Exploring family physician stress

Helpful strategies

F. Joseph Lee MD CCFP FCFP MCISc **Judith Belle Brown** MSW PhD **Moira Stewart** MSc PhD

ABSTRACT

OBJECTIVE To explore the nature of professional stress and the strategies used by family physicians to deal with this stress.

DESIGN Qualitative study.

SETTING Kitchener-Waterloo, Ont.

PARTICIPANTS Ten key-informant family physicians.

METHODS In-depth interviews were conducted with key informants. A total of 40 key informants were identified, based on selected criteria; 24 provided consent. The potential participants were rank-ordered for interviews to provide maximum variation in age, sex, and years in practice. Interviews were conducted, audiotaped, transcribed verbatim, and analyzed until thematic saturation was reached, as determined through an iterative process. This occurred after 10 in-depth interviews. Immersion and crystallization techniques were used.

MAIN FINDINGS The participants described professional stresses and strategies at the personal, occupational, and health care system levels. Personal stressors included personality traits and the need to balance family and career, which were countered by biological, psychological, social, and spiritual strategies. Occupational stressors included challenging patients, high workload, time limitations, competency issues, challenges of documentation and practice management, and changing roles within the workplace. Occupational stressors were countered by strategies such as setting limits, participating in continuing medical education, soliciting support from colleagues and staff, making use of teams, improving patient-physician relationships, exploring new forms of remuneration, and scheduling appropriately. Stressors affecting the wider health care system included limited resources, imposed rules and regulations, lack of support from specialists, feeling undervalued, and financial concerns.

CONCLUSION Family physicians face a multitude of challenges at personal, occupational, and health care system levels. A systems approach provides a new framework in which proactive strategies can augment more than one level of a system and, in contrast, reactive strategies can have negative inputs for different system levels.

EDITOR'S KEY POINTS

- Although it is increasingly recognized that family physicians are suffering from occupational stress, there is only a small body of literature on family physician stress, burnout, and coping. This interesting qualitative study builds upon survey results previously published in *Canadian Family Physician* by these authors and adds to the literature on this topic.
- Key informants were purposefully selected for in-depth interviews based on their knowledge of strategies for managing professional stress and their good communication skills; participants represented both sexes, various ages, and all levels of practice experience.
- Participants described stresses at the personal, occupational, and wider health care system levels, and reported personal and occupational strategies that not only decreased stress at these levels, respectively, but also affected stress at other system levels. Participants could also be divided into those who were primarily proactive planners, who used stress strategies to prevent stress, and those who were primarily reactive responders, who used stress strategies to relieve stress.

*Full text is available in English at **www.cfp.ca**.
This article has been peer reviewed.
Can Fam Physician 2009;55:288-9.e1-6

Le stress chez le médecin de famille

Stratégies utiles

F. Joseph Lee MD CCFP FCFP MCISc **Judith Belle Brown** MSW PhD **Moira Stewart** MSc PhD

RÉSUMÉ

OBJECTIF Déterminer la nature du stress professionnel et les stratégies utilisées par les médecins de famille pour faire face à ce stress.

TYPE D'ÉTUDE Étude qualitative.

CONTEXTE Kitchener-Waterloo, Ontario.

PARTICIPANTS Dix médecins de famille agissant comme informateurs-clés.

MÉTHODES Des entrevues en profondeur ont été effectuées avec des informateurs-clés. Un total de 40 informateurs-clés ont été identifiés à partir de critères de sélection; 24 ont donné leur consentement. Les participants potentiels ont été interviewés dans un ordre donné afin d'obtenir le maximum de variation dans l'âge, le sexe et l'expérience de pratique. Les entrevues ont été enregistrées sur bande magnétique, transcrites mot à mot et analysées jusqu'à atteinte de la saturation, tel que déterminé par un processus itératif, ce qui fut obtenu après 10 entrevues en profondeur. Des techniques d'immersion et de cristallisation ont été utilisées.

PRINCIPALES OBSERVATIONS Les participants ont identifié des stress professionnels et des stratégies aux niveaux personnel, professionnel et en lien avec le système de santé. Les stresseurs personnels incluaient les traits de la personnalité, et la nécessité d'équilibrer famille et carrière, ce pour quoi on utilisait des stratégies biologiques, psychologiques, sociales et spirituelles. Les stresseurs professionnels incluaient les patients difficiles, la charge de travail élevée, le manque de temps, les questions de compétence, les défis liés à la documentation et à la gestion de la pratique, et l'évolution des rôles dans le milieu de travail. Contre le stress professionnel, on utilisait des stratégies telles que: s'imposer des limites, participer à des formations médicales continues, solliciter l'aide des collègues et du personnel, se servir d'équipes, améliorer la relation médecin-patient, explorer de nouvelles formes de rémunération et avoir un agenda raisonnable. Les stresseurs reliés au système de santé élargi incluaient les ressources limitées, l'imposition de règles et de règlements, le manque de soutien des spécialistes, le sentiment de dévalorisation et les préoccupations d'ordre financier.

