Toronto pediatric clinic is a mother, a child and their family friend. The mother and her three-year-old have been in Canada for almost a year, having emigrated from Vietnam (insert virtually any country of origin here) and are currently living in a multi-family dwelling in a well-known area of lower socio-economic status. The mother speaks very little English, and the family friend is attempting to act as interpreter and support person. No official interpreter services are available today, and after completing my consultation (to the best of my abilities) regarding the presenting problem of “language delay,” I am faced with having to try to discuss the possibility of this child having a much broader communication disorder, autism.

Where to start? Is there an ethno-cultural equivalent to autism? How will this diagnosis affect this mother and child and the rest of the family dynamics? How do I get the importance of advocacy across to them? The questions go on. Even with English as a first language and no educational or economic barriers, navigating the “system” is complex and exhausting (e.g., myriad agencies, separate contact individuals, multiple appointments, variable therapeutic options etc.). What resources are available or accessible for this particular family financially, emotionally and socially? My first thought is, “Am I going to be able to do enough to help this family, and what happens when they walk out this door?”

Such an encounter would certainly not be an uncommon event for Canadian healthcare providers, and it is meant to highlight some of the issues around immigrant health, particularly as it applies to children and youth.

**Canadian Immigrants**

Immigrants, defined as individuals who come to a country where they were not born in order to settle, make up an increasing proportion of the Canadian population. In the 2006 government of Canada census report, immigrants made up 19.8% (6.1 million) of the over 31 million Canadians, up from 17.4% in 1996 (Statistics Canada 2006). Overall, 16.4% of Canadians identified themselves as being of a “visible minority,” compared with 11.2% in 1996 (Figure 1), which is likely indicative of the shift in immigration patterns away from European origins and toward African, Caribbean, Central American, Chinese, Middle Eastern, South Asian and Southeast Asian origins (Statistics Canada 2006).

Figure 1 shows the absolute number and the percentage of visible minorities from the 1981 to 2006 censuses. In 1981, there were 1.1 million visible minority persons in Canada, and the number

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increased to 1.6 million in the next census, 1986. From 1986 to 1991, the number of visible minority persons almost doubled to 2.5 million. In 10 years, the proportion of visible minority persons almost doubled from 4.7% of Canada’s population in 1981 to 9.4% in 1991. In 1996, the visible minority population was 3.2 million, constituting 11.2% of Canada’s population. The growth in the visible minority population continued in 2001, when it was 3.9 million, forming 13.4% of Canada’s population. In 2006, it reached over 5 million and constituted 16.4% of the total population of Canada (Statistics Canada, Census of Population, 2006).

The immigrant population can be further subdivided into traditional immigrants, refugees (those who cannot return to their home country because of fear of persecution due to belonging to a particular social, political or religious group) and the illegal or undocumented. It has long been recognized that migration carries with it implications and challenges for individuals’ health in the context of physical, emotional and social well-being. Immigrants also represent an extraordinarily diverse population with varying cultural beliefs, ethnic backgrounds and societal characteristics that factor into their risk for physical and mental illnesses.

The country of origin has features – such as endemic infectious diseases; general living conditions; economic well-

**Health Status of Immigrants to Canada**

For many decades, the medical care of the immigrant community and research into immigrant health focused predominantly on the diseases or health issues (infectious, nutritional or otherwise) that these individuals “brought” with them. This has been referred to as the *sick immigrant paradigm* (Beiser 2005), and it was based on the belief that only the least healthy and less well-adjusted people would choose to emigrate from their home countries of origin and was based on protectionist ideologies evolved from both scientific and political arguments. This concept was quite embedded in the mentality of the day in the 19th and early 20th centuries.

However, the combination of observed differences and changing socio-political realities ushered in a new immigrant construct that has been termed the *healthy immigrant paradigm* (Beiser 2005) or *healthy migrant effect* (Chen et al. 1996; Kinnon 1999; Perez 2002). Researchers in both Canada and the United States have suggested that, overall, immigrants – particularly those in their new country less than 10 years – generally have lower rates of chronic diseases and mortality (excluding certain infectious diseases such as human immunodeficiency virus/acquired immunodeficiency syndrome and tuberculosis) than their native-born counterparts (DesMeules et al. 2004, 2005; Gold et al. 2004; Hyman 2000; Parakulam et al. 1992; Sharma et al. 1990; Singh and Siahpush 2001). These same researchers acknowledge that it remains unclear whether these findings are due to genetic predispositions, a practice of positive health behaviours, a requirement to be deemed or screened as “healthy” to migrate in the first place or some other factors not being taken into account. The concern that is repeatedly
mentioned is that the finding of an immigrant health benefit may be misleading. There are numerous factors, for example, that may play a role in determining health outcome at an individual level (e.g., personal genetics or health characteristics, ethno-cultural background, the presence or absence of “community of support,” the duration in the new country, family/social and economic supports etc.) and at a broader group level (e.g., changes in immigration policies, migration experiences, being a refugee versus being a non-refugee etc.).

