Research Web exclusive

Complementary and alternative medicine

Do physicians believe they can meet the requirements of the Collège des médecins du Québec?

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Abstract

Objective To determine whether medical training prepares FPs to meet the requirements of the Collège des médecins du Québec for their role in advising patients on the use of complementary and alternative medicine (CAM).

Design Secondary analysis of survey results.

Setting Quebec.

Participants Family physicians and GPs in active practice.

Main outcome measures Perceptions of the role of the physician as an advisor on CAM; level of comfort responding to questions and advising patients on CAM; frequency with which patients ask their physicians about CAM; personal position on CAM; and desire for training on CAM.

Results The response rate was 19.5% (195 respondents of 1000) and the sample appears to be representative of the target population. Most respondents (85.8%) reported being asked about CAM several times a month. A similar proportion (86.7%) believed it was their role to advise patients on CAM. However, of this group, only 33.1% reported being able to

do so. There is an association between an urban practice and knowledge of the advisory role of physicians. More than threequarters of respondents expressed interest in receiving additional training on CAM.

Conclusion There is a gap between the training that Quebec physicians receive on CAM and their need to meet legal and ethical obligations designed to protect the public where CAM products and therapies are concerned. One solution might be more thorough training on CAM to help physicians meet the Collège des médecins du Québec requirements.

EDITOR'S KEY POINTS

- Patients in Quebec regularly ask their FPs and GPs about complementary and alternative medicine (CAM), yet most of these physicians do not believe they can respond to their questions adequately.
- The literature on CAM should be made available in academic journals with a general readership in medicine or public health to be more efficiently shared and used.
- Quebec physicians have (perceived and real) training needs that must be met before they can meet legal and ethical obligations established by the Collège des médecins du Québec. These needs are increasingly urgent as CAM is already widely used; it is part of the preventive and therapeutic arsenal of an increasing number of patients, and the number of regulated CAM health professionals is increasing.

This article has been peer reviewed. Can Fam Physician 2016;62:e772-6

La version en français de cet article se trouve à www.cfp.ca dans la table des matières du numéro de décembre 2016 à la page e767.

y definition, complementary and alternative medicine (CAM) includes all approaches not considered part of conventional medical practice.1 Homeopathy, acupuncture, chiropractic medicine, and massage therapy are examples. In 2006, 74% of Canadians reported having used CAM at least once. Close to 65% of Quebec residents reported having used at least 1 type of CAM.²

The code of ethics of the Collège des médecins du Québec (CMQ) contains rules governing unrecognized treatments, which include CAM.3 It states, "A physician must, with regard to a patient who wishes to resort to insufficiently tested treatments, inform him of the lack of scientific evidence relative to such treatments, of the risks or disadvantages that could result from them, as well as the advantages he may derive from the usual care, if any."3 Thus, physicians are responsible for enlightening their patients, using evidence from a proven scientific design.3 When a patient decides to use CAM, the physician must follow up. The CMQ also insists that patients must share information so that their physicians are aware of any alternative products or services they are using.

Legally, each practitioner is responsible for the care he or she provides. A physician who refers a patient to CAM or provides advice on CAM might be found guilty of negligence or malpractice if this action is not based on current scientific evidence; however, a physician would not be found guilty of an error committed by a CAM therapist.1

According to the literature, training on CAM makes physicians more comfortable counseling patients and finding relevant evidence-based guidelines. 4,5 Apart from continuing professional development, which any physician can access, training on CAM offered to future physicians is underdeveloped and inconsistent. In North America, approximately 50% of medical programs offer training on CAM, primarily in the form of electives within a medical curriculum.^{6,7} A systematic review of the websites of Canadian medical programs and scientific articles on the subject indicates that very few formal courses on CAM are offered as part of medical training at this time.^{8,9}

To date, very little has been written about physicians' perceptions of their ability to inform and advise their patients on CAM. 10 The objectives of this study were to determine whether Quebec FPs knew their role and obligations concerning CAM and to determine whether they believed they were able to advise their patients on the use of CAM.

METHODS

This study consisted of a secondary analysis of data from a self-administered questionnaire developed to explore physicians' perceptions of their ability, role, and responsibilities regarding the use of CAM.11 The instrument, available in French, was based on 3 validated questionnaires. 12-14 The following definition of complementary and alternative medicine was printed on the first page of the questionnaire (in French): "Health care that, either conceptually or philosophically, does not fit within the biomedical health care system."15 A list of examples of CAM was provided; it included massage therapy, chiropractic medicine, osteopathy, acupuncture, homeopathy, hypnotherapy, and medicinal herbs and plants. The guestionnaire was pretested with 3 FPs; the final version was then retested with 10 other FPs. In all, 28 questions were used and the questionnaire could be completed in less than 10 minutes.

