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RUNNING HEAD: Physician availability and CAM use

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When one door closes, another door opens: Physician availability and motivations to consult
complementary and alternative medicine providers^a

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Abstract

Background: Access to needed health-care is considered a fundamental right by many developed nations, yet few studies have examined the health-care choices made by consumers when they are unable to get timely primary-care due to physician availability.

Aim: In this study we examine the implications of physician availability for consumers' health-care attitudes, behaviours, and choices, and specifically with respect to intentions to consult complementary and alternative medicine (CAM) providers.

Method: A sample of 235 CAM non-consumers and CAM clients were recruited from the offices of conventional medicine and CAM practitioners in an underserved urban center in Canada.

Results: Although 91% of the sample had a regular family physician almost half had experienced difficulties getting an appointment with a physician when needed. Those who had experienced access difficulties were more dissatisfied in general and with access to conventional health-care. The majority of the participants (85.1%) indicated that they would consider consulting a CAM provider should they have difficulty getting an appointment with a physician in the future, including nearly 60% of the CAM non-consumers. Stepwise logistic regression controlling for sociodemographic and health status variables revealed that participants who had more experience with CAM, greater perceived control over their symptoms, and who were generally dissatisfied with conventional health-care, were more likely to express intentions to use CAM should they experience physician access difficulties in the future.

Conclusions: In the context of low physician availability, health-care consumers who are dissatisfied with conventional medical care may choose to consult CAM providers to manage symptoms.

Keywords: physician access; satisfaction with health-care; complementary and alternative medicine;

Access to needed health-care is an important and often neglected determinant of health¹ that has become the focus of growing concern in Canada and other developed nations. In countries such as Canada where there is universal health-care coverage, barriers to health-care access include long wait times and difficulties getting an appointment because of insufficient physician availability.² Currently, physician availability is an ongoing issue in several developed nations including Canada,³ the United Kingdom,⁴ Australia,⁵ and New Zealand.⁶⁻⁷ Yet little is known about the effect of access difficulties on consumers' health-care choices. The unmet health-care needs that result from physician shortages may not only contribute to greater health risks⁸⁻⁹, but can have implications for consumers' health-care attitudes,¹⁰⁻¹¹ choices, and behaviours¹². This may be especially true in Canada where unmet health-care needs due to physician shortages have risen substantially over the past decade.¹³

The use of alternative forms of health-care, such as complementary and alternative medicine (CAM), has also increased in recent years.¹⁴⁻¹⁶ CAM includes a diverse group of healing therapies (e.g., chiropractic, homeopathy, massage therapy, and acupuncture) not currently considered an integral part of conventional medical practice.¹⁷ An often cited reason for the increasing interest and use of CAM is that people are becoming more consumer-minded in their health-care decisions,¹⁸ and that dissatisfaction with aspects of conventional care is one factor that has fueled this consumerist approach. Yet there is a paucity of research examining CAM use in underserved regions or the impact of physician availability on motivations for using CAM. The purpose of the current study was therefore to explore the extent to which problems accessing primary health-care due to physician availability are related to intentions to use CAM.

One factor contributing to primary-care access problems in Canada and other developed countries is an insufficient number of doctors to meet population needs. Among Organization for

Economic Cooperation and Development (OECD) countries, Canada has one of the lowest age-adjusted physician to patient ratios ranking 24 out of 27 countries, with the only United Kingdom, Japan, and Turkey having fewer doctors.¹⁹⁻²⁰ Recent data also indicate that Canada has the lowest rate of same day access to physicians for needed medical care, and the highest rate of waiting six or more days to get a physician appointment compared to five other OECD countries.²¹

Poor primary-care access due to insufficient physician supply is well known to have a number of important implications for health outcomes,⁸⁻²⁰⁻²² but can it also impact consumers' health-care attitudes, behaviours and choices? Not receiving timely primary-care may have immediate decisional and behavioural effects as individuals needing care are essentially forced to continue to wait until care is available, or to engage in alternative care choices such as self-care or utilizing other available health-care services. When lack of access is an ongoing issue there may be even more enduring consequences for patients' attitudes towards primary-care. For example, access difficulties have been linked to patient dissatisfaction.⁴⁻¹⁰ Consequently, consumer-minded individuals facing difficulties receiving primary-care may choose to look outside of conventional care to have their health-care needs met.

