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Survey of users of the Quebec Physicians Health Program

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ABSTRACT

OBJECTIVE To document the opinions of the users of the Quebec Physicians Health Program (QPHP) about the services they received.

DESIGN Mailed questionnaire.

SETTING Quebec.

PARTICIPANTS A total of 126 physicians who used QPHP services between 1999 and 2004.

MAIN OUTCOME MEASURES Users' overall rating of the QPHP services, their opinions about the program, and whether their situations improved as a result of accessing QPHP services.

RESULTS Ninety-two of the 126 physicians surveyed returned their completed questionnaires, providing a response rate of 73%. Most respondents thought that the QPHP services were good or excellent (90%), most would use the program again (86%) or recommend it (96%), and most thought the Quebec physician associations and the Collège des médecins du Québec should continue funding the QPHP (97%). Most respondents thought the service confidentiality was excellent (84%), as was staff professionalism (82%), and 62% thought the quality of the services they were referred to was excellent. However, only 57% believed their situations had improved with the help of the QPHP.

CONCLUSION The QPHP received good marks from its users. Given the effects of physician burnout on patients and on the health care system, it is not only a personal problem, but also a collective problem. Thus, actions are needed not only to set up programs like the QPHP for those suffering from burnout, but also to prevent these types of problems. Because family physicians are likely to be the first ones consulted by their physician patients in distress, they play a key role in acknowledging these problems and referring those colleagues to the appropriate help programs when needed.

EDITOR'S KEY POINTS

- Burnout among physicians is a growing problem.
 To help physicians suffering from burnout and its associated problems, specific help programs have been set up in many countries, including Canada.
 Although physician help programs are intuitively considered to be useful, very few have been evaluated.
- The objective of this study was to document the opinions of the users of the Quebec Physicians Health Program (QPHP) about the services they received.
- Although physicians rated the QPHP and its services highly, about 40% of users reported that their situations only partly improved or did not improve as a result of accessing the QPHP.

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Médecin, guéris-toi toi-même

Enquête auprès de médecins ayant utilisé le Programme d'aide aux médecins du Québec

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RÉSUMÉ

OBJECTIF Vérifier l'opinion des utilisateurs du Programme d'aide aux médecins du Québec (PAMQ) au sujet des services qu'ils en ont reçus.

TYPE D'ÉTUDE Questionnaire postal.

CONTEXTE Le Québec.

PARTICIPANTS Un total de 126 médecins ayant utilisé le PAMQ entre 1999 et 2004.

PRINCIPAUX PARAMÈTRES À L'ÉTUDE Comment les utilisateurs évaluent les services du PAMQ, ce qu'ils pensent du programme et si leur situation s'est améliorée après avoir utilisé le programme.

RÉSULTATS Sur les 126 médecins consultés, 92 ont répondu au questionnaire, soit un taux de réponse de 73%. La plupart jugeaient les services du PAMQ bons ou excellents (90%), utiliseraient le programme à nouveau (86%) ou le recommanderaient (96%), et la majorité croyaient que les associations médicales du Québec ainsi que le Collège des médecins du Québec devraient continuer de subventionner le PAMQ (97%). La plupart des répondants croyaient que la confidentialité du service était excellente (84%) de même que le professionnalisme du personnel (82%), et 62% estimaient que la qualité des services vers lesquels on les avait dirigés était excellente. Toutefois, seulement 57% croyaient que leur situation s'était améliorée avec l'aide du PAMQ.

CONCLUSION Les utilisateurs du PAMQ lui ont attribué une cote élevée. Compte tenu des conséquences de l'épuisement professionnel des médecins sur les patients et sur le système de santé, ce problème est non seulement personnel, mais aussi collectif. Il est donc nécessaire de créer des programmes comme le PAMQ pour ceux qui sont atteints d'épuisement professionnel, mais aussi pour prévenir ce type de problème. Comme les médecins de famille risquent d'être les premiers consultés par leurs confrères en détresse, ils ont un rôle primordial à jouer pour reconnaître ces problèmes et diriger leurs collègues vers les programmes d'aide appropriés si nécessaire.

