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Inequity in Oral Health Care for Elderly Canadians: Part 2. Causes and Ethical Considerations

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Abstract

The Canadian Health Measures Survey, conducted between March 2007 and February 2009, revealed unmet dental needs among older adults in Canada. This article, the second of a 3-part series, explains that the inequity in oral care faced by elderly Canadians is due largely to the current fee-for-service dental service system. However, the inequity has arisen because of financial, behavioural and physical barriers, and both the community at large and the dental profession have a social responsibility to reduce this unfairness and provide equitable access to oral care for older people.

Part 1. Oral Health Status

The first article[3] of this 3-part series considered data from the Canadian Health Measures Survey (CHMS),[4] which reported that among Canadians 60–79 years of age, nearly all (90%) had at least 1 decayed, missing or filled tooth (excluding wisdom teeth), about one-third (31%) had periodontal pockets of at least 4 mm, and about one-fifth (22%) had no natural teeth. Not only did older participants in the survey report many unmet dental treatment needs, but it is likely that these needs will increase as more people get older and more frail.

Aging of the population, through increasing longevity and decreasing fertility, affects many developed countries. Canada is experiencing this phenomenon, despite having one of the highest per capita immigration rates in the world.[1] About 15% of the Canadian population is older than 65 years, a proportion that is anticipated to increase to 25% by 2036,[2] when the last of the baby boom generation reaches age 65.

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tooth (excluding wisdom teeth), about one-third (31%) had periodontal pockets of at least 4 mm, and about one-fifth (22%) had no natural teeth. Not only did older participants in the survey report many unmet dental treatment needs, but it is likely that these needs will increase as more people get older and more frail. This second article in the series examines the barriers that prevent elderly people from obtaining professional oral health care and discusses the ethical implications of this inequity.

Equity in Oral Health Care

To begin, we would like to clarify that *equality* is the state of being equal, whereas *equity* is the quality of being fair and impartial. Equity in health care may be achievable if Canadians can agree on what constitutes a fair distribution of health-related resources, such that no one is deprived of care because of their age, sex, geographic location or socio-economic status.[5] We acknowledge that comorbidities occurring in old age create inequality in health status throughout a population; however, we believe it is desirable to have equity in access to oral health care for the elderly population. In this regard, we refer to the principle of equity, which is based on *proportionality* and *distributive justice* (as explained by Aristotle[6]) and on people's autonomy to select the care they need.[7,8] Accordingly, in a country like Canada, where everyone should have equal access to health care, an elderly person who is frail, should be entitled to more care than an abled person, if there is a reasonable prospect that the care will be beneficial.

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Oral Health Care System in Canada

Canada's health care system (Medicare) has evolved through decades of discourse on whether health care is a social good or an individual responsibility. The Medical Care Act passed in 1966 was based on defined criteria of comprehensiveness and universality. However, additional criteria on accessibility, public administration and portability were adopted as part of the Canada Health Act in 1984, such that "insured persons must have reasonable and uniform access to insured health services, free of financial or other barriers. No one may be discriminated against on the basis of such factors as income, age, and health status."[9]

The Canada Health Act supports equity and solidarity in Canadian health care policy. However, apart from specific oral surgical procedures performed in hospitals, dentistry has been largely excluded from medicare because of budgetary constraints. Some provinces and territories provide a limited array of dental services to children, members of the Armed Forces and recipients of social assistance.[10-12] Only Alberta and the Yukon Territory provide some financial assistance for dental services to residents over age 65.[13,14]

A personal dental care plan can be purchased from a private provider—either directly by a Canadian resident or indirectly by an employer on behalf of an employee—in the form of a tax-free, nonwage benefit. Many employees of small businesses and the "working poor" do not qualify for public assistance, nor do they work the number of hours required to be eligible for nonwage benefits. Furthermore, people who retire lose their employer-sponsored dental benefits and must pay for dental services with after-tax money. Thus, there appears to be inequity in oral health care, whereby insured people receive subsidized dental services and people with relatively low income and limited public benefits must pay for dental care out of their own pockets.[15]

Barriers to Oral Care

Inequity in oral care is influenced by several interrelated factors, broadly categorized here as financial, behavioural and physical barriers.