CONCLUSION Le médecin de famille fait face à une multitude de défis reliés aux aspects personnels, professionnels et du système de santé. Une approche systémique offre une nouvelle perspective dans laquelle les stratégies proactives peuvent augmenter plus d'un niveau d'un système alors qu'au contraire, les stratégies réactives peuvent avoir des effets négatifs sur différents niveaux du système.

POINTS DE REPÈRE DU RÉDACTEUR

- Même si on reconnaît de plus en plus que les médecins de famille souffrent de stress professionnel, il existe très peu de publications sur le stress, le burnout et les capacités d'adaptation des médecins de famille. Cette intéressante étude qualitative fondée sur les résultats d'une enquête déjà publiée par les auteurs dans *Le Médecin de Famille Canadien* s'ajoute à la littérature sur ce sujet.
- Des informateurs-clés ont été choisis intentionnellement pour des entrevues en profondeur en fonction de leur connaissance des stratégies pour faire face au stress professionnel et de leur habileté à communiquer; les participants représentaient les deux sexes, différents âges et tous les niveaux d'expérience professionnelle.
- Les participants ont identifié des stress reliés aux aspects personnels, professionnels et du système de santé élargi, et ils ont rapporté des stratégies d'ordre personnel et professionnel qui diminuaient non seulement le stress à ces niveaux, mais influençaient aussi le stress à d'autres niveaux du système. On a également pu répartir les participants en deux groupes: ceux qui étaient surtout des planificateurs proactifs et qui utilisaient des stratégies spécifiques pour prévenir le stress, et ceux qui étaient principalement des répondeurs réactifs, qui utilisaient des stratégies pour soulager le stress.

***Le texte intégral est accessible en anglais à www.cfp.ca.**
Cet article a fait l'objet d'une révision par des pairs.
Can Fam Physician 2009;55:288-9.e1-6

It has been increasingly recognized that family physicians are suffering from occupational stress.[1] The term *burnout* has come to mean emotional exhaustion, depersonalization, and a perceived lack of personal accomplishment.[2] In Canada, a survey of rural family physicians in 2001 showed a self-reported burnout rate of 55%[3]; a survey in 2004 demonstrated that almost half of urban family physicians self-reported experiencing high stress levels and components of burnout.[4]

Personality traits such as a desire for high achievement, perfectionism, and a strong sense of obligation might make physicians vulnerable to depression, burnout, and anxiety and might contribute to higher suicide rates among physicians.[5,6] Physicians—particularly female physicians who often have greater responsibility for family duties—have often found it challenging to balance personal and professional life.[7-10]

The purpose of this study was to explore the stress experienced by Canadian family physicians and the strategies used to deal with this stress. The intent was to identify the underlying themes and provide a deeper understanding and more information than could be found with surveys. A literature search failed to find any qualitative research on this topic among Canadian family physicians.

METHODS

Sample

The study used a purposive sample of key informants from among the 158 family physicians in Kitchener-Waterloo, Ont, an urban community with a population of 300 000. Letters containing information about the study were sent to the potential participants, and consents and ethics approval were obtained.

Key informants were purposefully selected based on their knowledge of strategies for managing professional stress and their good communication skills. Forty key informants were identified; 24 provided consent. The potential participants were then rank-ordered for interviews to provide maximum variation in age, sex, and years in practice. Two of the researchers used an iterative process to determine when thematic saturation had been reached. Saturation occurred after 10 in-depth interviews.

Participants ranged from 29 to 73 years of age, with an average age of 47 years. There were 5 men and 5 women. The number of years of practice experience ranged from 1 to 50 years, with an average of 20.4 years.

Data collection and analysis

The in-depth interviews were conducted between December 2003 and February 2004. The interviews ranged from 45 to 75 minutes long; they were audiotaped and transcribed verbatim. The interviews were semi-structured, and thematic analysis was conducted shortly after each interview by 2 of the researchers. Analysis was initially done independently, followed by comparison and corroboration among researchers. Each transcript underwent a minimum of 3 iterations of the interpretive process. The interviews were conducted until all probable themes had been uncovered. Immersion and crystallization techniques were also used.

