



BCDA Submission on Poverty Reduction

The link between poverty and poor oral health is well recognized. As noted in the Canadian Academy of Health Sciences report,

Poor oral health is also causally linked to chronic pain, poor nutrition, impaired learning, and persistent infection, and it is strongly associated with arthritis and dementia. People with poor oral health also suffer from reduced dignity, self respect, employability and social connectedness, all of which have major health implications. (p 50)ⁱ

This is demonstrated in a number of ways:

1. Approximately 1% of emergency room visits are for non-traumatic dental care for the 29 reporting hospitals in BC. Of these patient, 98% were seen and released without their dental condition being treated.ⁱⁱ
2. In Canada, day surgery rates to treat extensive dental decay for children under the age of 6 were 3.9 times higher for children in the least affluent versus most affluent neighbourhoods.ⁱⁱⁱ
3. BC's 22 not-for-profit dental clinics provided over 45,000 patient visits in 2017, a growth of 36% since 2011.

What is less understood is how poor oral health contributes to poverty. Consider the following:

4. 29% of low income US adults in a self-reported study stated that 'the appearance of my mouth and teeth affects my ability to interview for a job', while 82% 'believe straight, bright teeth help you get ahead in life'.^{iv}
5. In Canada, about 2.26 million school-days and 4.15 million working-days are lost every year due to dental visits or dental sick-days.^v
6. An Ontario study suggested that there is the potential for discrimination of the poor based on oral health.^{vi}
7. Assuming access to fluoride leads to better oral health as an adult, a US study found that the earnings were approximately 2% higher for those with access to fluoridated water during childhood than those without. In the case of women, the rate was 4%.^{vii}

Poor oral health is inextricably tied to poverty, both as a health care concern and as a contributor to poverty.

Further complicating the matter, unlike other provinces, BC has virtually no fluoridated drinking water. Over the years, British Columbians have voted against fluoridated water in municipal referendums which led to lower oral health measures, especially for vulnerable patient groups that may not readily access preventive care such as young children and frail seniors.

Looking forward, any proposed poverty reduction plan for BC must address improving oral health outcomes for financially vulnerable patients.

The BCDA recommends the government implement an Oral Health Strategy that engages government ministries and the health authorities to ensure that limited resources are efficiently employed with respect to effective public health promotion programs and to ensure that public dental plans assist vulnerable populations to reach their optimal oral health. To do so also requires the engagement of critical stakeholders such as the BC Dental Association, professional and patient advocacy groups, as well as others such as BC's more than 20 not-for-profit clinics.

Discussion:

As part of the BCDA's recommendations, the following statements not only answer the three questions posed by the consultation, but also illustrate the need for an overall approach to reducing oral diseases in BC and how this will contribute to the province's Poverty Reduction Strategy.

1. What does success look like in a BC Poverty Reduction Strategy?

From dentistry's perspective, a measure of success would be that all British Columbians have optimal oral health: that their oral health does not deter or hinder their ability to speak, eat, work and socialize; and they are pain and infection free.

BC's public and private dental care sectors have met the majority of British Columbians' oral health needs:

- 70% of British Columbians visited the dentist in 2014, and among seniors, the rate was 64%.^{viii}
- An estimated 65% of British Columbians have access to a dental plan^{ix}.
- The province has the lowest population to dentist ratio in the country^x and is supported by other dental auxiliaries such as dental hygienists and denturists.
- Many vulnerable groups have access to public dental coverage: children from low income families, income assistance clients, persons with disability, foster children and First Nations.
- There are over 20 not-for-profit clinics providing care, either free of charge or at discounted rates, for vulnerable groups: children, the homeless and financially challenged, including seniors.
- There is an active dental public oral health department within the health authorities to support oral care for young children and persons with disability.

However, British Columbians do not enjoy the same level of dental health as other Canadians as illustrated in this comparison of decayed, missing and filled teeth (DMFT) index:

Age	Decayed Teeth		Missing Teeth		Filled Teeth		Decayed, Missing & Filled Teeth (DMFT)	
	BC	CDN	BC	CDN	BC	CDN	BC	CDN
20-39	1.16	0.81	0.60	0.39	8.13	5.65	9.89	6.85
40-59	0.53	0.45	2.45	2.42	13.04	9.43	16.02	12.3
60-79	0.33	0.37	5.85	5.57	13.97	9.72	20.15	15.67

Note: BC figures are from the 2006 Adult Dental Health Survey (adjusted to the CHMS age groups). Canadian figures are from the 2009 Community Health Measures Survey.

In part, this is attributed to the lack of fluoridated water. In Ontario and Alberta, 67.3% and 43.3% of the population, respectively, have access to fluoridated water, compared to under 3% in BC.

It is also important to note that the difference between the provincial and national DMFT rates is primarily the result of filled teeth and not decayed, indicating that British Columbians are receiving treatment for the most part.

Other contributing factors to poor oral health in BC include:

1. BC has the second highest rate of poverty in Canada, 13.2%.^{xi}
2. There is a large number of recent immigrants to Canada.
3. Not all dental coverage is equal, and patients must cover the co-pay and any procedures not covered.
4. Dental anxiety and phobias, estimated between 22% of the population, act as a deterrent to seeking care early.^{xii}
5. Remote areas are still challenged in obtaining dental care.