Dissatisfaction with conventional care is a factor known to be associated with both a consumerist approach to health-care and the use of CAM in particular. Several studies indicate that CAM use may be motivated by dissatisfaction with a variety of conventional care dimensions,²³ and dissatisfaction with conventional care in general.²⁴⁻²⁵ Although dissatisfaction has been implicated in motivating CAM use, the weight of the current evidence suggests that it may be most important for understanding initial CAM use.²⁴⁻²⁶⁻²⁷ Research on how dissatisfaction with access to primary health-care may influence CAM use is, however, scant.

Dissatisfaction with the availability of specialists in Israel was related to consulting CAM providers.²⁵ Similarly, a large survey in the United States found that delaying or not receiving needed medical care because of cost barriers was associated with CAM use in the previous year.²⁸ However, because CAM use in this study was predominantly self-care, it is unclear whether the same results would be found for provider-based CAM, or when the barriers to access are unrelated to financial factors.

Few if any studies have examined how access problems and dissatisfaction with conventional care may be related to CAM use in a region with low physician availability. The aim of the current study was therefore to examine how difficulties accessing a primary-care physician affect the attitudes, behaviours, and choices of health-care consumers with respect to CAM. Because dissatisfaction with conventional medical-care is a known predictor of CAM use we examined how dissatisfaction in general and with access to care was related to health-care consumer's intentions to use CAM should they experience access difficulties in the future. We also explored consumers' primary-care behaviours, the treatment choices that were made when they experienced difficulties accessing a physician, and whether physician availability was related to their intentions to consult CAM providers in the future. Finally, motivations to use CAM have been linked to certain age groups,²⁹ being female,³⁰ more educated,³⁰⁻³¹ having greater perceived control over health,³²⁻³³ and having poorer health status.³¹⁻³⁴ Accordingly, we examined dissatisfaction and access difficulties within the context of these variables.

Method

The study was part of larger investigation of the motivations for consulting CAM providers. In this paper we report the findings relevant to physician access difficulties and CAM use.

Setting and sample

The study was conducted over a 14-month period starting in January 2005 in an urban center in Southwestern Ontario, Canada. The low physician availability in Southwestern Ontario, Canada, provides an appropriate if not ideal location to examine the study objectives. In addition to the fact that Ontario has the lowest physician to patient ratio among the ten provinces in Canada,³⁵ the percentage of family physicians accepting new patients in Ontario has declined from 38.4% in 2000 to only 9.6% in 2006.³⁶ With only 4.1% of family physicians accepting new patients, Southwestern Ontario is particularly underserved, and has the second worst physician availability in the province.

Following institutional ethical approval of the study, participants were recruited by distributing questionnaires at 11 conventional medicine clinics and 16 CAM clinics staffed by one or more conventional medicine or CAM practitioners. The conventional clinics included six general/family physician clinics, two walk-in clinics, two community health clinics, and one urgent care clinic. The CAM clinics included two naturopathic clinics, four chiropractic clinics, eight clinics offering both chiropractic and massage therapy, and one clinic offering acupuncture, chiropractic and reflexology. The three remaining CAM clinics included one massage therapy clinic, one homeopathic clinic, and one clinic offering energy healing, reflexology and reiki. As participation is based on self-selection, it is difficult to estimate the exact response rates other than assessing questionnaires displayed versus those returned. A total of 679 questionnaires were made available to participants through displays in the 27 health clinics, and 242 (35.6%) questionnaires were completed and returned. The return rates of the individual clinics ranged from 20% to 57%, which may reflect differences in operating hours, size, and client volume among the clinics.

Procedure

The study was advertised in the waiting room of each clinic using a sign describing the study and a display box which made questionnaire packages available to potential participants. Patients interested in participating took a questionnaire package to complete at a location of their choice, or contacted the researchers and were mailed a questionnaire package, which included a postage-paid return envelope. As an incentive, participants were given the choice to enter into a draw for one of several gift certificates.

