

PERSONAL VIEW

Health and sustainability of rural communities

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ABSTRACT

The challenges associated with rural and remote health have been widely acknowledged by rural communities and the health care community for some time now. However, it is only recently that any concerted effort has begun to address these difficulties. The aim of this paper was to examine the issue of rural health and sustainability internationally with a particular emphasis on the Canadian context. This paper used a framework to: articulate the nature of rural health and sustainability; examine the historical, socio-cultural, ethical, legal, economic and political aspects of rural health and sustainability; delineate the importance and significance of rural health and sustainability to Canadian citizens, and analyze progress made in relation to rural health and sustainability. This paper concludes by cautioning that rural health and sustainability can only be enhanced by innovative strategies that employ both capacity building partnerships with rural people that are supported overall, by adequate funding allocation.

Introduction: an analysis of rural Canadian health and sustainability

The challenges associated with rural and remote health have been widely acknowledged by rural communities and the health care community for some time now. However, it was only recently that any concerted effort has begun to address these difficulties. The aim of this paper was to examine the issue of rural health and sustainability internationally with a particular emphasis upon the Canadian context. To achieve

its aim this paper used a framework proposed by McIntyre and Thomlinson¹ to:

- articulate the nature of rural health and sustainability
- examine the historical, socio-cultural, ethical, legal, economic and political aspects of rural health and sustainability
- delineate the importance and significance of rural health and sustainability to Canadian citizens



- analyze the work of Romanow² in relation to rural health and sustainability

Rural health and sustainability: its nature

Rural idealism

All over the world pervasive, romantic connotations are associated with 'rural' and 'rural lifestyle.' However, in reality, these notions are very idealistic and do not portray 'rural' accurately. Countless international rural communities encounter tremendous demographic, economic, social and ecological challenges associated with geographic isolation, depopulation and population aging, environmental decay and depletion of natural resources.

'Rurality' an internationally recognized risk factor

Contrary to their diverse nature, rural communities worldwide share common problems in health status and in access to health care. Population health rhetoric has yet to translate into successful multisectoral strategies for reducing disparities in health status and access to health care, the extent of which is clearer when analyzing the rural situation.

People in rural communities have poorer health status and greater needs for primary health care, yet they are not as well served and have more difficulty accessing health care services than people in urban centers .(p.162)²

In Australia, for example, it is widely recognized that the health of rural residents is poor when compared with their urban counterparts³ and in Canada health indicators consistently reveal that significant disparities exist in health outcomes between residents of northern Canada versus the south and between residents living in Atlantic Canada and the rest of the country².

While it appears that a community's health is inversely proportional to the remoteness of its location, rurality is

internationally recognized as a risk factor⁴. Most rural and remote areas in Canada are experiencing a trend towards progressive deterioration in health the greater the distance from urban areas³. 'At every stage of the lifespan, remote-area living compounds the difficulty of dealing with health problems or age-related disability' (p.2)⁵. Moreover, residents of rural health regions not only have lower life expectancy than the national average, they experience higher disability, violence, accidental, and poisoning rates than do their urban counterparts⁶.

Challenges to health care access

Internationally, rural and remote community residents face numerous challenges to health care access, some of which include:

- problematic access to primary health care, diagnostic services and specialized treatments
- challenges to retention of health care providers
- a limited number of health care facilities, the majority of which are in dire need of upgrading

Further, rural residents worldwide experience the extra burden associated with high costs incurred while traveling in order to secure required health care. For most, this traveling necessitates days or weeks away from family and social support, not to mention the incurred costs for sustenance and accommodation.

Although innovations such as telemedicine in Australia⁷ and telehealth in Canada² have addressed problematic access to specialized health care services, the state of health in rural and remote areas of both countries remains less than optimal. Fee for service continues to be the dominant payment method for doctors, despite widespread and longstanding recognition of its inappropriate incentives and primary health care remains fragmented, unevenly distributed, and disproportionately focused on reacting to episodic illness⁸.



Health system reforms

Under the guise of health care reform, centralization of health care services has not only created disparities in access to health care, but difficulties associated with recruitment and retention of health care professionals compounding the lack of access to adequate health care^{9,10}. While access to physicians, nurses and specialists varies significantly around the world, many rural and remote communities do not have access to even the most basic health care due to an insufficient number of health care providers.

