**Best Practises Proposal - Community Based Dental Screening**

**and Education**

**Key points**

* Dental pain can be reduced if physicians/ community assistants ask whether patients have problems with their mouth, teeth, or dentures.
* Migrants arriving from countries with limited dental care and where diets are high in sugar are at the highest risk for disease.
* Screening and referral for dental disease can facilitate treatment and prevention of dental disease.
* Patients are twice as likely to go for dental treatment when actively examined and referred by a physician/ community assistants.
* Non-steroidal anti-inflammatory drugs can be used effectively to treat dental pain.
* Tooth brushing twice daily with fluoridated toothpaste is effective in reducing risk for dental decay.

**Introduction:**

The most common oral conditions are dental caries (cavities) and periodontal disease (bone loss around the teeth. Both are preventable chronic infectious diseases influenced by socio-behavioural, economic and environmental risk factors. In addition to oral pain, infection, tooth loss and associated dysfunction, these chronic oral conditions are known to have a profound effect on general health and quality of life, affecting nutrition status and body weight of both children and older adults. With higher risks associated with poverty, race or ethnicity.

Immigrant and refugee families form a growing proportion of the Canadian population and experience barriers in accessing primary health care services. Through multiple open ended interviews, we can examine the experiences of access to primary health care by immigrant and refugee families. After settling in Canada, immigrants and refugees often experience a decline in their health status. Health care services are expected to be approachable, acceptable, available, accommodative, affordable, and appropriate.

*Immigrant and Refugee: Perspective towards Health Care.*

Immigrants and refugees come to Canada in different immigration categories that include convention refugees (privately sponsored or government sponsored), asylum seekers, economic class, and family class immigrants.

Convention refugees are people who flee from their home country for reasons that include fear of persecution, while asylum seekers are people awaiting determination of their requests for refuge. Privately sponsored refugees are either convention refugees or asylum seekers. Government assisted refugees are convention refugees referred for resettlement by a referral organization (e.g. the United Nations Refugee Agency (UNHCR).

Economic class immigrants are people who come to Canada for non-humanitarian reasons under immigration classes like federal skilled worker class, provincial nominee class, the Canadian experience class, or family class where they are sponsored by an immediate family member.

During the settlement period, Conventional refugees, refugee claimants, and other protected people are eligible to apply for the Interim Federal Health Program to cover some costs associated with dental care. In Canada, high-risk First Nations communities are also benefiting from the application of fluoride varnish by non-dental health care providers

**Health condition:**

Immigrants often present with a favourable health status on arrival but over time develop the same or even worse health status than the Canadian-born populations.

Refugees on the other hand often arrive in poorer general health status than their immigrant counterparts and often present with ill physical and mental health status. Contributing to their likelihood for poor health is a difficult migration journey that may include migration from countries experiencing violent conflicts, forced migration at short notice, and living in refugee camps, along with unfavourable social determinants of health

*Barriers to the Health Care system:*

Immigrants experience poor patient-provider communication due to language barriers, nonprofessional interpreters, physicians being too busy to listen or lacking empathy with their health concerns, inadequate referral to specialized care resources, inadequate social support, differences in expectations, and lack of culturally sensitive care. Others are challenged by socio-cultural differences and economic difficulties.

Refugee claimant mothers revealed that the mothers had difficulties accessing care when needed. The difficulties were due to income level, health insurance problems, lack of knowledge about services, and feelings of being judged as a parent. Additionally, one third of mothers witnessed or was the object of racism and discrimination in the health-care system.

Refugees experienced additional barriers in language and interpretation, differences in culture, health care coverage, and availability of services, isolation, poverty, and poor transport. A sense of discrimination and stigmatization, and logistical concerns were additional barriers to refugee’s access to health care services. Moreover, refugees fear accessing health care services where their immigration status can be questioned or reported to law enforcement authorities and thus being denied care. Similarly, asylum seekers found it difficult to access care because it was too expensive, were suspicious of the health care system, and felt the health care professionals had unfavourable attitudes towards them.

Some families arrived in Canada after a difficult immigration journey that included experiencing violent conflicts and living in refugee camps. Life in a refugee camp was portrayed as very difficult. Upon arriving in Canada, families lived under unacceptable conditions (e.g. poor housing) and were challenged in their quest to access health care services.