A total of 1000 physicians were selected randomly from the CMQ database as of December 31, 2007. The main criterion for inclusion was being an FP or a GP. Given a total population of 9549 physicians, a minimum of 96 respondents were needed to achieve a margin of error of plus or minus 10%, 19 times out of 20.16

The questionnaires were distributed by mail in September 2009. Two reminders were mailed to all physicians in the month following the initial mailing.16 A self-addressed, stamped envelope was included. The research project was approved by the research ethics board for research on human subjects at the Centre hospitalier universitaire de Sherbrooke in Quebec.

Statistical analyses were performed using SPSS, version 18. Comparisons were performed using χ^2 tests. Questions that were not completed were excluded individually from the calculations to obtain results that reflected the true number of respondents. Two logistic regression models were used to explore the factors associated with physicians' perceptions of their role.

RESULTS

A total of 195 physicians, including 170 in active clinical practice, responded to the questionnaire (response rate of 19.5%). No significant differences were noted between the profile of respondents and that of members of the CMQ (data not presented). The respondents were divided equally between men and women (54.1% and 45.9%, respectively). They had a mean (SD) of 21 (11) years of practice and were uniformly divided between rural regions (48.2%) and urban regions (51.8%). Almost all respondents had graduated from 1 of Quebec's 4 faculties of medicine (93.5%). Two-thirds of respondents reported being somewhat open or very open to CAM (67.4%; 95% CI 59.8% to 74.3%) compared with 11.8% who reported being somewhat against CAM (95% CI 7.6% to 17.9%) and 20.7% who reported being undecided (95% CI 15.0% to 27.8%). About 3 respondents out of 5 (61.9%; 95% CI 54.1% to 69.2%) reported having used CAM personally. Most physicians (85.8%; 95%

CI 79.4% to 90.5%) are asked about various aspects of CAM several times a month; 25 respondents (14.8%; 95% CI 10.0% to 21.3%) are asked about various aspects of CAM daily.

Overall, 86.7% of respondents (95% CI 80.3% to 91.3%) correctly identified their obligation to answer questions from their patients about CAM. Table 1 shows physician perceptions on 7 aspects of their professional role with respect to CAM and level of comfort advising patients on CAM.

Of the physicians who believed it was their role to advise patients on the use of CAM, one-third (33.1%; 95% CI 25.6% to 41.6%) reported they were able to do so; this is in contrast to 77.3% (95% CI 54.2% to 91.3%) of physicians who did not consider this their role (P<.001). Of the physicians who assumed the role of advisor, most reported they recommend CAM to their patients (78.6%; 95% CI 71.7% to 85.8%). However, only 28.4% (95% CI 20.4% to 38.0%) reported believing they did so adequately; this is in contrast to 73.1% (95% CI 51.4% to 94.7%) of

those who did not recommend them (P < .001). About 4 respondents out of 5 (79.3%; 95% CI 72.1% to 85.0%) reported recommending CAM to their patients when relevant. Osteopathy was the CAM recommended most often, followed by massage therapy and then acupuncture.

Various factors play a role in physicians' perceptions of their role regarding CAM and their comfort answering patient questions. The respondent's sex, years of experience, place of practice (rural or urban), personal use of CAM, openness to CAM, and practice of recommending CAM to patients were included in 2 regression models (Table 2).

Finally, more than three-quarters of respondents reported that they would like more training on their advisory role with regard to CAM.

DISCUSSION

The results of this study show that CAM is part of the daily work of FPs in active practice, given the frequency with

Table 1. Physicians' perceptions of their role and ethical obligations with respect to CAM: The number of respondents varies based on the missing data for each question.

	RESPONSES, N (%)				
STATEMENTS	COMPLETELY DISAGREE	DISAGREE	UNDECIDED	AGREE	TOTALLY AGREE
It is my role to inform my patients about CAM using scientific data	6 (3.6)	17 (10.1)	18 (10.7)	94 (55.6)	34 (20.1)
It is my role to inform patients of the risks and side effects of CAM	4 (2.4)	13 (7.7)	13 (7.7)	97 (57.4)	42 (24.9)
It is my role to inform patients of the various treatments that are available (CAM and otherwise)	3 (1.8)	6 (3.6)	9 (5.3)	97 (57.4)	54 (32.0)
I am professionally liable when I advise a patient about CAM	4 (2.4)	6 (3.6)	22 (13.3)	87 (52.7)	46 (27.9)
I believe I am able to advise my patients on the use of CAM	10 (6.0)	56 (33.3)	23 (13.7)	75 (44.6)	4 (2.4)
Using CAM might be justified, even if there is no hard evidence on its efficacy	3 (1.8)	20 (11.9)	32 (19.0)	86 (51.2)	27 (16.1)
Using CAM might be justified, even if there is no hard evidence on its safety	31 (18.5)	55 (32.7)	40 (23.8)	36 (21.4)	6 (3.6)