Physician shortage

The shocking status of physician recruitment and retention in rural and remote areas is highlighted by Ng, Wilkins, Pole, & Adams' and findings related to numbers of physicians in rural areas and distances between rural and remote residents and the nearest physician¹¹. In 1993, the situation in rural Canada was such that:

- There was less than one physician per 1000 rural residents, compared with two or more physicians per 1000 urban residents
- The average rural resident lived 10 km away from a physician, compared with less than 2 km for an urban resident
- The 12 700 persons who lived between 65-69 N latitude, were in excess of 100 km away from a physician
- No physicians were in residence above 70° N latitude, the most northern region of Canada which is inhabited by 3300 persons¹¹

Nursing shortage

The global nursing shortage¹², magnifies the problems associated with recruiting and retaining nurses in rural and remote communities. For rural nurses, the deteriorating conditions within the system that have caused so many to leave are more keenly experienced¹³. Some recruitment and retention challenges include¹³:

- less available staff to distribute work load
- extended shifts and on call
- no breaks during shifts
- requests to remain in the locality during off duty hours
- inflexible work hours, short term contracts and fractional time appointments
- demands of family responsibilities compete/conflict with shift work requirements
- access to education and training is compromised by greater distances, expense, time and location
- limited career opportunities

Workforce shortage solutions

The Canadian Health Services Research Foundation claims that the solution to inequity of access to healthcare providers lies in not merely having many healthcare workers in the system, but in ensuring that healthcare workers are well distributed among all urban, rural and remote areas¹⁴. However, rural nursing and medical practice are different from that in the urban communities. Structures and solutions aimed at improving urban service provision do not necessarily work in rural communities¹³.

Common goals and interests of rural residents internationally

Rural residents are poignantly aware of the disparities that exist in relation to their health status, access to health care and access to health care providers. Faced with unfavorable odds rural residents continue to believe in a future characterized by better health and quality of life.

However, rural residents often do not recognize that they share common interests and goals among themselves. These commonalities become more apparent when applying the framework of the determinants of health¹⁴⁻¹⁶:

- income and social status
- social support networks
- education



- employment and working conditions
- physical environments
- biology and genetic endowment
- personal health practices and coping skills
- healthy child development and health services
- and the social, environment, gender and culture

Limitations of current health promotion efforts

To date, public health has examined these factors more at an individual level than at a group or community level. Current emphasis in research has been on individual behaviors with little attention being directed towards investigating the possible influence of social forces in family and community¹⁷.

*We seem to spend more time calculating how to apply medical innovations to the individual's ill health than we spend evaluating or applying the discoveries of social science to the community's well-being. (p. 1182)*¹⁸

Rural health and sustainability: historical aspects

1970s healthy public policy

The concept of healthy public policy is not a new one, originating almost 30 years ago with Canada assuming a leadership role in endorsing the notion of population health promotion. While emphasizing that a high quality health care system was only one component of a healthy public policy, Lalonde's report explored factors that influence the health of a population including¹⁶:

- human biology
- lifestyle
- environment
- availability of health services

Lifestyle: Of these factors, attention was first directed towards the impact of lifestyle on health status. Lalonde

proposed that changes in lifestyle or social and physical environments would likely lead to more improvements in health than those achieved by spending more money on existing health care delivery systems¹⁶. Government and non-government organizations established health promotion programs designed to assist people to adopt healthy lifestyles¹⁹. Programs, primarily preventative in nature, were implemented with a focus on the reduction of health related risk behaviors and incorporation of strategies such as²⁰:

- the Canada Food Guide
- ParticipAction
- Dialogue on Drinking

1980s contributions

In the 1980s, the remaining health determining factors became the focus, most notably the influence on health of environments including¹⁹:

- social
- physical
- economic
- political

During the first international conference on health promotion, in 1986, two Canadian documents were released:

- Achieving Health for All: A Framework for Health Promotion¹⁵
- The Ottawa Charter on Health Promotion²¹

While drawing attention to the underlying conditions within society that determine health, these documents were instrumental in focusing policy and program discussions on how health is created and how health can be achieved by society, in its entirety.