POINTS DE REPÈRE DU RÉDACTEUR

- L'épuisement professionnel est de plus en plus fréquent chez les médecins. Pour aider les médecins aux prises avec cette condition et avec les problèmes associés, des programmes spécifiques ont été créés dans plusieurs pays, incluant le Canada. Même si ces programmes d'aide sont intuitivement considérés comme très utiles, très peu ont été évalués.
- Cette étude voulait vérifier l'opinion des utilisateurs du Programme d'aide aux médecins du Québec (PAMQ) sur les services qu'ils en ont reçus.
- Quoique les participants aient une haute opinion du PAMQ et de ses services, environ 40% d'entre eux ont déclaré que leur situation ne s'était améliorée que partiellement ou pas du tout à la suite de l'utilisation du programme.

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Burnout has been defined as a syndrome with 3 components: emotional exhaustion, depersonalization, and decreased sense of personal accomplishment. Despite the shame and traditional taboo surrounding burnout among physicians, this phenomenon is now being recognized as a real problem for both family physicians and other specialists. A 2003 Canadian Medical Association survey showed that 45.7% of Canadian physicians were in advanced stages of burnout; similar results were found among physicians in Alberta.² Studies in other countries have documented burnout among physicians to be in the range of 19% to 47%³⁻⁸ and up to 76% among medical residents.⁹

Burnout has been associated with poor physical health, depression, and marital problems, and might contribute to substance abuse. 10-12 It can lead to loss of job satisfaction, physician errors, lower patient satisfaction, and longer postdischarge recovery time for patients. 13-15 Physicians who are emotionally exhausted or dissatisfied with their work are more likely to reduce their work hours and even leave practice. 16,17 Thus, burnout affects not only physicians and their families, but patients and the health care system as well.

Many organizational (eg, academic practice, work hours, job satisfaction), personal (eg, age, sex, number of children), and family (eg, work-home interference, home support) factors can contribute to physician burnout. ^{18,19} Still, some studies have found that the strongest predictor of whether physicians will experience burnout and career dissatisfaction is a sense of not having control over the practice environment, and especially over schedules and workload. ^{20,21}

To help physicians suffering from burnout and its associated problems, specific help programs have been set up in many countries. Program content varies from telephone help lines to full therapy services and inpatient care. In Canada, to deal with burnout among physicians, help programs have been created in all provinces and territories. These programs vary in nature and scope. In addition, a Centre for Physician Health and Well-being was established by the Canadian Medical Association in the fall of 2003.

Although physician help programs are intuitively considered to be useful, very few have been evaluated. Published evaluations of physician help programs are rare, ²⁶ and we could not find any evaluations of Canadian programs. A better understanding of the experiences of the users of such programs would help verify the usefulness of the programs and, when needed, improve them.

The objective of this study was to document the opinions of the users of the Quebec Physicians Health Program (QPHP; Programme d'aide aux médecins du Québec) about the services they received.

METHODS

Program overview

The QPHP was created in 1990. It is funded by contributions from Quebec associations of physicians.27 The QPHP services are free and accessible to Quebec physicians, residents, and medical students. The first type and main activity of the QPHP is a consultation service. Physicians can call or visit the QPHP and talk to physician counselors who can help them identify their problems and find solutions, develop action plans, refer them to other professional resources if needed, provide support throughout the healing process, and help with social and workplace reintegration if required. New requests for help totalled 369 in fiscal years 2006 to 2007.²⁸ The second type of service consists of prevention programs that take the form of courses, lectures, information sessions, and booths at medical conferences. The QPHP services are available to medical associations, health care organizations, and teaching institutions, as well as anyone who wants to help a physician, resident, or medical student in distress.

The survey was undertaken at the request of the QPHP managers, who wanted to know what the program's users thought of the consultation service and how it could be improved.