Financial Barriers

Data from 2 surveys conducted nearly 20 years apart, examining the income and expenditures of older adults in all 10 Canadian provinces, showed that spending on health care tended to follow income levels closely.[16] Possession of dental insurance was also a strong predictor of dental service utilization. Elderly people have progressively lower income as they age and are less likely to have dental insurance or to visit a dentist.[17] The CHMS found that currently, about two-thirds (63%) of the Canadian population aged 6–79 years have private insurance, 5% have publicly funded insurance, and about one-third (32%) have no dental insurance and pay directly from their own pockets.[4] It is particularly significant that about half (53%) of those age 60–79 years do not have dental benefits. The CHMS also confirms that uninsured and low- to middle-income people, including older adults, tend to avoid dental visits because of the financial cost despite many unresolved oral problems.[4] Others have documented that people with low incomes typically seek only emergency care.[18,19]

The scenario of an imbalance between dental demand and dental need contrasts with the utilization of medical services in Canada, where resources are redistributed across different age and income groups so that people usually receive the medical care they need.[20] Hence, the dental care system in Canada is an example of an "inverse care law," whereby those with the most needs receive the least care.[21-23] Furthermore, treatment decisions may be influenced more by the limited coverage offered by a dental insurance plan or allowed by the patient's finances than by a determination of optimal treatment.[24,25]

Behavioural Barriers

A 1995 study from Sweden showed that even when financial barriers are removed, visits to dentists do not increase proportionately.[26] In fact, the relationship between patient and dental care provider is also influenced by the behaviour of both parties. People generally are prompted to seek dental care by oral problems that cause pain or discomfort,[27,28] and there are some who believe that tooth loss is an inevitable consequence of aging and postpone treatment until they are ready to replace all of their remaining natural teeth with complete dentures.[24,29-32] In any event, poor rapport with dental professionals typically leads to a disregard for professional advice and missed dental appointments.[19,32]

Anxiety or phobias about dentistry, which affect 12% of the older population,[33,34] can seriously impede the search for treatment. This neglect of oral care is compounded by ageism and other stereotyping of the behaviour of elderly people on the part of dental professionals.[32,35] Indications of ageism were apparent in the responses of about 80% of Vancouver area dentists, who reported that they had never treated a patient in a long-term care facility; furthermore, about two-thirds of respondents expressed no interest in offering services to elderly patients.[36] Much more empathy for frail and dependent elderly patients was evident from the 88% of dentists in Scotland who attended to residents in care facilities,[37] presumably because dentists received support from the public health system to provide services to patients in domiciliary care.

The impacts of poor oral health on the quality of life of elderly people is not always recognized by dental professionals,[38,39] who may focus more on "quick fixes" for acute dental problems than on effective management of the chronic conditions that so often lead to deterioration of the dentition in old age.[40,41] Management of frail elderly patients with multiple comorbidities typically requires collaboration with other health care professionals (e.g., physicians, nurses, care aides, speech language pathologists, dieticians, facility managers and social workers). Yet formal interprofessional educational programs are missing from the curricula of most health care professions because of constraints of time, logistics and resources, as well as a low perception of the significance of this aspect of career development.[42] Consequently, other professional groups often overlook the role of dentistry in integrated care for older people.[43]

Access to dental care for elderly residents in long-term care facilities depends strongly on the culture and values of each facility.[41] Even in the United States, where federal regulations dictate that long-term care facilities provide oral care and supplies, documentation of a standardized protocol is uncommon, and nursing assistants

provide oral care inconsistently.[44] Discrepancies have been even more apparent in similar facilities in Canada, despite legislation in some jurisdictions mandating access to and assistance with oral care for the residents.[45] Nurses, as front-line personnel in the facilities, are typically given the responsibility for oral care, with dental hygienists playing a supplementary role when necessary.[46] Unfortunately, nurses receive little practical education on oral care, and what little information they have is impeded by busy schedules, more pressing priorities,[47] and in some situations by a fear of dislodging oral bacteria that can cause aspiration pneumonia.[46] Therefore, health care providers often struggle with unclear procedural guidelines, division of responsibilities and ethical conflicts in delivering oral care to frail elderly patients, especially when patients exhibit uncooperative or aggressive behaviour.[40,41]

Physical Barriers

In 2010, Canada had about 19,000 dentists, 21,000 hygienists, 2200 denturists and 300 dental therapists[48] for a population with 4.8 million people aged 65 years and older,[49] which translates loosely to 1 oral care provider for every 100 older residents of the country. However, dental professionals tend to prefer urban settings, and only 10% of them practise in rural areas,[50] where one-third of senior Canadians live.[51] Hence, there is an obvious inequity in access to dental care between urban and rural elderly areas.