**Newcomer Oral Health**

In the Canadian setting, oral health has traditionally received low priority in public policy discussions and has not been subjected to the tenets of the *Canada Health Act*, i.e., comprehensive, accessible, portable, universal and publicly funded and administered. Newcomers to Canada have many pressing concerns, such as housing, employment, education and general health; thus, preventive oral health may not be high on their priority list. Limited opportunity for dental care in the country of origin. The location of pain suggests a need for dental screening along with screening for other systemic symptoms.

Regardless of their birthplace, many studies have shown that children of newcomers have worse oral health than their non-newcomer counterparts. Several barriers play a role, such as cost of regular dental care, insufficient dental insurance coverage, language and parental beliefs and practices that put the children at higher risk for dental diseases. Consequently, newcomers rank lower in terms of use of dental services.

Successive reductions in public dental funding, especially for disadvantaged populations, has left Canada ranked second to last among Organisation for Economic Co-operation and Development

Nations in terms of public funding of dental care. A case in point is the proposed cuts to dental benefits for newcomers to Canada under the Interim Federal Health Program

Children of newcomers are suffering from poor oral health and face several barriers to use of dental care services. The disparity in dental caries between children of newcomers and their counterparts can be reduced by improving their parents’ literacy in the official language(s) and educating parents regarding good oral health practices. An appropriate oral health policy remains crucial for marginalized populations in general and newcomer children in particular.

Children suffering from pain caused by dental problems are more likely to perform poorly at school, as they may be inattentive or miss classes. They may be more prone to functional and cognitive problems (e.g., speech impairment, learning and eating problems) or psychological issues arising from poor self-image in a social setting. In particular, disadvantaged children, such as most refugee and immigrant (“newcomer”) children, appear to be at higher risk for dental diseases. This has implications for countries, such as Canada, where immigrants represent 20.6% (6 775 800) of the total population and immigrant children under 14 years of age represent 19.2% of the recent immigrant population. Those who lacked dental insurance, on average, had higher odds of reporting unmet dental care needs than immigrants with a household income between $20,000 -$40,000 and lower than $20,000.

In addition, the provision of dental insurance for immigrants with an average household income between $20,000 -$40,000 and lower than $20,000 significantly reduced the odds of reporting unmet dental care needs. Dental insurance was a more important determinant of having unmet dental care need. Several barriers play a role, such as cost of regular dental care, insufficient dental insurance coverage, language and parental beliefs and practices that put the children at higher risk for dental diseases. A child who may refuse to eat, especially in the absence of other symptoms, suggests that dental screening would be appropriate. Because there are very high rates of refined sugar intake and related dental ailments. A quick visual examination and identification of carious lesions provides evidence of dental conditions that can be addressed with a referral to a dentist.

*Barriers to Appropriate Oral Health for Newcomer Children*

*Child level (oral hygiene practices)*

*Family level (parenting practices, oral health perceptions)*

*Community level (dental insurance, dental care provider)*

**The Rationale:**

Dental disease is more prevalent in developing countries, yet certain vulnerable populations within developed countries (including new immigrants and refugees) bear similar oral health burdens. The increased consumption of refined sugar coupled with inadequate exposure to topical fluorides available in toothpastes and professionally applied fluoride products available in developed nations contribute to high rates of disease.

Income and dental insurance are two of the most important factors that determine whether someone will visit a dentist. The Canadian Health Measures Survey found that 62% of Canadians have private dental insurance, only 6% have publicly-funded insurance, and 32% have none (Health Canada, 2010). Maintaining good oral care and having access to dental insurance, especially among vulnerable populations, is a national issue in Canada. Income is also associated with oral health status.

Other Concerns for Newcomers:

*Expectations not quite met.*

Prompt access to care unavailable

Sometimes getting access to care is a challenge

Lengthy wait times at health care service points

High cost of medications

Cost of Non –essential care (e.g. dental care) was very high

Inadequate child care support

The quality of care is less than ideal.

*Facing a new life:*

Challenges related to transportation, challenges of cold weather, employment, language and cultural differences, and lack of social support in their quest to access health care services.

Unemployment or underemployment

Poor housing conditions affecting the present state of health

Immigrants found it difficult to access care because of geographic and economic barriers while asylum seekers were limited by lack of awareness of the health systems. Access to health care is limited by populations, communities, households and individual barriers.