FINDINGS

Participants described professional stresses and strategies at the personal, occupational, and health care system levels, which are depicted in **Figure 1**.

Personal stress factors

Most of the physicians interviewed acknowledged that factors such as personality traits and the need to balance career and family contributed to their sense of professional stress. Most participants expressed a strong sense of obligation and high self-expectations.

Personal strategies

Personal strategies were used by all of the participants and could be categorized into themes relating to spiritual, psychological, social, and biological well-being.

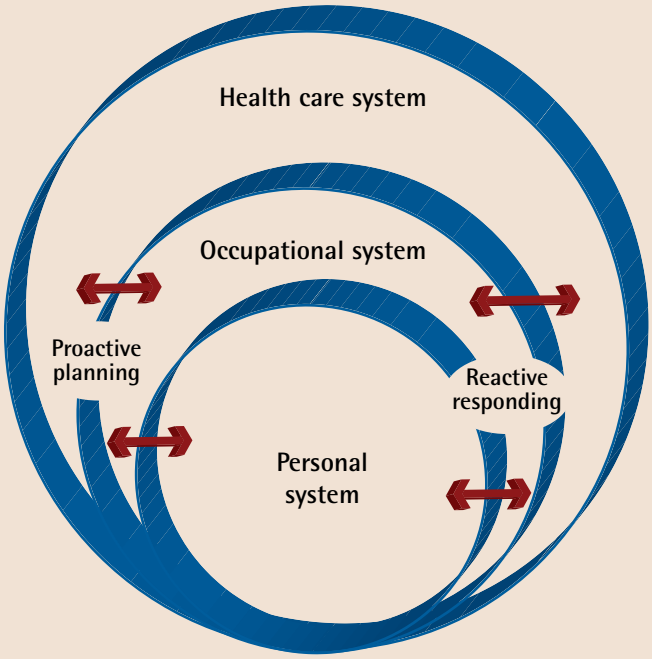
Spiritual strategies included prioritization of values, reflection, and self-awareness. One of the male participants shared a personal insight he had gained after suffering extensive stress during his career. "My personal belief is that we should take personal responsibility for [stress] and look at our own beliefs and thoughts that create our own stress." He went on to speak about his own self-awareness: "I try to recognize my faults and admit them without being too self-critical. I've got lots of them!"

This sentiment was echoed by a younger participant who felt that he did possess self-awareness, although he admitted that this was a challenge for him.

> If I was looking at [my life] like a pie chart in terms of time, personal effort, and commitment that I'm putting toward my work and toward my family time, it's skewed towards my profession, and I don't think that's healthy in the long run. I think it's good that I'm aware of it and want to make changes on it, but I'm still sort of struggling to actually implement those changes and try to find a balance that I'm happier with.

Psychological strategies were mentioned by most of the participants. These included acceptance of limits. One participant spoke on the theme of acknowledging one's own feelings: "It is important to realize that doctors are human and they have to deal with their feelings as well, and if you don't deal with them, it will come out with the patient as anger or upset." Humour was felt to be important, particularly for one male participant, who used this

Figure 1. The 3 levels of systems: *Proactive planning and reactive responding affects different levels of systems.*



key strategy throughout his lengthy career: "If you're going to go and spend time with people who are dying, then you'd better spend some time laughing as well."

Most participants spoke of their need to socialize with friends and family. A woman spoke of how she enjoyed her life: "Going for a run with friends, taking my daughter … watching my son play hockey. Those kinds of things, that's what you live for."

Physical activity, exercise, outside interests, and hobbies were strategies used by all the physicians. A younger male participant spoke of what he had learned from an older physician.

> When I went there … I saw how he took these big, long lunches and he'd go to the gym. I thought, gee that's a good idea, because I used to always go after work. You're tired after work and you don't want to go. All of a sudden you sort of fall out of routine. It's a great idea to keep me going to the gym because it's that time set during the day and I can, and you're not having any responsibilities to see anybody [like] your family at that time of the day.

Occupational stress factors

Occupational stress factors involved the staff, colleagues, and patients of family physicians, as well as the interactions among these parties. They included challenging patients, high workload, time limitations, competency, challenges of documentation and practice management, and changing roles.

All of the participants spoke about "heartsink," demanding, and challenging patients. *Heartsink* has been used to refer to patients whose names cause their doctors' hearts to sink.[11] A female participant spoke about one particular patient she had reluctantly taken on as a favour to a relative who was an existing patient.

> I took this lady on. Holy cow! She was just trouble from the first day she came in. Heartsink patient? Brutal. She had an itinerary. She would tell me what she wanted …. She needed notes, notes, notes, for everything.