Materials

Each participant completed a self-report questionnaire that assessed demographic information, health problems, use of provider-based CAM, use of primary health-care services, satisfaction with conventional doctors, health control beliefs, and intentions to use CAM if a family physician was unavailable. Participants completed the Brief Health History questionnaire²⁴ to assess the experience of 13 acute and 16 chronic self-reported health problems within the past six months. The total number of acute and the total number of chronic problems experienced for each individual were summed.

Participants also completed a series of questions about the use of conventional primary-care services. First, they indicated whether they had a regular family doctor or health-care provider, and where they normally went when they experienced a non-emergency health problem. Participants indicated whether they ever had difficulty getting an appointment to see a physician (excluding specialists), and if so how many times in the past year this had happened. Participants were instructed that difficulty getting a physician appointment included the following: no appointments were available, scheduling of an appointment with a doctor was too far in the future, or for those who did not have a family physician, the wait time for a walk-in

clinic was more than 1 hour. Participants also reported the nature of the health problem that they were seeking care for when they encountered difficulties seeing a doctor. Those who had to wait to see a physician indicated what they did to deal with their health problem on a checklist which included options such as waiting until the problem went away, waiting until they could get an appointment, going to the emergency room, going to an urgent care clinic, or going to an alternative health-care provider. Finally, participants were asked if they would ever consider seeing an alternative health-care provider if they had difficulty getting a timely appointment to see a doctor in the future, with yes or no as response options.

Experience with CAM was assessed using was a measure adapted from Sirois & Gick.²⁴ Participants indicated if they had ever tried any of the CAM listed which included chiropractic, homeopathy/naturopathy, acupuncture, massage therapy, reflexology, and other, with space to specify other therapies tried. They also indicated how many times they had tried CAM (if any) in the past year and how long they had been using CAM (under 6 months, under 1 year, 1 to 2 years, 3 to 5 years, or over 5 years). Participants were classified into three client groups based on their experience with CAM rather than the type of office from which they were sampled to examine how experience with CAM was related to primary-care behaviours. Individuals who had not used CAM regularly or at all in the past year, or previously were described as CAM non-consumers, new/infrequent CAM clients (NICAM) were individuals who used CAM for two years or less, or for three to five years infrequently, and established CAM clients (ECAM) included individuals who had used CAM for over five years, or had used more than one complementary therapy for three to five years at high frequency.

Two subscales from the Patient Satisfaction Questionnaire Short-Form (PSQ-18),³⁷ a well-validated measure of specific aspects of patient satisfaction, was used to assess the extent to

which participants were satisfied with the treatment received from conventional medical doctors. Only the general satisfaction (two items) and satisfaction with accessibility and convenience (four items) were examined for the current study. All items were scored on a 5-point Likert-type scale with response options ranging from 1 (*strongly agree*) to 5 (*strongly disagree*), with higher values reflecting greater satisfaction with the treatment received from doctors. Internal consistencies for general satisfaction (.64) and satisfaction with accessibility (.75) were satisfactory.

To assess perceptions of control over health, participants completed two subscales of the Control Beliefs Inventory (CBI),³⁸ a previously validated measure.³⁹ The 7-item General Health Control subscale measured perceived control over health in general (e.g., ‘My health depends on how I take care of myself’), and the 5-item Symptom Control subscale measured the extent to which one perceives that illness symptoms can be managed and controlled (e.g., ‘If I do the right things I can make my symptoms more manageable’). All items are rated on a 6-point Likert-type scale, with response options ranging from 1 (*strongly disagree*) to 6 (*strongly agree*). The subscales demonstrated adequate to very good reliability in the current study with Cronbach alphas of .86 for Symptom Control, and .90 for General Control.

Statistical analyses

Descriptive analyses were conducted, and t-tests were used to examine the relation of access difficulties to satisfaction with conventional care. A binomial forward step-wise logistic regression was conducted with intention to consult a CAM provider as the dependent variable, controlling for sociodemographic variables (gender, education, and age) in the first step, and acute and chronic health problems in the second step. Access variables (past access difficulty, satisfaction with access) were conditionally entered in the third step, and control beliefs (general

and symptom control) and general satisfaction were entered in the fourth step to avoid any effects that may be masked by multicollinearity issues between the two satisfaction variables. Experience with CAM was entered in the final step as it was expected that this variable may dominate the model. A threshold of $p < 0.05$ set for retention in the model, and $p = 0.10$ for removal. Adjusted odds ratios (OR) and 95% confidence intervals (CI) were calculated for all variables remaining in the final model and changes in significance noted at each step.