Inherent difficulties with the collection and interpretation of data also need to be considered when reviewing the available literature. The small numbers of immigrants represented overall, the lack of detail regarding immigrant subgroups, an inability to evaluate in-/out-migration, under-representation of certain immigrants due to language or cultural barriers, loss to follow-up and difficulty with longitudinal data collection are but a few of the reported limitations that further complicate the use of such research findings.

There are also multiple studies, however, that document immigrant and native health patterns becoming similar as the time spent in the new host country increases (Dunn and Dyck 2000; Kliwer and Smith 1995; Kliwer and Ward 1988; Nair et al. 1990; Newbold 2005, 2009). This has been termed the convergence effect where ongoing “exposure to the physical, social, cultural and environmental influences in a destination country sets in motion a process in which migrant patterns of morbidity and mortality shift so that they come to resemble the usually worse health norms of the resettlement country” (Beiser 2005: 33). Beiser reviews the concept of “resettlement stress,” which purports that immigration increases the probability of experiencing certain socio-economic stressors such as poverty, unemployment, under-housing, a lack of access to services, social isolation and so on (Beiser et al. 1993; Beiser and Hou 2002; Citizenship and Immigration Canada 2000; DeVoretz 1995), which then further increase the likelihood of exposure to risk factors for disease and limited access to care for these illnesses (Dryburgh and Humel 2004; Kinnon 1999; Kliwer and Jones 1998).

These social determinants of health (Table 1) are also felt to affect immigrants more powerfully than their native-born counterparts and may account for the phenomenon called immigrant overshoot, where the average health of immigrants not only deteriorates to the average but may in fact get worse (Jolly et al. 1996; Kampman et al. 1999; Newbold and Danforth 2003). Paradoxically, despite poverty being one of the major risk factors for the mental health of children, and although immigrant children are almost three times more likely than their non-immigrant counterparts to live in poverty, immigrant children seem to enjoy better mental health and have fewer behavioural difficulties, perhaps suggesting strengths that these individuals and families bring to the country (Beiser and Hou 2002).

Multiple other facets of the immigrant experience have been looked at as factors affecting their health and mental well-being, including concepts such as degree of acculturation, maintenance of biculturalism, “undocumentedness,” social connectedness (like-ethnic networks), racial discrimination and many others.

### Immigrant Health of Youth and Children

Recently, researchers have begun to look at the health of immigrant children and youth through a different lens. Studies have been developed to better define their health status on arrival; the factors that help them maintain, improve or regain health; and the similarities or discrepancies in health outcomes and access to healthcare. For example, Singh et al. (2008) looked at levels of sedentary behaviours and physical inactivity in US children and adolescents and found that even after controlling for several socio-economic and demographic characteristics, the recent immigrant groups had substantially higher levels of both. The investigators suggested a number of possible ethno-cultural, socio-economic, familial and environmental influences and concluded that these could lead to a reduction of immigrant children’s overall health advantage over US-born children as they enter adulthood.

MacDonald and Kennedy (2005) concluded that the likelihood of being classified as obese or overweight for most immigrants is lower than that for native-born Canadians on arrival to Canada but increases gradually; by approximately 20–30 years after immigration, the immigrants’ unhealthy weight meets or exceeds that of levels for native-born Canadians. The rates were however lower for immigrants living in neighbourhoods with larger ethnic social networks and whose ethnic communities had lower rates of being obese or overweight.

Steele et al. (2002) looked at recent health and social policy changes in Ontario and the effect on recent immigrants and refugees in inner-city Toronto. They postulated that socio-

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**Table 1. Social determinants of health as defined by the SDOH National Conference**

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<td>Early life</td>
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<td>Social exclusion</td>
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<td>Unemployment and employment security</td>
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*This list is unique in that it specifically focuses on the public policy environment (e.g., income and its distribution) rather than characteristics associated with individuals (e.g., income and social status).*
economic factors are likely more important as determinants of health for immigrants versus non-immigrants and that, therefore, during times of policy change affecting the socio-economic environment, immigrants are more vulnerable. Women seem to bear a disproportionate part of the burden as primary caregivers whose financial autonomy is affected by cuts to welfare, homecare support and community services. They are put at increased risk of spousal abuse, and, by extension, their children’s well-being is likely also affected.

Despite the study by Steele et al. suggesting at least a perception of increasing barriers to accessing care, other studies such as that by Guttmann et al. (2008) have shown at least similar access to care for children of immigrants regarding immunizations in Ontario. There have also been conflicting findings when looking at rates of perinatal morbidity and mortality (Doucet et al. 1992; Hyman 2000; Hyman and Dussault 1996; Kramer 1987; Reeb et al. 1987; Rumbaut and Weeks 1996) and psychological and behavioural difficulties among children and adolescents (Bagley 1972; Beiser et al. 2002; Hamilton 2005; Harker 2001; Harris 1999; Kao 1999; Malzberg and Lee 1956; Portes and Rumbaut 1996; Rumbaut 1997a, 1997b; Rutter et al. 1974).