Health promotion challenges: Three health promotion challenges outlined by Canadian Health Minister, Jake Epp include¹⁵:



- increasing the prevention of disease
- reducing inequities in health
- enhancing the capacity to cope with chronic disability and disease

In response to these challenges, Epp¹⁵ proposed:

1. A framework of mechanisms including mutual aid, self-care and creation of healthy environments.
2. Strategies including coordinating healthy public policy, strengthening community health services, and fostering public participation.

While offering these strategies, Epp not only acknowledged the important role of health care providers in promoting health and preventing disease, but also underscored the need for working with other sectors to ensure that the collective policy environment was one that supports health¹⁵.

World Health Organization's position

WHO broadly considered health determinants to be pre-requisites for health²¹, most notably¹⁹:

- food
- shelter
- education
- income
- a stable eco-system
- sustainable resources
- equity
- peace
- social justice

Further, WHO acknowledged that access to these prerequisites could not be guaranteed by the health sector alone. Instead, it was recognized that coordinated action was required among all concerned, including:

- governments
- non-governmental organizations
- industry

- media

Mustard²², added to the concept of population health by proposing that the determinants of health do not work in isolation. Rather, it was suggested that it is the complex interaction among the determinants that has the most significant effect on health.

1990s perspectives

The Federal/Provincial/Territorial Advisory Committee on Population Health, found mounting evidence to support the notion that the determinants of health, particularly the socio-economic determinants, influence the health status of Canadians²³.

Into the new millennium

In response to the Federal/Provincial/Territorial Advisory Committee findings²³, all Ministers of Health in September 2000 consented to assign priority to action on the broader, underlying conditions that make Canadians healthy or unhealthy²⁰.

On 3 April 2001, the Canadian federal government established the Commission on the Future of Health Care in Canada and nominated former Saskatchewan premier, Roy Romanow, as its Commissioner. With a mandate to advise the federal government on how to ensure the sustainability of Medicare while ensuring access to timely, affordable and quality health care services for all Canadians, the Romanow Commission used a four phase approach to²⁴:

1. Consult with key expert/stakeholder groups to gather and synthesize information on health care, narrow the research focus and consultation priorities, identify knowledge gaps, and commission new research to bridge them.
2. Release an Interim Report in February, 2002 and hold expert/stakeholder consultations to encourage feedback concerning preferences and values for future health care.



3. Hold televised policy dialogues and closed round table discussions on rural health issues and themes to regionalize context, and release discussion papers by independent researchers, experts and academics.
4. Hold a validation conference for consensus building concerning the recommendations to be outlined in the Commission's final report.

Rural health and sustainability: Socio-cultural aspects

In common with rural populations the world over, rural Canadians are not a single, homogenous group. Cultural diversity is a fundamental Canadian characteristic that exemplifies rural communities just as much as it does those, which are urban. While many rural communities are located in large agricultural regions, some are located close to major urban centers, others are coastal communities and still others are located in the most remote areas of Canada's north².

Most Canadians consider access to social programs to be essential for securing quality of life. People living in rural and remote communities are no exception. However, it is now widely acknowledged that rural and remote communities have geographical dimensions that have created an ever increasing sense of isolation and corresponding division between rich and poor²⁵. Rural and remote Canadian residents are particularly concerned with this widening gap in:

- distribution of wealth in Canada
- corresponding increases in poverty rates
- declines in availability of social programming, quality food and affordable housing

During the Romanow Commission's consultations, Canadians residing in rural and remote communities spoke candidly about their concerns related to health care in Canada²⁶. These residents talked about the need for²:

- good health
- good access to health care

These needs were not only perceived to be vital to sustaining their personal quality of life, but also essential for the quality of life in rural communities²⁷.

Some rural participants viewed the problem in rural areas to be access to health care in general. Others raised rural health and sustainability of access to specialists and surgery procedures in rural area, complimenting a common concern across a variety of groups¹⁴:

- the wait lists for certain procedures
- access to more timely interventions

Still other participants stressed the importance of health promotion and prevention as relevant to maintaining a high quality of life¹⁴. The reactive nature of the health care system was highlighted in the concerns that rural residents had that funding for health care continues to be concentrated in the traditional disease model¹⁴.

Rural health and sustainability: ethical, legal, economic and political aspects

Internationally, decisions about how much and where to spend health care dollars are inherently based on values²⁸. But whose values should be used during the decision making process?