Results

Demographic characteristics

The study included 235 participants (82.1 % female), ranging in age from 16 to 86, with a mean age of 40.7 (SD = 14). The majority of the participants were Caucasian (93.6 %), and married or living with spouse equivalent (62.4%), with 22.2% never married, and 15.4% separated, divorced or widowed. More than half were employed full time (53.6%), 22.6% were unemployed or retired, 17% were employed part-time, and 6.8% were on disability. Consequently, almost half of the sample said that they were getting by financially (47.7%), 34.9% described their financial status as comfortable, and 17.4% reported that they were struggling with some immediate financial concerns. Most of the participants were fairly well educated with 66.4% having one year or more of a university or college undergraduate education (excluding graduate school), 23% having a high school education or less, and 10.6% having attended graduate school.

Primary health-care use

The majority of the participants (91.1%) indicated that they had a family doctor/regular health-care provider. Consistent with this most participants reported that they went to their family doctor when they had a health problem, or to a walk-in clinic. The proportions varied

somewhat depending on participants' experience with CAM (see Table 1). ECAM clients were more likely than NICAM clients to report that they visited their CAM provider first when they had a health problem. Approximately half of the participants (47.7%) had experienced difficulty getting an appointment with a physician when they needed one. However, significantly more current CAM clients (51.4%) had experienced difficulty getting an appointment than had the CAM non-consumers (34.6%; $\chi^2(1) = 4.56, p < .05$). Among those who had experienced difficulty seeing a doctor the average number of times this occurred within the past year was 1.36 ($SD = 2.1$), with a range of between zero and 15 times. The health problems experienced by participants who reported difficulty getting an appointment varied, but were for the most part minor in nature. The most frequently reported health problem was a flu, cold or other infection (38.0%), and the remainder of health problems included back or muscle strains, reproductive issues, headache or general pain, gastrointestinal issues, chronic health problems, and other unknown or undisclosed health issues. A small proportion (7%) also reported that the reason for their appointment was a physical check-up. The health-care choices made by the participants when a doctor was not available are presented in Table 2. The choices of the CAM non-users and NICAM clients were very similar, whereas the ECAM clients tended to use CAM practitioners and urgent care centers, and not community health centers.

Satisfaction and access difficulties

A comparison of participants who did and did not experience access difficulties in the previous year revealed significant differences in the levels of satisfaction with conventional care. Those who had difficulty seeing a physician when needed reported lower satisfaction with access ($M = 2.38, SD = 0.91$ vs. $M = 3.20, SD = 0.82$) and in general ($M = 2.49, SD = 0.89$ vs. $M = 3.09, SD = 0.91$) as compared to those who did not have this difficulty ($t(1, 233) = 7.30, p < .001$, and

($t(1, 233) = 5.08, p < .001$, respectively).

Intentions to use CAM

Overall, the majority of the participants (85.1%) indicated that they would consult a CAM provider should they have difficulty getting an appointment with a doctor in the future. Not surprisingly, 90.3% of the NICAM clients and 93.7% of the ECAM clients reported that they would consider using CAM if a doctor was unavailable. However, the majority of the non-CAM clients (59.6%) also indicated intentions to use CAM should they have difficulty getting an appointment with a doctor in the future.

Predictors of intentions to use CAM

The adjusted OR and 95% CI for all variables remaining in the final regression model are presented in Table 4. None of the socio-demographic and health status control variables entered in the first two steps were significantly related to intentions to use CAM either initially or in the final model. Among the access variables conditionally entered in the third step, only satisfaction with access was a significant predictor and was retained (OR = .55, 95% CI .35, .85; $p < .01$), indicating that participants who expressed intentions to consult a CAM provider should they experience access difficulties in the future were more likely to be dissatisfied with access to conventional primary care. Symptom control but not general health control beliefs was conditionally entered in step 4 and remained significant in the final model. However, when general satisfaction was also entered in this step, satisfaction with access was no longer significant. Both CAM experience groups (NICCAM and ECAM) were retained in the model in the final step. The final model indicated that participants who would consider using a CAM provider in the future should a physician not be available were more likely to believe that their symptoms could be managed and controlled, were less satisfied in general with conventional

medical care, and were more likely to have previous experience with CAM. Together, all variables accounted for 33.9% of the variance in the final model predicting the intention to use CAM if access difficulties were experienced in the future.