In addition, 1 in 4 Canadian senior citizens reported restrictions in their activities of daily living, 15% required home care services, and 7% lived in a residential care facility.[52] Consequently, many elderly people, whether living at home or in a long-term care facility, have physical challenges that may affect their ability to visit a dental office and would prefer to have a visit from a dental professional in their own environment.[37,53-55] However, dental professionals are generally uncomfortable offering services outside the clinical setting.[56] Furthermore, many residential care facilities lack space for a dental unit, and not all private dental clinics can accommodate a wheelchair or the demands of providing oral care to patients with dementia, severe dyskinesia or incontinence.[36]

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Social Responsibility and Distributive Justice

We believe that reducing inequity in oral care is a form of *social responsibility*, the obligation to act for the benefit of society as a whole. Health care is a common good, and the principles of *common good* and *distributive justice* posit that society should promote and distribute its social advances, including health and welfare, justly and for the benefit of all, without regard to age, socio-economic status or the nature of individual needs. The baby boomers have contributed significantly to the nation's achievements, and many of them continue to do so after reaching age 65, either as members of the paid labour force or as providers of social support and care to their families and the community.[52] A healthy society is an economically productive society. Consequently, giving elderly people equitable access to oral health care contributes to society's economic stability. A just public dental health program must be flexible enough to accommodate diversity with a fair allocation and distribution of resources, whereby those in better socio-economic positions bear a social responsibility to assist others in less favourable positions for the welfare of all.

In addition to the social responsibility of society as a whole, dental professionals have a social responsibility to offer services, beyond their duty as health care providers in alleviating oral pain, to everyone in need, including elderly patients who are burdened with chronic disabilities. Some dentists are willing to continue providing care when their aging patients enter long-term care facilities, although others feel that this responsibility belongs to the public-based dental sector.[37,57] For example, in the 1980s dentists in the Vancouver area reported providing dental services to elderly patients in care facilities with

little concern for financial gain,[36] but data from 2011 suggest that financial loss alone is used by some dentists to justify withholding services from residents of the facilities.[56]

Services to members of underprivileged populations are usually offered by institutions or not-for-profit organizations with a sense of social responsibility to deliver care to those in need,[58,59] filling gaps where governments and for-profit organizations have failed.[60] Although some social advocates contend that there will be less incentive for individuals to develop personal responsibility and that non-profit organizations will fade out if and when government adopts the principles of social justice,[61] others argue that a partnership between public and non-profit sectors may develop.[60] However, we believe that government involvement in delivering oral care should not be a deterrent to contributions from non-profit organizations.

The American College of Dentists, in its *Ethics Handbook for Dentists*,[62] states that dentistry is both a business and a profession, and that "every dentist is called upon to participate in service – the chief motive being to benefit mankind, with the dentist's financial rewards secondary."[62] Similarly, in the context of managed care, the College states that "the standard of care should be the same for all patients regardless of the means of reimbursement." Dentists in Canada have generally been nervous about changes to the dominant fee-for-service mode of delivering care. In the past, they opposed public funding of dentistry through taxation, and succeeded in keeping dentistry as a self-regulating profession.[63] More recently, they have been encouraging governments to offer tax incentives to dentists who work in disadvantaged communities, and to subsidize services for underprivileged groups, including elderly people who are frail.[57] It seems to us that this cannot be achieved without a general decrease in the income expectations of dentists and a substantial increase in support from governments for the more vulnerable people in our society, without compromising standards of care or balanced budgets.

Conclusion

Dental care in Canada is mostly excluded from the public health care plan and is instead paid for on a fee-for-service basis. Hence, financial barriers appear to contribute substantially to inequity in oral care for older adults, especially among retirees and frail elderly people. Behavioural barriers impede older people who have limited knowledge about oral care and those with serious dental phobias. Behavioural barriers also prevent care providers from offering services because of ageism and conflicting priorities. Physical barriers hinder access to dental care for elderly patients in remote communities and for those who are frail, confined to the home or living in institutions and therefore dependent on others for transportation and routine daily care. A growing awareness of these barriers and a renewed sense of the social responsibility incumbent upon dental professionals should help to reduce the barriers in the foreseeable future. The third and final part of this series will describe ways in which the current inequity in oral care for the elderly population might be reduced.