Sommerville advises that Canada's public health care system is 'a major force in determining what can be referred to as the ethical and legal tone of a society' (p. xi)²⁹. Therefore, the underlying values should reflect the principles of the Canada Health Act (CHA): the 'right to health care for all,' and assurances that no Canadian citizen will be impoverished through long, expensive care³⁰, those values and beliefs which Canadians prefer²⁸.

Five federally defined principles comprise the core of the CHA³¹:

1. Universality
2. Accessibility



3. Portability
4. Comprehensiveness
5. Public administration.

The CHA governs federal transfers to provinces for the provision of public insurance for hospital care and physician services³².

Although both federal and provincial levels of government play a role in health care, the preponderance of jurisdictional responsibility for the provision of health services lies with provincial governments³². While sharing the costs of provincially provided health services that fall under the rubric of Canada Health and Social Transfer (CHST) under the terms governed by the CHA, the federal government³²:

- shares part of the cost of provincial medicare
- runs health protection (ie regulates medications)
- funds health care to Aboriginals on reserves
- shares health promotion and education with the provinces

Many Canadians believe that the CHA's principles continue to be basically sound; still others view Canada's health care system to be unsustainable. The desire to sustain a comprehensive, universal and publicly administered health care system is in direct conflict with the desire to eliminate deficits, reduce the debt load and lower taxes.

Both the federal and provincial governments are currently struggling to maintain a high quality, publicly administered and publicly funded healthcare system while, at the same time, managing conflicting demands of the public for lower taxes and balanced budget³².

Saul cautioned that corporate values are becoming more important in resource decisions and that such values are not the best choice for healthcare³³. Further, Saul asserted that Canadians have lost sight of the commitment to the common good that has depicted the country's development as a nation. A corporate ideology, based on self-serving processes and technology is the result of a society organized

around economics, rather than around those things that contribute to a good life for its citizens.

Enhancing rural community health & sustainability: current approaches

Romanow claimed that Canada lacks a national approach to addressing rural health and sustainability specific to rural communities². Further, Romanow alleged that even though territories and provinces may be developing alternate methods for addressing rural health and sustainability issues, they are engaged in this process in isolation, without an overall guiding vision and sufficient attention to co-ordination.

In reviewing the current approaches to resolving rural community health and sustainability issues, Romanow identified a number of fundamental challenges²:

1. A lack of consensus exists on what 'adequate' access should include.
2. A need is evident for effective linkages with larger centers.
3. Significant challenges are associated with serving the smallest and most remote communities.
4. There is a pervasive tendency to direct strategies towards of alleviation of symptoms as opposed to elimination of etiologies.
5. There is a predominance of 'urban' strategy application to rural communities.
6. A paucity of rural research is evident.

Romanow asserted that there is a lack of consensus about²:

- what constitutes adequate access
- identification of those services that are most important for people to access

Identification of a basic core of services for different types of rural communities was understood to be an approach that will differentiate between the core services available to people in their own communities and those services they will



need to from other centres. Romanow pointed out that identification and agreement about the core services will necessitate consultation with key stakeholder groups, including community residents and health care providers².

Since smaller rural communities are unable to sustain a full range of services, some health care services could be delivered in smaller communities, with specialized services continuing to be available in larger centers. Ultimately there is a need to improve and enhance the rural community linkages with urban center.

The smallest and most remote communities are the most difficult to serve because they have too few people to sustain anything but the most basic services, which in certain rural areas can even prove problematic². It is suggested that Canada should examine the models that other countries (i.e. Australia) have developed in response to similar rural health and sustainability challenges.

In the majority of situations, strategies and programs have focused on the symptoms of rural health and sustainability problems, as opposed to the causes. Emphasis has been directed at finding solutions to immediate service delivery challenges and ways to recruit and retain more health care providers. Romanow cautioned that although lack of access to health services as well as physicians and nurses are definitely serious quandaries, resolving these issues may not be sufficient for significantly improving the sustainability of rural communities and the health status of rural residents². Alternatively, Romanow emphasized that the fundamental causes of the 'rural health deficit' must be addressed².