Discussion

In this study we found some support for the role of physician availability in consumers' motivations for consulting CAM providers. A greater proportion of current CAM consumers had experienced access difficulties compared to non-CAM consumers, and those with more experience using CAM were more likely to express intentions to consult a CAM provider should they have difficulties getting an appointment with a physician in the future. In fact, approximately 15% of the CAM users reported that they had consulted a CAM provider the last time that they were unable to get an appointment with their family physician. In some respects this finding is not unexpected as these consumers would have greater confidence in the efficacy of CAM for treating minor health issues, having had longer and a wider range of CAM treatment experiences.

In addition, we found that the majority of primary health-care consumers expressed intentions to use CAM in the future should a physician not be available, regardless of whether they had previously consulted CAM providers. We believe that the unique characteristics of our study location, namely the longstanding problems with physician availability in Southwestern Ontario, may explain this finding. In this context, individuals may consider using CAM as a substitute for conventional care rather than wait for needed care from their physician, or endure unreasonable wait times in impersonal after-hour clinics and emergency rooms. This is not to suggest that in regions where physician availability is low that consumers will turn to CAM for *all* health issues. Rather, our findings indicate that for minor health problems, some consumers

may be motivated to utilize CAM care as a stop-gap. This is consistent with previous research that suggests consumers use CAM primarily to treat minor health problems.⁴⁰ It is also possible that under low access circumstances, consumers may be more inclined to consult a CAM provider for treatment of an ongoing or recurring health problem, rather than for first-contact care of a new health problem. This suggested utilization pattern is consistent with research indicating that people use CAM to supplement rather than to replace conventional medicine.⁴¹⁻⁴²

Given the ongoing physician access difficulties in Southwestern Ontario, it is not surprising the almost half of the primary health-care consumers in this study, had experienced problems getting an appointment with a physician, despite the fact that the majority reported having a regular family physician. This finding echoes that of another study conducted in Southwestern Ontario, which found that most people had a regular family doctor but still experienced difficulties getting care when it was needed.¹ Results at the national level resonance these findings, and indicate that although most Canadians have a regular family doctor, difficulties in accessing care were reported by nearly one in six individuals requiring routine care and one in four needing immediate care for a minor health issue.²

The current study also provides suggestive evidence for how dissatisfaction with conventional care may motivate CAM use under circumstances of low primary-care access. We found that having experienced problems getting a physician appointment was not directly predictive of intentions to use CAM. However, those who had experienced access problems expressed greater dissatisfaction in general and with access to with conventional care, and those who intended to use CAM in the instance of future access difficulties were similarly more dissatisfied with their conventional care, including accessibility. Together these findings suggest that experiencing access problems may indirectly play a role in CAM motivations by

engendering greater dissatisfaction conventional care in general, and not just access. Indeed, lack of access to one's primary care physician can negatively impact continuity of care,¹² a well documented predictor of patient satisfaction.⁴³

Other research has indicated that CAM use is motivated in part by proactive health beliefs¹⁸⁻⁴⁴ and by a desire to exert control over health.⁴⁵ Similarly we found that believing in the controllability of symptoms predicted intentions to consult CAM providers when conventional care was not immediately available. This finding is consistent with the tenets of the Theory of Planned Behaviour,⁴⁶ which highlights the role of control beliefs in the formation of intentions to engage in health behaviours. Beliefs and expectations about whether the behavior (seeking care from CAM providers) will produce the desired outcome (controlling symptoms) lead to the development of behavior intentions, which are viewed as mediating the influence of health beliefs on actual behaviour.⁴⁷

Limitations of this study include the characteristics of this self-selected sample of primary-care consumers, and the exclusive focus on provider-based CAM. The possibility of a selection bias favouring consumers with pro-CAM attitudes is always high with non-randomized samples such as the current sample. Because we only examined intentions to use CAM providers and not self-care CAM, it is unknown if the motivations revealed would apply to these other CAM modalities. Moreover, it may be argued that intentions to use CAM when there are access difficulties may not necessarily translate into actual behaviour. However, the Theory of Planned Behaviour,⁴⁶ supports the role of intentions in actual CAM use suggested by our findings.