Some patient groups have poorer oral health as measured in different ways:

1. For low income patients, dental insurance reduces barriers to care, but does not eliminate them. These patients have fewer dental visits and poor oral health.^{xiii} For example, First Nations have access to a robust dental plan, but poor oral health.^{xiv}
2. Children under the age of 6 in BC who are treated in the operating room for dental surgery have a higher probability of coming from a lower income area.^{xv}
3. Approximately 45% of patients at not-for-profit clinics self reported 'fair' to 'poor' oral health. Though 63% reported 'good to excellent' oral health, over 95% reported at least one or more chronic medical conditions.^{xvi}

2. What do you think are the best ways to reduce poverty in British Columbia?

The social determinates of health similarly impact oral health, specifically: lack of access to clean drinking water, lack of understanding of the need for ongoing preventive care (including the importance of primary teeth), lack of access to dental care, both restorative and preventive, as well as less healthy diets. Last, the role of dental phobia cannot be dismissed which is estimated to impact 20% of the population, often arising due to a traumatizing event, and not always associated with dental treatment.

Improving the social determinants of health, including oral health, is one of the best ways to reduce poverty.

3. What can we do as a province, a community or as individuals to reduce poverty and contribute to economic and social inclusion?

Provincial Level:

Recommendation 1: Undertake an oral health needs assessment for British Columbians taking into consideration at-risk groups:

1. Children
2. Low Income Seniors
3. Long Term Care and other vulnerable patients
4. Persons with Disability
5. Financially vulnerable groups – homeless, unemployed, low income working adults, etc.

Recommendation 2: Create an Oral Health Strategy for British Columbia engaging resources from the Ministries of Social Development & Poverty Reduction, Health and Family and Children along with the health authorities and stakeholders: dental professional and other associations, community not-for-profit dental clinics, dental education institutions and patient advocacy groups.

Recommendation 3: Encouraging all employers to offer extended health benefits including dental as a means of attracting and retaining employees and minimizing out of office time due to emergency dental needs for workers and their dependants.

Recommendation 4: Endorse as provincial government policy, support for fluoridated drinking water at the municipal level.

Community Level:

Recommendation 5: Ensure public health facilities can accommodate dental care:

- a) Hospital emergency and operating rooms have access to dental equipment and personnel to meet the needs of dental patients.
- b) For patients who require medical support for their dental needs, ensure systems are in place to allow for seamless communications and appropriate access to both necessary medical and dental care.

Recommendation 6: Create systems within long term care facilities to encourage dental care for residents such as creating a dental care coordinator position to assist with daily oral care and facilitate ongoing professional care.

Recommendation 7: In multi-disciplinary health centres ensure access to dental providers, including onsite access. Successful examples include the dental clinics at both the BC Cancer Agency and BC Children’s Hospital.

ⁱ Canadian Academy of Health Sciences, *Improving Access to Oral Care*, 2014, Ottawa, Canada

ⁱⁱ Syed Ahmed, “The Direct and Indirect Costs of Non-Traumatic Dental Emergency Room Visits in British Columbia”, September 2016 Masters Thesis, UBC.

ⁱⁱⁱ Canadian Institute of Health Information, *Treatment of Preventable Dental Cavities in Preschoolers: A Focus on Day Surgery Under General Anesthesia*, Ottawa, ON, 2013, page 6

^{iv} Health Policy Institute, *Oral Health and Well-Being in the United States*, <https://www.ada.org/en/science-research/health-policy-institute/oral-health-and-well-being>, access March 22, 2018.

Health Canada, *Report of the Findings of the Oral Health Component of the Canadian Health Measures Survey, 2007–2009*, 2010, Ottawa

^{vi} Jamie Moeller,[®] et al., 'Assessing the relationship between dental appearance and the potential for discrimination in Ontario, Canada', Published online 2015 Nov 18. doi: [10.1016/j.ssmph.2015.11.001](https://doi.org/10.1016/j.ssmph.2015.11.001), accessed March 22, 2018

^{vii} Sherry Glied & Matthew Neidell, 'The Economic Value of Teeth', Working Paper 13879, <http://www.nber.org/papers/w13879>, accessed March 22, 2018

^{viii} Canadian Dental Association, unpublished data, 2017

^{ix} BC Dental Association estimate

^x Canadian Dental Association, unpublished data, 2017

^{xi} Seth Klein, Iglia Ivanova and Andrew Leyland, "Long Overdue Why BC Needs a Poverty Reduction Plan", January 2017, page 16

^{xii} ADA Health Policy Institute, "A State-Level Analysis", *Oral Health and Well-Being in the United States*, <https://www.ada.org/en/science-research/health-policy-institute/oral-health-and-well-being>, 2018, accessed March 28, 2018

^{xiii} David Locker, John Maggiras, Carlo Quinonez,

^{xiv} Health Canada, *Report of the Findings of the Oral Health Component of the Canadian Health Measures Survey, 2007–2009*, 2010, Ottawa, Table 28, p 96

^{xv} Brenda T. Poon, PhD, et al., 'Dental caries disparities in early childhood: A study of kindergarten children in British Columbia', *Can J Public Health* 2015;106(5):e308–e314, doi: 10.17269/CJPH.106.4918, <https://journal.cpha.ca/index.php/cjph/article/viewFile/4918/3173>, accessed March 23, 2018

^{xvi} Bruce Wallace, et al., 'Self-reported oral health among a community sample of people experiencing social and health inequities: cross-sectional findings from a study to enhance equity in primary healthcare settings', *BMJ Journals*, <http://europepmc.org/articles/PMC4691735>, accessed March 23, 2018