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Table 2. Physicians' advisory role and level of comfort answering questions about CAM							
	ROLE IN RESPONDING TO P	ROLE IN RESPONDING TO PATIENT QUESTIONS		ABILITY TO RESPOND TO PATIENT QUESTIONS			
FACTORS	OR (95% CI)	<i>P</i> VALUE	OR (95% CI)	P VALUE			
Female sex	1.43 (0.45-4.57)	.551	0.53 (0.25-1.13)	.099			
Years of experience	1.01 (0.97-1.06)	.580	1.02 (0.99-1.06)	.168			
Urban practice	4.49 (1.38-14.67)	.013	1.28 (0.66-2.47)	.470			
Personal position on CAM	1.88 (0.64-5.49)	.250	1.87 (0.85-4.12)	.117			
Personal use of CAM	0.82 (0.26-2.59)	.729	1.09 (0.87-4.15)	.106			
Frequency of questions on CAM (≥1/wk)	0.29 (0.08-1.05)	.287	0.39 (0.14-1.09)	.072			
Recommends CAM to patients	0.84 (0.21-3.33)	.839	0.98 (0.37-2.55)	.963			
CAM—complementary and alternative medicine, OR—odds ratio.							

which their patients ask them about it. To our knowledge, this is the first Canadian study to determine whether physicians see themselves as having enough information about CAM to meet the requirements of their governing body. In this study, approximately 4 physician respondents in 5 have accurate knowledge of their role and responsibilities regarding CAM. However, less than half believe they advise their patients adequately.

In spite of the fact that the scientific literature does not provide a full picture of the risks of interactions between CAM and drug therapies used in conventional medical practice, certain combinations are known to pose health risks. 17,18 For this reason, the CMQ strongly recommends that members discuss taking CAM concurrently with conventional pharmacotherapy.³ Studies have already shown that between 23% and 90% of physicians do not know what CAM their patients use, owing to inadequate communication. 19-23 This communication would enable physicians to ensure that the CAM was not interacting in a way that harmed their patients' health or that they were not replacing any conventional treatments that had been prescribed.24 The low percentage of physician respondents who reported being able to adequately advise their patients on CAM could, in part, explain this inadequate communication. Physicians who do not believe they can discuss CAM adequately might be choosing not to have the conversation with their patients. This inability could be owing to a lack of training or to the difficulty of finding evidence-based guidelines on CAM.

This survey differs from previous surveys on the attitudes of physicians toward CAM. It is one of the first to investigate physician awareness of what is expected of them when confronted with patients who are users of CAM (current or potential). It also investigates their perceptions of their level of comfort responding to these questions. Of interest, physicians with urban practices are more aware of the CMQ's expectations of their role and responsibilities. Perhaps patients in urban areas have better access to CAM practitioners and thus these patients' physicians have to take a position on CAM more often than their rural counterparts do.

Limitations

This study has certain limitations, making it difficult to generalize its findings. First, in spite of the reminders that were sent out to optimize the response rate, a relatively low number of physicians responded. However, this is typical for this type of survey.25 It might be possible to extrapolate the results to all Quebec physicians, and perhaps all Canadian physicians, because nonresponse bias is less concerning in a study of physicians than in a study of the general population. This is owing to the fact that physicians tend to represent a more homogeneous respondent population in terms of

knowledge, training, attitudes, and behaviour.²⁶ Finally, although a definition of CAM was attached to the questionnaire, one of the limitations of this study is that the questions referred to CAM generally. This approach was pragmatic, but it did not do justice to the varying levels of knowledge and evidence that have been gathered for each of the known types of CAM.27

Conclusion

This survey showed that most respondents knew their role and responsibilities on recourse to CAM by their patients. However, physicians who want to play this role reported feeling less well equipped than physicians who did not believe this was their role. In other words, there is a gap between Quebec FPs' perceived knowledge of CAM and the advisory role that they are required to assume to meet the legal and ethical requirements of the CMQ, which were developed to protect the public. These results argue in favour of fuller exposure to CAM for FPs during their training and during continuing professional development. Future research could identify essential notions of CAM for physicians in active practice; this would have an effect on their level of comfort in counseling their patients and accompanying them in their choice of CAM care.