Sample

Physicians (family members and medical students were excluded) who used the QPHP consultation service between 1999 and 2004 and whose cases were "closed" were identified in the QPHP file. A random sample of 265 physicians was selected. The QPHP staff attempted to contact those physicians by telephone to check their mailing addresses and their willingness to participate in the survey. After several attempts, it was possible to reach 126 physicians who agreed to take part in the survey. Of these 126 physicians who were sent the questionnaire by mail, 92 returned their completed questionnaires, providing a response rate of 73%.

Development of the survey instrument

Questions were generated based on what QPHP managers wanted to know from the program users, inspired by existing satisfaction questionnaires with good psychometric properties.²⁹ A questionnaire was designed to collect data about how the respondents had learned about the QPHP, their assessment of standard dimensions of the services they received, and some demographic and professional characteristics. Content and face validity were assessed by physicians associated with the QPHP and were judged to be satisfactory. The questionnaire was reviewed and adjusted for clarity and readability. The final version of the questionnaire is available on request.

Because of the difficulty of recruiting QPHP users, it was not possible to quantitatively test the psychometric properties of the questionnaire before the survey. Reliability (internal consistency) was assessed on the survey responses and was found to be very good: Cronbach calculated on the 9 assessment items was 0.84.

Data collection

The questionnaire was sent to the sample of physicians with a letter from the Director of the QPHP and a stamped, self-addressed return envelope. Because it was important to keep the questionnaire anonymous, no reminders could be sent to those who had not responded. The survey concluded in the spring of 2007.

Ethical approval was obtained from the Research Ethics Committee of the Department of Health Administration of the University of Montreal.

RESULTS

Respondents and nonrespondents

Respondents' characteristics are shown in Table 1. Few data were available for nonrespondents. Compared with those who did respond, there was a higher proportion of nonrespondents who were young and residents (P = .001).

Sources of knowledge about the QPHP

The most common way respondents had learned about the QPHP was through QPHP advertisements in medical journals (35%), followed by communications from the Collège des médecins du Québec (25%) and suggestions from colleagues (12%) (Table 2). Only 1% of respondents had learned of the QPHP from their own physicians.

Overall assessment of QPHP

Overall, respondents' assessment of the QPHP services was very high (Table 3). About 90% of respondents found that the services were good or excellent, indicated that they would use them again if needed, and reported that they would recommend them to colleagues. Respondents were almost unanimous (97%) in declaring that physician associations should continue funding the QPHP.

Assessment of specific aspects

Four specific aspects of QPHP services were assessed. More than 90% of respondents thought that confidentiality and staff professionalism were good or excellent and that they had received help from the QPHP services in a timely fashion. As for the quality of the services to which respondents were referred, 62% of physicians found them to be excellent and 25% found them to be good.

Usefulness

Respondents were asked whether the situation for which they contacted QPHP had improved with the help of this service. Slightly more than half (57%) said yes, and another 31% said partly; 6% said no, and 6% said the question was not applicable.

Table 1. Characteristics of survey respondents and nonrespondents

	RESPONDENTS	NONRESPONDENTS	
CHARACTERISTIC*	(N = 92) N (%)	(N = 47) N (%)	P VALUE (χ²)
Age, y	14 (70)	14 (70)	.001
• 25-35	17 (19)	21 (57)	
• 36-45	23 (26)	9 (24)	
• 46-55	30 (33)	6 (16)	
• ≥ 56	20 (22)	1 (3)	
Sex	20 (22)	1 (3)	.21
• Female	48 (53)	30 (64)	.21
Male	43 (47)	17 (36)	
Marital status	+3 (+7)	NA [†]	NA [‡]
• Single	9 (10)	IVA	INA
Married	44 (49)		
Common law	18 (20)		
Divorced,	19 (21)		
widowed, or	19 (21)		
separated			
No. of children		NA [‡]	NA [†]
• None	26 (29)		
• 1	15 (17)		
• 2	21 (23)		
•≥3	28 (31)		
Professional	20 (0.)		.001
status			
• GP or FP	64 (70)	23 (49)	
• Other	27 (29)	7 (15)	
specialist			
Resident	1 (1)	17 (36)	
Place where		NA [‡]	NA [†]
medical degree			
was obtained			
• Quebec	82 (89)		
• Elsewhere	10 (11)		
No. of years in practice		NA [†]	NA [†]
• ≤ 10	26 (29)		
• 11-20	25 (28)		
• 21-30	28 (31)		
• ≥ 31	11 (12)		
NIA			

NA—not available.