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References

1. Government of Canada, Citizenship and Immigration Canada. Ottawa. Preliminary tables – permanent and temporary residents, 2011. Canada – permanent residents by category, 2007–2011. [accessed 2012 Apr 17] Available: http://www.cic.gc.ca/english/resources/statistics/facts2011-preliminary/01.asp.

2. Statistics Canada. Projected population by age group according to three projection scenarios for 2006, 2011, 2016, 2021, 2026, 2031 and 2036, at July 1, CANSIM, table 052-0005 and Catalogue no. 91-520-X. 2010. [accessed 2012 Jul 17]. Available: http://www.statcan.gc.ca/tables-tableaux/sum-som/l01/cst01/demo08d-eng.htm

3. Yao CS, MacEntee MI. Inequity in oral health care for elderly Canadians: Part 1. Oral health status. *J Can Dent Assoc.* 2013;79:d114.

4. Health Canada. Report on the Findings of the Oral Health Component of the Canadian Health Measures Survey 2007-2009 (Technical Report). [accessed 27 Aug 2013]. Available: http://www.fptdwg.ca/English/e-documents.html

5. Daniels N, Light D, Caplan R. Benchmarks of fairness for health care reform. New York, Oxford University Press, 1996.

6. Aristotle. The Nicomachean Ethics of Aristotle. Book V. Translated by Ross WD, 1908. Pacific Publishing Studio, USA, 2011.

7. Bryant SR, MacEntee MI, Browne A. Ethical issues encountered by dentists in the care of institutionalised elders. *Spec Care Dentist.* 1995;15(2):79-82.

8. Dharamsi S, MacEntee MI. Dentistry and distributive justice. *Soc Sci Med.* 2002;55(2):323-9.

9. The Canada Health Act: Overview and Options. Parliamentary Information and Research Service, Library of Parliament. Current Issue Review 94-4E. Revised 16 May 2005. [accessed 2013 August 27] Available:

http://www.parl.gc.ca/content/lop/researchpublications/944-e.htm

10. Province of Ontario. Breaking the cycle. The third progress report: Ontario's poverty reduction strategy, 2011 annual report. Ontario. [accessed 2013 August 27] Available: http://www.children.gov.on.ca/htdocs/English/documents/breakingthecycle/2011AnnualReport.pdf.

11. Government of New Brunswick. Overcoming poverty together: The New Brunswick economic and social inclusion plan. New Brunswick: Government of New Brunswick. 2010. [accessed 2012 Jul 17]. Available: www2.gnb.ca/content/dam/gnb/Departments/esic/pdf/Booklet-e.pdf.

12. Government of Québec. Régie de l'assurance maladie Québec. Dental services. [accessed 2012 Jul 26]. Available: http://www.ramq.gouv.qc.ca/en/citizens/health-insurance/healthcare/Pages/dental-services.aspx.

13. Government of Alberta. Dental and optical assistance for seniors. [accessed 2013 August 27] Available: http://www.seniors.alberta.ca/financial_assistance/dasp/basic/

14. Government of Yukon. Extended Health Care Benefits to Seniors – Benefits. [Updated 10-19-2010; accessed 2012 Jul 31]. Available: http://www.hss.gov.yk.ca/extended_care_benefits.php.

15. Leake J, Birch S. Public policy and the market for dental services. *Comm Dent Oral Epidemiol.* 2008;36(4):287-95.

16. Chawla RK. Shifts in spending patterns of older Canadians. Statistics Canada, Catalogue no. 75-001-XIE. *Perspectives.* 2005;6:12,17-28.

17. Manski RJ, Goodman HS, Reid BC, Macek MD. Dental insurance visits and expenditures among older adults. *Am J Public Health.* 2004;94(5):759-64.

18. Muirhead V, Quiñonez C, Figueiredo R, Locker D. Predictors of dental care utilization among working poor Canadians. *Community Dent Oral Epidemiol.* 2009;37(3):199-208.

19. Wallace BB, MacEntee MI. Access to dental care for low-income adults: perceptions of affordability, availability and acceptability. *J Community Health.* 2012;37(1):32-9.

20. Hurley J, Guindon GE. 2008. Centre for Health Economics and Policy Analysis (CHEPA) Working Paper Series – Paper 08-04 – Private Health Insurance in Canada. [accessed 2013 August 27] Available: http://www.chepa.org/research-products/working-papers/08-04.

21. van Doorslaer E, Masseria C, Koolman X, OECD Health Equity Research Group. Inequalities in access to medical care by income in developed countries. *CMAJ.* 2006;174(2):177-83.