**Understanding the Unique Health Needs of Immigrant Youth and Children**

Ultimately, the understanding of immigrant health, particularly in the context of children and youth, is clearly a multi-faceted and nuanced entity with several layers of complexity and a considerable number of interacting characteristics. As individuals responsible for the healthcare of our nation, do we understand the intricacies of this diverse group of people? Are we asking the right questions of the right stakeholders and looking at subgroups of immigrants with enough detail? Are we missing opportunities to support or promote inherent positive health behaviours among immigrants and their like-ethnic communities?

If, on average, immigrant families are more likely to be exposed to the negative aspects of the social determinants of health, why are some health outcomes more negatively affected while others are not? Can we better align health promotion and preventive care measures, traditional/non-traditional clinical care models and cross-departmental (e.g., education, health, immigration etc.) policy development to achieve better and more fiscally sustainable outcomes for the immigrant children and youth of Canada? How would this impact on policy makers, healthcare administrators and front-line care providers of immigrant children and youth?

The Canadian Paediatric Society (CPS) quotes as its mission statement that it is “the national association of paediatricians, committed to working together and with others to advance the health of children and youth by promoting excellence in healthcare, advocacy, education, research and support of its membership” (2009: 3). CPS has published a report biannually over the past several years titled *Are We Doing Enough? A Status Report on Canadian Public Policy and Child and Youth Health*. The report essentially functions as a report card for the provinces and various policy makers to highlight four major areas where government interventions can be or have been targeted: (1) disease prevention, (2) health promotion, (3) injury prevention and (4) the best interests of children and youth.

The hope is to allow for critical evaluation of progress across the country with regards to these issues and to promote the use of policy change and implementation to improve the health and safety of Canadian children and youth (CPS 2009). Despite the excellent track record of CPS and numerous gains made on many issues across the nation, immigrant health of children remains a relative non-issue. In fact, immigrant health is mentioned only once and in the context of child poverty (“immigrant families are over-represented among the poor”). This is in no way meant as a criticism of CPS or the extraordinary advocacy and leadership that they provide, but acts merely as an example of the difficulties faced when trying to make immigrant health of children and youth part of the local, provincial or national agenda, especially in the face of multiple, equally important and disparate healthcare priorities.

"Resettlement stress" purports that immigration increases the probability of experiencing certain socio-economic stressors, which then further increase the likelihood of exposure to risk factors for disease and limited access to care for these illnesses.

**Challenges and Opportunities for Improving the Health of Immigrant Children and Youth**

I think that anyone who has worked with an immigrant child and family, be it in an office, emergency room, home visit, school meeting or elsewhere, can relate to the sense of frustration at knowing or at least feeling that there are barriers and challenges that we could do a better job at alleviating. The interface that immigrant families have with the medical system, in its broadest sense, is different from that of the non-immigrant. Family members, friends from within the community and settlement workers, for example, often act as their conduit to care and information.

Cultural differences, trust issues or fear of perceived authority figures, language and educational barriers and so on are all likely impediments to overall care and general access. The gap is further widened by the average care providers’ lack of knowledge
of or familiarity with these issues, the individuals we serve and their respective points of reference. We carry with us our own biases, assumptions and assertions as to how individual healthcare, prevention and promotion should proceed, and we are sometimes perhaps guilty of having a "one size fits all" approach to our interactions (Table 2).

There are, however, many examples of innovative and functional solutions to some of the immigrant health issues. In Ontario, community health centres and specific immigrant/refugee health centres have evolved with alternative funding structures for care providers to allow for provision of care to the non-insured or under-insured populations. These centres include medical staff (i.e., physicians, nurses, etc), ethno-cultural-specific staff support workers, interpreter services and even legal supports for their clientele. There have been collaborative efforts between the Ministry of Health and Long-Term Care and medical service providers, such as professional midwives and family practitioners, to come up with unique ways of providing access to care for those living without status to receive obstetrical and neonatal services. Schools, with the buy-in and vision of their school boards, are being looked at as a natural hub for children and youth to have improved access to healthcare with the built in "trust" and convenience that allows immigrant parents to accept and be involved in their children's health maintenance.

**Conclusion**

There is clearly much that is being done, some of it by dedicated individuals, some at the grassroots community level relying on local organizations and other components that are more programmatic, government driven and policy directed. In my opinion, what needs to be asked is not, What are we doing? but, rather: Are we doing enough? Are we doing the right stuff in the right way? and, How can we, as healthcare providers and policy makers, "level the playing field" for all children? I believe that by focusing in on these types of questions, we can fulfill our obligation to all the people of Canada and to the immigrant children and youth who will become a significant part of the future of this country.

**References**


Kliewer, E.V. and R. Jones. 1998. *Changing Patterns of Immigrant Health and Use of Medical Services. Results from the Longitudinal Survey of Immigrant to Australia (LSIA)*. Canberra, Australia: Department of Immigration and Multicultural Affairs.


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FACTS FOR LIFE

Children learn how to behave (socially and emotionally) by imitating the behaviour of those closest to them.

Source: Facts for Life Global
<www.factsforlifeglobal.org/03/messages.html>