^{*}A question was asked about the main work setting, but the responses were unusable and data are not reported.

[†]Not all respondents answered all questions and information was not always available for all nonrespondents; the denominator varies by

[†]Data on some characteristics were not available for nonrespondents.

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Table 2. Sources of knowledge about the QPHP: Respondents could choose more than 1 source.

SOURCE	N (%)	
QPHP advertisement in medical journal	39 (35)	
Collège des médecins du Québec	28 (25)	
Colleague	14 (12)	
Physician association	10 (9)	
QPHP stand at a conference	7 (6)	
CME session	3 (3)	
QPHP conference	3 (3)	
My own physician	1 (1)	
Other	8 (7)	
CME—continuing medical education, QPHP—Quebec Physicians Health		

Table 3. Respondents' assessment of the QPHP consultation service

Program.

consultation service	
ITEM	N (%)*
Overall assessment	
Overall rating of QPHP	
Excellent	65 (71)
• Good	18 (20)
• Fair	5 (5)
• Poor	4 (4)
Would use QPHP again	. (.)
• Yes	79 (86)
• No	13 (14)
Would recommend QPHP to a colleague	()
• Yes	87 (96)
• No	4 (4)
Quebec physician associations and college should	()
continue funding QPHP	
• Yes	88 (97)
• No	3 (3)
Assessment of specific aspects of services	. ,
Confidentiality	
Excellent	75 (84)
• Good	10 (11)
• Fair	3 (3)
• Poor	1 (1)
Timeliness	
• Yes	87 (96)
• No	4 (4)
Staff professionalism	
Excellent	75 (82)
• Good	11 (12)
• Fair	1 (1)
• Poor	4 (4)
Quality of external referrals	40 (00)
• Excellent	49 (62)
• Good	20 (25)
• Fair	7 (9)
• Poor	3 (4)
Usefulness	
Improvement of situation with help from QPHP • Yes	52 (57)
• Partly	29 (32)
• Fartiy • No	5 (5)
Not applicable	5 (5) 5 (5)
	5 (5)
QPHP—Quebec Physicians Health Program.	

Using χ^2 testing, we investigated whether responses differed by respondent characteristics, but no statistically significant differences (P<.05) were found.

Respondents' comments

Written comments provided by respondents were largely positive. Suggestions mainly revolved around increasing the awareness among the medical profession about physicians' problems and publicizing the QPHP services more:

QPHP should be more visible to reduce the taboos around physicians' mental health and stress management problems. In our field, it is considered wrong to admit our limits. It is seen as appropriate to show that we are invincible, which is totally false.

QPHP services should be more publicized. Many of my colleagues have problems.

Send a leaflet presenting your services to all physicians at least once a year.

Sensitize medical students and young doctors on the risks of "workaholism" and of feeling too responsible.

Promote critical thinking of models of super-performing physicians presented in medical professional journals.

Publish preventative or educational articles in medical journals.