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Competing interests

None declared

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- 1. Association canadienne de protection médicale. Les médecines complémentaires et parallèles-quels sont les enjeux médico-légaux? Ottawa, ON: Association canadienne de protection médicale; 2012. Available from: www. cmpa-acpm.ca/fr/-/alternative-medicine-what-are-the-medico-legalconcerns-. Accessed 2016 Nov 4.
- 2. Esmail N. Complementary and alternative medicine in Canada: trends in use and public attitudes, 1997-2006. Vancouver, BC: Fraser Institute; 2007.
- 3. Collège des médecins du Québec. Le médecin et les traitements non reconnus. Montreal, QC: Collège des médecins du Québec; 2006
- 4. Frenkel M, Ben-Arye E, Hermoni D. An approach to educating family practice residents and family physicians about complementary and alternative medicine. Complement Ther Med 2004;12(2-3):118-25.
- 5. Cook DA, Gelula MH, Lee MC, Bauer BA, Dupras DM, Schwartz A. A webbased course on complementary medicine for medical students and residents improves knowledge and changes attitudes. Teach Learn Med 2007;19(3):230-8.

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- 6. Academic Consortium for Integrative Medicine and Health [website]. McLean, VA: Academic Consortium for Integrative Medicine and Health; 2016. Available from: www.imconsortium.org. Accessed 2016 Nov 7.
- 7. Cowen VS, Cyr V. Complementary and alternative medicine in US medical schools. Adv Med Educ Pract 2015;6:113-7.
- 8. Complementary and Alternative Medicine in Undergraduate Medical Education. CAM in medical schools. Complementary and Alternative Medicine in Undergraduate Medical Education; 2015. Documents available from the corresponding author.
- 9. Gaboury I, Xhignesse M, Verhoef M. CAM-related content of Canadian postgraduate medical programs. Paper presented at: 6th IN-CAM Research Symposium; 2010 Nov 19-21; Vancouver, BC.
- 10. Owen DK, Lewith G, Stephens CR. Can doctors respond to patients' increasing interest in complementary and alternative medicine? BMJ 2001:322(7279):154-8.
- 11. O'Connor D. Étude sur les perspectives des omnipraticiens du Québec quant à leur rôle-conseil concernant l'utilisation des médecines alternatives et complémentaires (MAC) [master's thesis]. Sherbrooke, QC: University of Sherbrooke; 2008.
- 12. Schneider CD, Meek PM, Bell IR. Development and validation of IMAQ Integrative Medicine Attitude Questionnaire. BMC Med Educ 2003;3:5.
- 13. Hsiao AF, Hays RD, Ryan GW, Coulter ID, Andersen RM, Hardy ML, et al. A self-report measure of clinicians' orientation toward integrative medicine. Health Serv Res 2005;40(5 Pt 1):1553-69.
- 14. Lie D, Boker J. Development and validation of the CAM Health Belief Questionnaire (CHBQ) and CAM use and attitudes amongst medical students. BMC Med Educ 2004;4:2.
- 15. Leckridge B. The future of complementary and alternative medicinemodels of integration. J Altern Complement Med 2004;10(2):413-6.
- 16. Dillman DA, Smyth JD, Christian LM. Internet, mail, and mixed-mode surveys. The tailored design method. 3rd ed. Hoboken, NJ: John Wiley and Sons; 2009.

- 17. Chen XW, Sneed KB, Pan SY, Cao C, Kanwar JR, Chew H, et al. Herb-drug interactions and mechanistic and clinical considerations. Curr Drug Metab 2012;13(5):640-51
- 18. Boullata J. Natural health product interactions with medication. Nutr Clin Pract 2005;20(1):33-51.
- 19. Barnes J. Pharmacovigilance of herbal medicines: a UK perspective. Drug Saf 2003;26(12):829-51.
- 20. Shaw D, Ladds G, Duez P, Williamson E, Chan K. Pharmacovigilance of herbal medicine. J Ethnopharmacol 2012;140(3):513-8. Epub 2012 Feb 9.
- 21. Walji R, Boon H, Barnes J, Austin Z, Welsh S, Baker GR. Consumers of natural health products: natural-born pharmacovigilantes? BMC Complement Altern Med 2010;10:8.
- 22. Faith J, Thorburn S, Tippens KM. Examining CAM use disclosure using the Behavioral Model of Health Services Use. Complement Ther Med 2013;21(5):501-8. Epub 2013 Aug 17.
- 23. Thomson P, Jones J, Evans JM, Leslie SL. Factors influencing the use of complementary and alternative medicine and whether patients inform their primary care physician. Complement Ther Med 2012;20(1-2):45-53. Epub 2011 Nov 3.
- 24. Sagar SM. Integrative oncology in North America. J Soc Integr Oncol 2006;4(1):27-39.
- 25. Cho YI, Johnson TP, Vangeest JB. Enhancing surveys of health care professionals: a meta-analysis of techniques to improve response. Eval Health Prof 2013;36(3):382-407.
- 26. Kellerman SE, Herold J. Physician response to surveys. A review of the literature. Am J Prev Med 2001;20(1):61-7.
- 27. Gaboury I, April KT, Verhoef M. A qualitative study on the term CAM: is there a need to reinvent the wheel? BMC Complement Altern Med 2012;12:131.