22. Allin S. Does Equity in Healthcare Use Vary across Canadian Provinces? *Healthc Policy.* 2008;3(4):83-99.

23. Alter DA, Stukel T, Chong A, Henry D. Lesson from Canada's Universal Care: socially disadvantaged patients use more health services, still have poorer health. *Health Aff (Millwood).* 2011;30(2): 274-83.

24. Bedos C, Levine A, Brodeur JM. How people on social assistance perceive, experience, and improve oral health. *J Dent Res.* 2009;88(7):653-7.

25. McNally M, Lyons R. The silent epidemic of oral disease: evaluating continuity of care and policies for the oral health care of seniors. *Oral Health of Seniors Project: CHSRF Final Report.* 2004. [accessed 2013 August 27] Available at: http://www.fcass-cfhi.ca/Migrated/PDF/ResearchReports/OGC/lyons_final.pdf

26. Österberg T, Sundh W, Gustafsson G, Gröndahl HG. Utilization of dental care after the introduction of the Swedish dental health insurance. *Acta Odontol Scand.* 1995;53(6):349-57.

27. Grignon M, Hurley J, Wang L, Allin S. Inequity in a market-based health system: Evidence from Canada's dental sector. *Health Policy.* 2010;98(1):81-90. Epub 2010 Jun 23.

28. Slaughter A, Taylor L. Perceptions of dental care need among African-American elders: implications for health promotion. *Spec Care Dentist.* 2005;25(3):158-63.

29. Riley JL 3rd, Gilbert GH, Heft MW. Dental attitudes: proximal basis for oral health disparities in adults. *Community Dent Oral Epidemiol.* 2006;34(4):289-98.

30. MacEntee MI, Hole R, Stolar E. The significance of the mouth in old age. *Soc Sci Med.* 1997;45(9):1449-58.

31. Bush HM, Dickens NE, Henry RG, Durham L, Sallee N, Skelton J, et al. Oral health status of older adults in Kentucky: results from the Kentucky Elder Oral Health Survey. *Spec Care Dentist.* 2010;30(5):185-92.

32. Slack-Smith L, Lange A, Paley G, O'Grady M, French D, Short L. Oral health and access to dental care: a qualitative investigation among older people in the community. *Gerodontology.* 2010;27(2):104-13.

33. Locker D, Liddell A, Burman D. Dental fear and anxiety in an older adult population. *Community Dent Oral Epidemiol.* 1991;19(2):120-4.

34. Bell RA, Arcury TA, Anderson AM, Chen H, Savoca MR, Gilbert GH, et al. Dental anxiety and oral health outcomes among rural older adults. *J Pub Health Dent.* 2012;72(1):53-9.

35. Moreira AN, Rocha ES, Popoff DA, Vilaça EL, Castilho LS, de Magalhães CS. Knowledge and attitudes of dentists regarding ageing and the elderly. *Gerodontology.* 2012;29(2):e624-31.

36. MacEntee MI, Weiss RT, Waxler-Morrison NE, Morrison BJ. Opinions of dentists on the treatment of elderly patients in long-term care facilities. *J Public Health Dent.* 1992;52(4):239-44.

37. Hally J, Clarkson JE, Newton JP. Continuing dental care for Highlands elderly: current practice and attitudes of dental practitioners and home supervisors. *Gerodontology.* 2003;20(2):88-94.

38. Hawkins RJ, Locker D. Non-clinical information obtained by dentists during initial examinations of older adult patients. *Spec Care Dentist.* 2005;25(1):12-8.

39. Reed R, Broder HL, Jenkins G, Spivack E, Janal MN. Oral health promotion among older persons and their care providers in a nursing home facility. *Gerodontology.* 2006;23(2):73-8.

40. Chung JP, Mojon P, Budtz-Jørgensen E. Dental care of elderly in nursing homes: perceptions of managers, nurses, and physicians. *Spec Care Dentist.* 2000;20(1):12-7.

41. Thorne SE, Kazanjian A, MacEntee MI. Oral health in long-term care: the implications of organisational culture. *J Aging Studies.* 2001;15(3):271-83.

42. Rafter ME, Pesun IJ, Herren M, Linfante JC, Mina M, Wu CD, et al. A preliminary survey of interprofessional education. *J Dent Educ.* 2006;70(4):417-27.