In spite of the increased understanding that rural health problems are unlikely to be adequately addressed by mainstream programs alone²⁵, many healthcare planners, providers and administrators continue to rely solely on the use of urban-focused approaches rather than designing models to suit the unique circumstances of rural communities. Romanow warned that continued reliance upon the use of urban models will create barriers for rural communities in their efforts to achieve equal status with their

urban counterparts². Unique rural health challenges need urgent attention and unique rural conditions must be considered when addressing those problems.

Research to describe and measure the health of Canadians and to identify the factors that influence their health is ongoing³⁴⁻³⁶. However, limited priority has been given to describing the health of the rural Canadians and sustainability of rural communities (KD Ryan-Nicholls, FE Racher, B Gfellner, R Annis. Unpubl. data, 2000). Moreover, strategies, programs and policies for improving health status of rural residents and the sustainability in rural communities have not been based on solid evidence or research. In the past, Canadian research on rural health issues has been piecemeal in nature and limited to small-scale projects². To make matters worse, despite the wealth of health-related data at the federal, provincial and territorial levels, most data collected or released are frequently not presented in a manner that supports meaningful rural health research and analysis³⁷. Furthermore, as with health research in general, there is little connection between decision makers and researchers. Consequently, rural strategies, programs, health policies and practice have not been as effective as they might have been.

Conclusion

It would seem that tremendous challenges lie ahead for rural Canada. The place to start, 'is with a vision where Canadians residing in rural and remote regions and communities are as healthy as people living in metropolitan and other urban centers' (p. 165)². This vision includes portions of the Rural and Remote Access Fund being allocated to improve health care access by:

1. Increasing the supply of health care providers in smaller communities by supporting the expansion of the rural experiences for physicians, nurses and other healthcare providers, as part of their education and training.
2. Supporting the expansion of telehealth approaches.



Inherent in this vision is the view that health status would also be improved through the use of the Rural and Remote Access Fund to support innovative strategies for health care service delivery to rural and remote communities and to improve the health status of people in those communities.

The author also has a vision of rural residents living in rural and remote regions and communities who are equally as healthy as their urban counterparts. She concurs that such a vision could also guide all rural health initiatives including policy development, program planning, clinical practice, research, and health human resources development.

Although she agrees with Romanow's vision the author must admit to experiencing reservation concerning some of his recommendations. Based on Canada's previous track record of attempting to address issues by merely allocating more money to health care without providing sufficient attention to the fundamental, underlying issues, she is concerned that the establishment of the Rural and Remote Access Fund may be interpreted as the sole strategy for addressing rural health and sustainability specific to rural residents and their communities. In the author's opinion, rural health and sustainability can only be enhanced by innovative strategies that employ capacity building partnerships with rural people that are supported overall by adequate funding allocation.

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References

1. McIntyre M, Thomlinson E. *Realities of Canadian nursing: Professional, practice and power issues*. Philadelphia: Lippincott, Williams & Wilkins, 2003.
2. Romanow RJ. *Building on values: The future of health care in Canada - Final Report*. 1-339. 2002. Ottawa, Health Canada.
3. Townsend M, Moore J, Mahoney M. Playing their part: the role of physical activity and sport in sustaining the health and well being of small rural communities. *Rural and Remote Health 2* (on line) 2002: 109. Available: <http://rrh.deakin.edu.au> (Accessed 4 March 2004).
4. Pearson TA, Lewis C. Rural epidemiology: Insights from a rural population laboratory. *American Journal of Epidemiology* 1998; **198**: 949-957.
5. Brown M. Health-care choices - the right of all Australians. *Rural and Remote Health 2* (on line) 2002: 162. Available: <http://rrh.deakin.edu.au> (Accessed 4 March 2004).
6. Statistics Canada. *Health indicators 2001(3)*. Ottawa: Statistics Canada, 2001.
7. Kelaher M, Manderson L, Poots H. Health service utilization among Filipino women in remote Queensland, Australia. *Rural and Remote Health 3* (on line) 2003: 151. Available: <http://rrh.deakin.edu.au> (Accessed 4 March 2004).
8. Lewis S, Donaldson C, Mitton C, Currie G. The future of health care in Canada. *BMJ* 2001; **32**: 926-929.
9. Conte SJ, Imershein AW, Magill MK. Rural community and physician perspectives on resource factors affecting physician retention. *Journal of Rural Health* 1992; **8**: 185-196.
10. Mackesy R. Physician satisfaction in rural hospitals. *Hospital & Health Services Administration* 1993; **38**: 375-385.