*Linguistic and cultural differences:*

Most immigrant and refugee families found it difficult to communicate and understand a Westernized concept of health, health care systems, and health care approaches. As a result, participants felt misunderstood by care providers which made them frustrated. Differences in cultures made it

difficult to access care because they lacked social support which also resulted in families experiencing frustration in the health services. Regarding linguistic and cultural barriers, families were frustrated with being unable to communicate effectively with care providers

*Canadians can access dental insurance in three ways:*

(1) Through third-party insurance (e.g. through their employer);

(2) By paying directly out-of-pocket (e.g. purchasing private dental insurance, or paying dental fees on a case by case basis; or

(3) Through government-subsidized programs.

**Behaviour change:**

Health education in itself has the potential to widen inequalities and so it is important to identify approaches that are particularly helpful for those with the worst oral health and greatest risk.

Some people may be more amenable to health education messages than others because of different competing demands on their lives, for example because of low socioeconomic circumstances.

Behaviour change methods and resources (such as phone apps, leaflets and messaging) help dental teams to provide people with support to improve their oral health?

**Target Populations:**

1. Young Newcomers
2. Preschool aged children

**Methodology:**

By constructing a clinician / community assistant, summary table to highlight the epidemiology of oral disease within this population, population-specific clinical considerations and potential key clinical actions. We can develop a logic model to define the clinical preventive action (intervention), outcomes, and key questions.

Oral health status measured by caries prevalence and relevant indices, such as decayed/missing/

filled teeth/surface scores (in primary and/or permanent dentition), gingivitis and periodontitis

• *Oral health behaviour*, either protective (such as regular dental visits, adequate oral hygiene practices, use of toothpastes with fluoride) or harming (such as diets rich in sugar, use of nursing bottles)

• *Oral health environment*, which either promotes the child’s oral health status or places it at higher risk, including availability of dental services, publicly funded dental programs, community dental care programs, geographic or language isolation or harmful health beliefs. It seems that parental education remains a predictor of dental care utilization. Limited English proficiency has also been shown to hinder access to dental care for children of newcomer families. In particular, those who speak a non-English language at home are less likely to visit a dentist for preventive or other services and more likely to visit only when their child is in pain.

**Screening Recommendations:**

The CMS treatment “no-drill” involves four aspects:

* Application of high concentration fluoride varnish by dentists to the sites of early decay
* Attention to home tooth brushing skills
* Restriction of between-meal snacks and beverages containing added sugar
* Risk-specific monitoring.

Screen for dental pain: Screen for obvious dental caries and oral disease, in children and adults.

Screening vs. Morbidity

The US Task Force on Preventive Services guidelines does not recommend or warn against routine screening by primary care clinicians. However, a systematic review and a randomized controlled trial subsequent to the systematic review, provide evidence that physicians can screen preschool children for dental caries with a high degree of accuracy

Relative benefits and harms of treatment versus, the most relevant benefit for screening and referral are the reduction of morbidity through prevention and management of dental disease. Potential harms include cost to patients to access dental care and adverse reaction to treatment.

Nonsteroidal anti-inflammatory drugs manage oral pain effectively. Antibiotics should be prescribed only in the presence of concomitant systemic symptoms, such as lymphadenopathy, fever, and associated cellulitis by localized swelling of dental origin. The application of fluoride varnish to teeth of children at high risk for caries and the recommendation that teeth be brushed twice daily with toothpaste containing 1000 ppm fluoride.

*Questions to Ask Your Patients*

* How often do you brush and floss?
* How often do you visit a dentist?
* Do you have a regular dentist?
* Do your gums bleed when you brush your teeth?
* What medications are you taking?
* Where do you get your drinking water?
* Do you smoke or use other tobacco products?
* How many sugary drinks (for example, fruit juice or soda) do you consume per day?

*Clinical Considerations.*

Because primary care practitioners /community assistants are likely the first point of contact with the Canadian health care system for new immigrants and refugees, screening and referral for dental needs is central to initiating and facilitating appropriate care.

* Psychological / Cultural obstacles: Experiential influences (fear of dentists, history of inadequate care and patients’ embarrassment over oral condition)
* Socio-economic status and access to care. Lower income and immigrant status are both associated with fewer visits for preventive dental care,

**Evaluation Methods:**

*CAMBRA:* The current approach to dental caries focuses on modifying and correcting factors to favour oral health. Caries management by risk assessment (CAMBRA) is an evidence-based approach to preventing or treating dental caries at the earliest stages. Preventative approach has major benefits compared to current practice.