DISCUSSION

This is the first published study to document the opinions of the users of a physician help program in Canada. Results showed that physicians were largely satisfied with the QPHP consultation services and the external services they were referred to. However, the fact that 9% of respondents expressed a low level of satisfaction (fair or poor) with the QPHP services, and that 13% of respondents had a similar opinion of the external services, is very worrying, and this deserves special attention. Even though most respondents were satisfied with the QPHP services, only 57% declared that their situations improved after receiving services from or through the QPHP. Could this finding reflect the ill-being associated with physicians' work organization, which has not improved in recent years? In addition, although the QPHP managers carefully select the professionals (eg, psychologists, psychiatrists) who provide external services, for reasons of confidentiality, the QPHP does not interact with those professionals once a physician has been referred to them and thus cannot be sure that they meet the needs of their clients. This raises the question of whether a physician help program

*The number of respondents varies by item. Percentages might not add

to 100% owing to rounding.

should offer the full range of possible services, from initial assessment, to outpatient treatment, right up to inpatient treatment, as is the case in some jurisdictions.23 Such a full-scope program would promote integrated services, but would also require considerable resources.

It is noteworthy that only 1% of respondents had heard of the QPHP from their own physicians. There are at least 2 possible explanations: either physicians who need help do not talk about their stress-related problems with their own physicians or the latter do not know about the QPHP even though it has been in existence since 1990. These explanations are reflected by the respondents' suggestions about the need for the medical profession to acknowledge that physicians can have problems and for the QPHP services to be better known by the profession. Because family physicians are likely to be the first ones consulted by their physician patients in distress, they play a key role in acknowledging these problems and referring those colleagues to the appropriate help programs when needed.

Respondents were almost unanimous in saying that they would recommend the QPHP consultation service to colleagues (96%) and that Quebec physician associations should continue funding the QPHP (97%). This is a strong message that the QPHP consultation service is essential. Nonetheless, this service is mainly curative. Preventive strategies are also needed. These strategies include the other services offered by the QPHP (eg, conferences, seminars, booths at professional events), which have a preventive focus. Other types of actions include the personal strategies that physicians can adopt themselves (eg, eating well, scheduling time for self and family, engaging in sports activities).5 However, given the effects of physician burnout on patient outcomes and the health care system, it is not only a personal problem, but also a social issue. 14,30 Thus, strategies are required at the level of the health care system. These strategies should address the various underlying professional and organizational factors of burnout, such as the administrative burden, the growing clinical workload, the difficulty of ensuring work-life balance, and the shortage of physicians. Many systemic solutions have been proposed, including increasing physicians' control over their work environments³¹; giving them access to child care, part-time practice, and flexible hours³²; maximizing career fit (ie, focusing on the aspect of one's work that is most meaningful)⁷; establishing programs that can increase other professional resources (eg, nurse practitioners) or decrease demands on physicians, including teamwork¹⁴; having adequate administrative support systems30,33; and providing physicians with efficient electronic records to reduce the burden of paperwork.31

Limitations

This study has 2 main limitations. First, despite a higher response rate (73%) than average (61%) to mailed surveys

of physicians,34 the experiences of more than a quarter of potential respondents could not be documented. Nonrespondents had a somewhat different profile than respondents did. It is also possible that they were less satisfied with QPHP than respondents were, although that is not necessarily the case.35 Second, the survey did not ask respondents about their reasons for accessing QPHP services. This would have been useful information. Further, this is essentially an opinion survey, not an outcome study, which would be more revealing but also much more complex to perform. Still, patient satisfaction has been related to outcomes and quality of care.36

Conclusion

The surveyed physicians appeared to be positively disposed toward the QPHP as a help system. However, it would be important to further explore the reasons why physicians consult the QPHP in order to distinguish between personal problems and organizational issues.

Burnout and associated psychosocial problems experienced by physicians are likely here to stay if not expand as the demand for medical services increases at a higher pace than the availability of physicians. Efforts are required, first to acknowledge that physicians too might have emotional problems, and second to develop appropriate help programs. Early intervention seems to be important to reduce physician suffering and its consequences for the physicians and for society.²⁶ Medical associations in particular have a responsibility to attend to their members' needs, especially because, as independent practitioners, physicians do not have access to employee help programs like other health professionals do. As a consequence, resources will have to be devoted to effective programs. Finding what type of service works and what does not will be key to any decision in this respect: outcomes studies beyond opinion surveys will thus be needed.