Conclusions

With the ongoing access difficulties in Southwestern Ontario, if consumers decide to use CAM rather than wait for available conventional care, their choice comes with a financial cost as

CAM consultations are not currently covered by Canada's universal health-care insurance. Our findings suggests that despite this cost, consumers may choose to consult CAM providers in as a means to take control over their illness symptoms in the absence of readily available medical care, and as a response to a pervasive sense of dissatisfaction with a health-care system that has failed to consistently meet their basic right to obtain medical care when needed.

References

1. Wellstood K, Wilson K, Eyles J. 'Reasonable access' to primary care: assessing the role of individual and system characteristics. *Health and Place*. 2006; **12**: 121-30.
2. Sanmartin C, Gendron F, Berthelot JM, Murphy K. Access to health care services in Canada, 2003. Statistics Canada; 2004.
3. Esmail N. Without doctors: How Canada's failed efforts at central planning have created a physician shortage. *Fraser Forum*. 2007: 20-2.
4. Commission H. Primary care trust: Survey of patients 2005. London, United Kingdom: Commission for Healthcare Audit and Inspection; 2005.
5. Glasson W, Bain R. Medical workforce issues in Australia: "tomorrow's doctors — too few, too far" *Medical Journal of Australia*. 2003; **179**: 556.
6. Glasgow K, Simmers D. An analysis of the New Zealand general practitioner workforce. Wellington, New Zealand: New Zealand Medical Association; 2004. p. 13.
7. NZIER. Ageing New Zealand and health and disability services: Demand projections and workforce implications, 2001-2021. A discussion document. Wellington: Ministry of Health; 2004.
8. Macinko J, Starfield B, Shi L. The contribution of primary care systems to health outcomes within Organization for Economic Cooperation and Development (OECD) countries, 1970-1998. *Health Services Research*. 2003; **38**: 831-65.
9. Macinko J, Starfield B, Shi L. Quantifying the health benefits of primary care physician supply in the United States. *International Journal of Health Services*. 2007; **37**: 111 - 26
10. Bower P, Roland M, Campbell J, Mead N. Setting standards based on patients' views on access and continuity: secondary analysis of data from the general practice assessment survey.

British Medical Journal. 2003; **326**: 258-.

11. Bell RA, Kravitz RL, Thom D, Krupat E, Azari R. Unmet expectations for care and the patient-physician relationship. *Journal of General Internal Medicine*. 2002; **17**: 817-24.
12. Starfield B, Shi L, Grover A, Macinko J. The effects of specialist supply on populations' health: Assessing the evidence. *Health Affairs*. 2005; **24**: 97-107.
13. Sanmartin C, Houle C, Tremblay S, Berthelot JM. Changes in unmet health care needs. *Health Reports*. 2002; **13**: Statistics Canada, Catalogue 82-003.
14. Park J. Use of alternative health care. *Health Reports*. 2004; **16**.
15. Rossler W, Lauber C, Angst J, Haker H, Gamma A, Eich D, et al. The use of complementary and alternative medicine in the general population: Results from a longitudinal community study. *Psychological Medicine*. 2007; **37**: 73-84.
16. Robinson A, Chesters J, Cooper S. People's choice: Complementary and alternative medicine modalities. *Complementary Health Practice Review*. 2007; **12**: 99-119.
17. Health NIo. What is complementary and alternative medicine (CAM)? Publication No D156. Bethesda, MD: NCCAM; 2002.
18. Kelner M, Wellman B. Health care and consumer choice: Medical and alternative therapies. *Social Science & Medicine*. 1997; **45**: 203-12.
19. Esmail N, Walker M. How good is Canadian health care? 2005 report: An international comparison of health care systems. *Critical Issues Bulletin*. Vancouver: The Fraser Institute; 2005.
20. Esmail N. Canada's physician shortage: Effects, projections, and solutions. *Fraser Alert*. Vancouver: The Fraser Institute; 2006.
21. Health Care in Canada 2007. Ottawa: Canadian Institute for Health Information; 2007.