11. Ng E, Wilkins R, Pole J, Adams OB. How far to the nearest physician? *Rural and Small Town Canada Analysis Bulletin* 1999; **1**: 1-7.
12. Hawthorne L. The globalisation of the nursing workforce: Barriers confronting overseas qualified nurses in Australia. *Nursing Enquiry* 2001; **8**: 213-229.
13. Mahnken J. More nurses-better health. *Rural and Remote Health*. *Rural and Remote Health 1* (on line) 2001: 200. Available: <http://rrh.deakin.edu.au> (Accessed 4 March 2004).
14. Canadian Health Services Research Foundation. *Human resources in Canada's healthcare system*. Issue/Survey Paper prepared for the Commission on the Future of Health Care in Canada. 2002. Ottawa, Canadian Health Services Research Foundation.
15. Epp J. *Achieving health for all: A framework for health promotion*. Ottawa: Health and Welfare Canada, 1986.
16. Lalonde M. *A new perspective on the health of Canadians: a working document*. Ottawa, Health and Welfare Canada, 1974.
17. Wolf S, Bruhn J. *The power of clan: The influence of human relationships on heart disease*. New Jersey: Transaction, 1993.
18. Lomas J. Social capital and health: Implications for public health and epidemiology. *Social Science and Medicine* 1998; **47**: 1181-1188.
19. Hamilton N, Bhatti T. *Population health promotion: an integrated model of population health and health promotion*. Ottawa: Health Promotion Development Division, 1996.
20. Kirby MJL, LeBreton M. *The health of Canadians - the federal role. Vol Six: Recommendations for Reform*, 1-325. Ottawa: Health Canada, 2002.
21. WHO. *Ottawa charter for health promotion*. Ottawa: WHO, 1986
22. Mustard F. *Determinants of Health*. Ottawa: Canadian Institute for Advanced Research, 1989.
23. Federal/Provincial/Territorial Advisory Committee on Population Health. *Toward a healthy future - Second report on the health of Canadians*. 1999. Ottawa: Health Canada, 2002.
24. Canadian Mental Health Association. *Four phases of the Romanow Commission's national dialogue strategy*. Canadian Mental Health Association Ontario Division , 1-2. 2003.
25. Humphreys J, Hegney D, Lipscombe J, Gregory G, Chater B. Whither rural health? Reviewing a decade of progress in rural health. *Australia Journal of Rural Health* 2002; **10**: 2-14.
26. Romanow RJ. *Building on values: the future of health care in Canada - Final Report*. 1-339. Ottawa: Health Canada, 2002.
27. Canadian Policy Research Networks. *Asking citizens what matters for quality of life in Canada. A rural lens*. Ottawa: Canadian Policy Research Networks, 2001
28. Canadian Nurses Association. *Working with limited resources: nurses' moral constraints. Canadian registered nurses: Ethics in practice* 2000. Ottawa: Canadian Nurses Association, 2000.
29. Somerville MA. *Do we care? Renewing Canada's commitment to health*. Montreal: McGill-Queen's University Press, 1999.
30. Fugard B. Efficiency vs equality: Health reform in Canada. *The Journal of Nursing Scholarship* 1998; **30**: 124-126.
31. BCMA presentation to the Royal Commission on the future of health care in Canada: *A vision for sustaining medicare*. Vancouver, BC: Vancouver Public Hearing, 2002.
32. Boychuk GW. *The changing political and economic environment of health care in Canada*. Ottawa: Commission on the Future of Health Care in Canada. 2002
33. Saul JR. *The unconscious civilization*. Concord, ON: Anansi, 1995.



34. Advisory Committee on Population Health. *Strategies for population health: Investing in the health of Canadians*. Ottawa: Health Canada, 1994.

35. Advisory Committee on Population Health. *Report on the health of Canadians*. Ottawa: Health Canada, 1996.

36. Advisory Committee on Population Health. *Toward a healthy future*. Ottawa: Health Canada, 1999.

37. Pitblado J, Pong R, Irvine A, Nagarajan K, Sahai V, Zelmer J et al. *Assessing rural health: toward developing health indicators for rural Canada*. Sudbury, ON: Centre for Rural and Northern Health Research, Laurentian University, 1999.