43. MacEntee MI. Muted dental voices on interprofessional healthcare teams. *J Dent.* 2011;39 Suppl 2:S34-40.

44. Coleman P, Watson NM. Oral care provided by certified nursing assistants in nursing homes. *J Am Geriatr Soc.* 2006;54(1):138-43.

45. Jiang CY. The implementation of oral health regulation in long-term care facilities. Master thesis, University of British

Columbia. [accessed 2013 August 27] Available: https://circle.ubc.ca/handle/2429/42100

46. Yoon MN, Steele CM. Health care professionals' perspectives on oral care for long-term care residents: nursing staff, speech-language pathologists and dental hygienists. *Gerodontology.* 2012;29(2):e525-35.

47. Dharamsi S, Jivani K, Dean C, Wyatt C. Oral care for frail elders: knowledge, attitudes, and practices of long-term care staff. *J Dent Educ.* 2009;73(5):581-8.

48. Canadian Dental Association. Dental Health Services in Canada. Facts and Figures 2010. [accessed 2013 August 27] Available: http://www.med.uottawa.ca/sim/data/Dental/Dental_Health_Services_in_Canada_June_2010.pdf.

49. Statistics Canada. Age and sex structure: Canada, provinces and territories, 2010. [modified 2011-07-20;accessed 2011 Aug 13]. Available: http://www.statcan.gc.ca/pub/91-209-x/2011001/article/11511-eng.htm

50. *Research in Focus on Research.* What the census can tell us about Canada's dental workforce? 2008. Sudbury (ON): Centre for Rural and Northern Health Research. [accessed 2013 August 27]. Available http://www.cranhr.ca/focus.html.

51. Dandy K, Bollman RD. Seniors in Rural Canada. In: Rural and small town Canada Analysis Bulletin. Statistics Canada. 2008;7(8), catalogue no. 21-006-X. [accessed 2013 August 27] Available at: http://www.statcan.gc.ca/pub/21-006-x/21-006-x2007008-eng.pdf

52. Public Health Agency of Canada. The Chief Public Health Officer's Report on The State of Public Health in Canada 2010. Chapter 3: The Health and Well-being of Canadian Seniors. accessed Jul 17 2012]. Available: http://www.phac-aspc.gc.ca/cphorsphc-respcacsp/2010/fr-rc/cphorsphc-respcacsp-06-eng.php.

53. Lester V, Ashley FP, Gibbons DE. Reported dental attendance and perceived barriers to care in frail and functionally dependent older adults. *Br Dent J.* 1998;28;184(6):285-9.

54. MacEntee MI, Thorne S, Kazanjian A. Conflicting priorities: oral health in long-term care. *Spec Care Dentist.* 1999;19(4):164-72.

55. Avlund K, Holm-Pedersen P, Schroll M. Functional ability and oral health among older people: a longitudinal study from age 75 to 80. *J Am Geriatr Soc.* 2001;49(7):954-62.

56. Chowdhry N, Aleksejuniene J, Wyatt C, Bryant R. Dentists' perceptions of providing care in long-term care facilities. *J Can Dent Assoc.* 2011;77:b21.

57. Quiñonez CR, Figueiredo R, Locker D. Canadian dentists' opinions on publicly financed dental care. *J Public Health Dent.* 2009;69(2):64-73.

58. Anheier HK. What kind of nonprofit sector, what kind of society? Comparative policy reflections. *Am Behav Scientist.* 2009;52(7):1082-94. doi: 10.1177/0002764208327676.

59. Wallace BB, MacEntee MI. Perspectives on community dental clinics and oral health inequities in British Columbia. *J Health Care Poor Underserved.* 2013;24(2):943-53.

60. Nissan E, Castano MS, Carrasco I. Drivers of non-profit activity: a cross-country analysis. Small Bus Econ. 2012;38(3):303-20. DOI 10.1007/s11187-010-9276-5.

61. Pesut B, Beswick F, Robinson CA, Bottorff JL. Philosophizing social justice in rural palliative care: Hayek's moral stone? *Nurs Philos.* 2012;13(1):46-55.

62. American College of Dentists. Ethics Handbook for Dentists. [revised 2012; accessed 2013 Jul 24]. [accessed 2013 July 24] Available: http://acd.org/ethicshandbook.htm.

63. Canadian Dental Association. CDA position on access to oral healthcare for Canadians. May 2010.[accessed 2013 Jul 24]. Available: http://www.cda-adc.ca/_files/position_statements/accessToCare.pdf .