Dr Blais is Director of the Department of Health Administration and a member of the Institut de recherche en santé publique of the University of Montreal in Quebec. Ms Safianyk is a master's degree student in the Department of Health Administration at the University of Montreal. Dr Magnan is Director of the Quebec Physicians Health Program in Montreal. Dr Lapierre works with the Quebec Physicians Health Program.

Dr Blais contributed substantially to conception and design of the study, acquisition of data, and analysis and interpretation of data; drafted the article; and gave final approval of the version to be published. Ms Safianyk contributed substantially to conception and design of the study, acquisition of data, and analysis and interpretation of data; critically revised the article for important intellectual content; and gave final approval of the version to be published. Dr Magnan contributed substantially to conception and design of the study and acquisition of data; critically revised the article for important intellectual content; and gave final approval of the version to be published. Dr Lapierre contributed substantially to conception and design of the study and acquisition of data; critically revised the article for important intellectual content; and gave final approval of the version to be published.

Competing interests

None declared

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- 1. Maslach C, Schaufeli WB, Leiter MP. Job burnout. Annu Rev Psychol 2001;52:397-422.
- 2. Boudreau RA, Grieco RL, Cahoon SL, Robertson RC, Wedel RJ. The pandemic from within: two surveys of physician burnout in Canada. Can J Commun Ment Health 2006;25(2):71-88.
- 3. Bovier P, Bouvier Gallacchi M, Goehring C, Kunzi B. Santé des médecins de premier recours en Suisse. Prim Care 2004;4(47):941-7.
- 4. Kuerer HM, Eberlein TJ, Pollock RE, Huschka M, Baile WF, Morrow M, et al. Career satisfaction, practice patterns and burnout among surgical oncologists: report on the quality of life of members of the Society of Surgical Oncology. Ann Surg Oncol 2007;14(11):3043-53. Epub 2007 Sep 9.
- 5. Lee FJ, Stewart M, Brown JB. Stress, burnout, and strategies for reducing them. What's the situation among Canadian family physicians? Can Fam Physician 2008;54:234-5.e1-5. Available from: www.cfp.ca/cgi/ reprint/54/2/234. Accessed 2010 Aug 18.
- 6. Union professionnelle des médecins libéraux de Bourgogne. Burn out: quand l'épuisement guette. Ressource 2002:1:1-3.
- 7. Shanafelt TD, West CP, Sloan JA, Novotny PJ, Poland GA, Menaker R, et al. Career fit and burnout among academic faculty. Arch Intern Med 2009;169(10):990-5.
- 8. Truchot D. Le burn out des médecins libéraux de Bourgogne. Rapport de recherche URM de Bourgogne. Dijon, Fr: UPMLB et Reims département de psychologie; 2001.
- 9. Shanafelt TD, Bradley KA, Wipf JE, Back AL. Burnout and self-reported patient care in an internal medicine residency program. Ann Intern Med 2002;136(5):358-67.
- 10. Vaillant GE, Sobowale NC, McArthur C. Some psychologic vulnerabilities of physicians. N Engl J Med 1972;287(8):372-5.
- 11. Gundersen L. Physician burnout. Ann Intern Med 2001;135(2):145-8.
- 12. O'Connor PG, Spickard A Jr. Physician impairment by substance abuse. Med Clin North Am 1997;81(4):1037-52.
- 13. Crane M. Why burned-out doctors get sued more often. Med Econ 1998:75(10):210-2.215-8.
- 14. Halbesleben JR, Rathert C. Linking physician burnout and patient outcomes: exploring the dyadic relationship between physicians and patients. Health Care Manage Rev 2008;33(1):29-39.
- 15. Mirvis DM, Graney MJ, Kilpatrick AO. Burnout among leaders of the Department of Veterans Affairs medical centers: contributing factors as determined by a longitudinal study. J Health Hum Serv Adm 1999;21(3):390-412.
- 16. Grunfeld E, Whelan TJ, Zitzelsberger L, Willan AR, Montesanto B, Evans WK. Cancer care workers in Ontario: prevalence of burnout, job stress and job satisfaction. CMAJ 2000;163(2):166-9.
- 17. Landon BE, Reschovsky JD, Pham Hoangmai HH, Blumenthal D. Leaving medicine: the consequences of physician dissatisfaction. Med Care 2006;44(3):234-42.
- 18. Linzer M, Visser MR, Oort FJ, Smets EM, McMurray JE, de Haes HC, et al. Predicting and preventing physician burnout: results from the United States and the Netherlands. Am J Med 2001;111(2):170-5.