22. Starfield B, Shi L, Macinko J. Contribution of primary care to health systems and health. *The Milbank Quarterly*. 2005; **83**: 457-502.
23. Ganguli SC, Cawdron R, Irvine EJ. Alternative medicine use by Canadian ambulatory gastroenterology patients: Secular trend or epidemic? *The American Journal of Gastroenterology*. 2004; **99**: 319-26.
24. Sirois FM, Gick ML. An investigation of the health beliefs and motivations of complementary medicine clients. *Social Science and Medicine*. 2002; **55**: 1025-37.
25. Shmueli A, Shuval J. Satisfaction with family physicians and specialists and the use of complementary and alternative medicine in Israel. *Evidence-based Complementary and Alternative Medicine*. 2006; **3**: 273-8.
26. Jørgensen V, Launsø L. Patients' choice of asthma and allergy treatments. *Journal of Alternative and Complementary Medicine*. 2005; **11**: 529-34.
27. Luff D, Thomas KJ. 'Getting somewhere', feeling cared for: patients' perspectives on complementary therapies in the NHS. *Complementary Therapies in Medicine*. 2000; **8**: 253-9.
28. Pagan JA, Pauly MV. Access to conventional medical care and the use of complementary and alternative medicine. *Health Affairs*. 2005; **24**: 255-62.
29. Eisenberg DM, Davis RB, Ettner SL, Appel S, Wilkey S, Van Rompay M, et al. Trends in alternative medicine use in the United States, 1990-1997. *Journal of the American Medical Association*. 1998; **280**: 1569-75.
30. Foltz V, St Pierre Y, Rozenberg S, Rossignol M, Bourgeois P, Joseph L, et al. Use of complementary and alternative therapies by patients with self-reported chronic back pain: A nationwide survey in Canada. *Joint Bone Spine*. 2005; **72**: 571-7.
31. Astin JA. Why patients use alternative medicine: Results of a national study. *Journal of*

the American Medical Association. 1998; **279**: 1548-53.

32. Furnham A, Bhagrath R. A comparison of health beliefs and behaviours of clients of orthodox and complementary medicine. *British Journal of Clinical Psychology*. 1993; **32**: 237-46.
33. Honda K, Jacobson JS. Use of complementary and alternative medicine among United States adults: The influences of personality, coping strategies, and social support. *Preventive Medicine*. 2005; **40**: 46– 53.
34. Hildreth KD, Elman C. Alternative worldviews and the utilization of conventional and complementary medicine. *Sociological Inquiry*. 2007; **77**: 76-103.
35. Information CIH. Supply, distribution and migration of Canadian physicians 2005. Ottawa, Ontario: Canadian Institute for Health Information; 2006.
36. Ontario CoPaSo. 2006 Physician resources in Ontario: Small triumphs, big challenges. Annual Physician Survey Results: College of Physicians and Surgeons of Ontario; 2007.
37. Marshall GN, Hays RD. The Patient Satisfaction Questionnaire Short-Form (PSQ₁₈). *RAND publication no P-7865*. Santa Monica, CA: RAND, 1994.
38. Sirois FM. The Control beliefs inventory. Carleton University; 2002.
39. Sirois FM, Davis CG, Morgan MS. "Learning to live with what you can't rise above": Control beliefs, symptom control, and adjustment to tinnitus. *Health Psychology*. 2006; **25**: 119-23.
40. Sirois FM. Treatment seeking and experience with complementary/alternative medicine: A continuum of choice. *Journal of Alternative and Complementary Medicine*. 2002; **8**: 127-34.
41. Druss BG, Rosenheck RA. Association between use of unconventional therapies and conventional medical services. *Journal of the American Medical Association*. 1999; **282**: 651-6.