*Caries Management System (CMS) :* – a set of protocols which cover the assessment of decay risk, the interpretation of dental X-rays, and specific treatment of early decay (decay that is not yet a cavity).

“50 years of research studies have shown that decay is not always progressive and develops more slowly than was previously believed. For example, it takes an average of four to eight years for decay to progress from the tooth’s outer layer (enamel) to the inner layer (dentine). That is plenty of time for the decay to be detected and treated before it becomes a cavity and requires a filling.”

 A tooth should be only drilled and filled where an actual hole-in-the-tooth (cavity) is already evident.

The data obtained from the studies included in this review reveal a number of key findings that will familiarize clinicians, researchers and public health policymakers with evidence-based information on the oral health status of newcomer children in both Canada and the United States, although most of the studies were conducted in the United States.

**Interventions for Newcomer Children**

*Programs for Parents:*

More than 1 counselling sessions for mothers with nursing children is required.

*Programs for children:*

In a school-based program, dental services to be provided for newcomer and impoverished children

*Language Literacy*

To make interventional and educational programs more effective, large public health units and private offices could make use of internal staff resources for interpreting or use a company or organization providing telephone interpretation services, e.g., Can Talk Canada. However, even when these services are available, public health facilities and private offices may insist that the patient or their parents bring an interpreter along to visits. The availability of more multicultural and multi-language providers may prove beneficial in creating a better understanding of oral health messages. Language barriers have been consistently associated with less use of dental care and issues of communication with health care providers

**Other Recommendations:**

By using collaborative networking approaches and developing culturally relevant programs to improve access to health care. Tailored services could include special clinics and health education and awareness forums.

Immigrant and refugee families with a low income and who reside in certain parts of the city are also eligible for a few low cost dental programs. While these programs are beneficial, they are few and limited. To improve access to care, we recommend better awareness of existing programs, and more provincially funded dental programs in other neighbourhoods where more immigrant and refugee families reside as the federal government had passed legislation limiting access to the Interim Federal Health Program (IFHP). IFHP provides health insurance for medication, emergency dental and vision care, translation, and prostheses for protected persons who include resettled refugees, and refugee claimants.

*Awareness of the importance of Oral Health:*

Effective educational and supportive programs are important to help raise awareness among immigrant parents and their children of the importance of maintaining good oral health through regular preventive care.

*Comprehensive Accessible Dental Care*

 Providing free (or perhaps affordable) accessible and comprehensive dental care may be the most efficient way to eliminate caries.

 (1) Improving parents' literacy in one of the official languages through language classes can be helpful to reduce the effect of language barriers. Moreover, bilingual oral care providers who can speak both official languages, as well as the home language of the child, may enhance the effectiveness of interventional and educational programs.

(2) Enhancing parents' understanding about the importance of routine preventive care can be achieved through community-wide educational programs.

(3) Free comprehensive dental care can be considered as the most time efficient way to eliminate caries in children who are in urgent need of care.

(4) There is a need to involve both provincial and federal governments in the decision-making process as well as other health care professionals and community workers.

**Desired Conclusion:**

The expert panel to conclude that referral to a dentist is vital in reducing the morbidity related to oral disease. Also to guide primary care practitioners/ community assistants in the early detection, prevention and treatment of common oral conditions for newly arriving immigrants.

Barriers that play a role include cost of regular dental care, insufficient dental insurance coverage, communicating with dental care providers because of language barriers and parental beliefs and practices that put these children at a higher risk of dental diseases. From the results obtained, the Guidelines Committee should consider screening tests, dental referral and management of dental pain to be clinical actions that are most feasible and applicable for primary care practitioners / community assistants. This could be achieved by:

* Improving newcomer parents’ literacy in the official language(s)
* Educating newcomer parents regarding good oral health practices
* Providing affordable (ideally free) comprehensive dental care the most efficient way to eliminate caries in children who are in urgent need of care.

**Research priorities include**

* Evaluating the oral health status and the experiences of new immigrants and refugees and
* Gaining a better understanding of the efficacy and costs associated with oral health screening.

**Scope for further research:**

More research is needed to determine the effect of screening, risk assessment and other promising preventive interventions by primary care practitioners/ community assistants.