- 19. Maranda MF, Gilbert MA, Saint-Arnaud L, Vézina M. La détresse des médecins: un appel au changement. Quebec, QC: Les Presses de l'Université Laval: 2006.
- 20. Freeborn DK. Satisfaction, commitment, and psychological well-being among HMO physicians. West J Med 2001;174(1):13-8.
- 21. Keeton K, Fenner DE, Johnson TR, Hayward RA. Predictors of physician career satisfaction, work-life balance, and burnout. Obstet Gynecol 2007:109(4):949-55.
- 22. Brown RL, Schneidman BS. Physicians' health programs: what's happening in the USA? Med J Aust 2004;181(7):390-1.
- 23. PAIMM Medical Care Association [website]. The Integral Care Programme for Sick Physicians (PAIMM). Barcelona, Spain: Galatea Foundation. Available from: http://paimm.fgalatea.org. Accessed 2009 Mar 6.
- 24. Association d'aide professionnelle aux médecins libéraux [website]. Paris, Fr: Association d'aide professionnelle aux médecins libéraux; 2005. Available from: www.aapml.fr/. Accessed 2009 Mar 6.
- 25. Canadian Medical Association [website]. Provincial physician health programs. Ottawa, ON: Canadian Medical Association; 2010. Available from: www.cma.ca/index.cfm/ci_id/25567/la_id/1.htm. Accessed 2010 Aug 30.
- 26. Rø KE, Gude T, Tyssen R, Aasland OG. Counselling for burnout in Norwegian doctors: one year cohort study. BMJ 2008;337:a2004. DOI: 10.1136/bmj.a2004
- 27. Programme d'aide aux médecins du Québec [website]. Montreal, QC: Programme d'aide aux médecins du Québec; 2003. Available from: www. pamq.org. Accessed 2009 Aug 12.
- 28. Programme d'aide aux médecins du Québec. Rapport annuel 2006-2007. Montreal, QC: Programme d'aide aux médecins du Québec; 2008.
- 29. Attkisson CC, Zwick R. The client satisfaction questionnaire. Psychometric properties and correlations with service utilization and psychotherapy outcome. Eval Program Plann 1982;5(3):233-7.
- 30. Spickard A Jr, Gabbe SG, Christensen JF. Mid-career burnout in generalist and specialist physicians. JAMA 2002;288(12):1447-50.
- 31. Dunn PM, Arnetz BB, Christensen JF, Homer L. Meeting the imperative to improve physician well-being: assessment of an innovative program. J Gen Intern Med 2007;22(11):1544-52. Epub 2007 Sep 22.
- 32. Linzer M. Preventing burnout in academic medicine. Arch Intern Med 2009:169(10):927-8.
- 33. Galam R; Commission Prévention et santé publique. L'épuisement professionnel des médecins libéraux franciliens: témoignages, analyses et perspectives. Paris, Fr: Union régionale des médecins libéraux d'Île de France; 2007.
- 34. Cummings SM, Savitz LA, Konrad TR. Reported response rates to mailed physician questionnaires. Health Serv Res 2001;35(6):1347-55.
- 35. Lasek RJ, Barkley W, Harper DL, Rosenthal GE. An evaluation of the impact of nonresponse bias on patient satisfaction surveys. Med Care 1997;35(6):646-52.
- 36. Kane RL, Maciejewski M, Finch M. The relationship of patient satisfaction with care and clinical outcomes. Med Care 1997;35(7):714-30.