42. Al-Windi A. Determinants of complementary alternative medicine (CAM) use. *Complementary Therapies in Medicine*. 2004; **12**: 99-111.
43. Forrest CB, Starfield B. Entry into primary care and continuity: the effects of access. *American Journal of Public Health*. 1998; **88**: 1330-6.
44. Sirois FM. Provider-based complementary and alternative medicine use among three chronic illness groups: Associations with psychosocial factors and concurrent use of conventional health-care services. *Complementary Therapies in Medicine*. In press.
45. Truant T, Bottorff JL. Decision making related to complementary therapies: A process of regaining control. *Patient Education and Counseling*. 1999; **38**: 131-42.
46. Ajzen I. From intentions to actions: A theory of planned behavior. In: Kuhl J, Beckman J, (eds.) *Action control: From cognition to behavior*. Heidelberg: Springer, 1985.
47. Ajzen I. The theory of planned behavior. *Organizational Behavior and Human Decision Processes*. 1991; **50**: 179-211.

Table 1. *Use of Primary-Care Services for Non-emergency Health Problems, Stratified by CAM Experience Group*

Healthcare service used	Total (<i>N</i> = 235)	CAM Experience Group <i>n</i> (%)		
		CAM non- consumers (<i>n</i> = 52)	New/Infrequent CAM clients (<i>n</i> = 72)	Established CAM clients (<i>n</i> = 110)
Family physician	146 (62.4)	29 (55.8)	46 (63.9)	71 (64.5)
Walk-in clinic	65 (27.7)	18 (34.6)	23 (31.9)	24 (21.6)
Community health center	6 (2.6)	5 (9.6)	1 (1.4)	--
Urgent care clinic	2 (0.9)	--	--	2 (1.8)
CAM provider	16 (6.8)	--	2 (2.8)	14 (12.7)

Table 2. *What Consumers Did When They Experienced Difficulty Seeing a Physician, Stratified by CAM Experience Group*

	CAM Experience Group <i>n</i> (%)			
	Total (<i>n</i> = 109)	CAM non- consumers (<i>n</i> = 16)	New/Infrequent CAM clients (<i>n</i> = 36)	Established CAM clients (<i>n</i> = 50)
Response to access difficulties				
Did nothing	12 (11.0)	3 (18.8)	3 (7.9)	6 (10.9)
Waited to see physician	30 (27.5)	6 (37.5)	13 (34.2)	11 (20.2)
Went to walk-in or urgent care clinic	37 (33.9)	5 (31.3)	10 (26.3)	22 (40.0)
Went to emergency room	5 (4.6)	---	2 (5.3)	3 (5.5)
Went to alternative care clinic	14 (12.8)	---	6 (15.8)	8 (14.5)
Went to pharmacy	4 (3.7)	---	2 (5.3)	2 (3.6)
Tried home remedy	1 (0.9)	---	1 (2.6)	---
Other	6 (5.5)	2 (12.5)	1 (2.6)	3 (5.5)

Note: Three participants did not answer this question and were excluded from this analysis.

Table 3. *Adjusted Odds Ratio Predicting Intentions to Use Complementary and Alternative Medicine (CAM) if Physician was Unavailable.*

Step and Variable	OR	95% CI	<i>p</i> value
<i>1. Demographics</i>			
Female	0.83	0.27, 2.56	0.74
<i>Age</i>			
25 – 35	1.27	0.23, 7.22	0.78
36 – 55	1.07	0.26, 4.44	0.93
> 55	0.81	0.22, 2.98	0.75
<i>Education</i>			
High school or less	2.21	0.42, 11.66	0.35
College/University	1.10	0.29, 4.23	0.89
<i>2. Health status</i>			
Total chronic conditions	1.09	0.77, 1.55	0.63
Total acute conditions	0.97	0.77, 1.22	0.79
<i>3. Accessibility</i>			
Satisfaction with accessibility	0.98	0.55, 1.74	0.94
<i>4. Health beliefs</i>			
General satisfaction	0.46	0.25, 0.85	0.01
Symptom control	2.26	1.24, 4.10	0.01
<i>5. Experience with CAM</i>			
New/infrequent CAM consumer	6.75	2.25, 20.27	0.00
Established CAM consumer	8.12	2.80, 23.54	0.00

Note. Reference categories are males, graduate school education, individuals aged 25 years or younger,

and CAM non-consumers; OR = odds ratio; CI = confidence intervals for odds ratio.