The high workload of practice was cited by all of the participants. As an example, a young participant spoke about the workload and responsibility of hospital work that he had to manage in addition to his office-based family practice. "I'd get a knot in my stomach every time I was on call because of the hospital calls." Ultimately, this participant gave up his hospital work.

Time limitations were identified by all of the participants as stressful. One physician reflected on how the increasing complexity of patient care made it progressively more difficult for him to stay on schedule. Another expressed guilt associated with not having the time to spend with some patients.

> [Speaking to a patient] "You know what? We need to address this in another visit." I always feel guilty doing that, especially [to] a patient who is more

elderly because you'd like to be able to address all the problems in 1 visit, but you can't spend 45 minutes every time you see them. I find that stressful.

Some participants shared concerns about the need to keep up-to-date and maintain competency. Others discussed the challenges of large amounts of paperwork. One participant provided an example: "It took me 2½ minutes to check the patient medically. It was a sprained ankle. And, it took me 25 minutes to fill out the forms."

Some participants thought that practice management was challenging, including dealing with staffing issues, and some believed this was owing to inadequate training for practice management.

Most participants thought that the changing role of the family physician was stressful. This included taking on new roles as a result of a shortage of specialists without adequate training for these new roles.

Occupational strategies

All participants used strategies in their practices to help them with patients, staff, and colleagues. These included setting limits, participating in continuing medical education, soliciting support from colleagues and staff, making use of a team approach, improving patient-physician relationships, exploring new forms of remuneration, and scheduling appropriately.

Most participants had reduced their roles as family doctors during the span of their careers and set limits on their workloads and scope of practice. These role reductions included giving up hospital work or obstetrics, "firing" patients, and converting from full-time to part-time work.

Continuing medical education was considered by many to be a helpful strategy to manage occupational stress. This addressed the issues of competency and collegiality. Some participants were members of small learning groups, which they found to be helpful.

Most participants sought support from colleagues and staff. Compatible practice partners, use of teams, and consulting other health professionals were cited as strategies by many.

Improving patient-physician relationships was described as helpful for some participants. One participant addressed this issue regularly with his staff and believed that relationships with patients could be helped by reframing "difficult" patients as "interesting" patients.

Some participants had started to take advantage of new forms of remuneration, such as partial capitation models instead of the traditional fee-for-service model, and felt this was a positive change.

Scheduling appropriately was also cited as important for some of the participants.

Systemic stress factors

Many of the stresses noted by the participants were caused by issues within the health care system, such as limited resources, imposed rules and regulations, lack of support from specialists and colleagues, feeling undervalued, and financial concerns.

All of the physicians discussed the problems caused by limited resources. This included lengthy waiting lists for diagnostic tests, difficulties referring patients, and the challenge of accessing specialists. Not only was the shortage of specialists discussed, but the shortage of family physicians was also mentioned by some participants, who indicated that it could be stressful to find replacements for vacation or eventual retirement.

Medicolegal issues, the need for documentation, and rules and regulations imposed by organizations such as professional colleges and the government were cited as stressful by some physicians.

Actual or perceived lack of support and collegiality from specialists, colleagues, and hospitals was discussed by most participants. Many spoke specifically about the diminishing collegiality among physicians as well as the loss of connectedness between family physicians and other specialists.

Feeling undervalued and financial concerns were brought up by almost all of the participants.

Proactive planners and reactive responders

Additional analysis of the data using crystallization and immersion techniques revealed themes of proactivity and reactivity. Most participants demonstrated some aspects of proactive planning and reactive responding, but either one or the other was usually predominant. The researchers were able to divide the participants into those who were primarily proactive planners and those who were primarily reactive responders.

Proactive planners often anticipated potential problems and took steps to avoid creating imbalance at the outset. Examples included advance schedule planning, constant fostering of the patient-physician relationship, planning for continuing medical education, setting limits, and developing an environment of mutual support with staff and colleagues.

Reactive responders generally used stress strategies only after suffering from great stress. For example, one participant was in full-time practice with comprehensive duties and felt guilty about not meeting family obligations. This reactive responder reduced office hours and gave up some hospital duties after feeling overwhelmed.

DISCUSSION

Levels of systems

Stress factors and strategies can be viewed in terms of different levels of systems as shown in **Figure 1**. General system theory states that open systems have feedback mechanisms and different inputs, both positive and

negative.[12] Each system comprises various components as well as the dynamic interactions occurring among various parts within the system. There are 3 different systems of stress factors: the personal system, the occupational system, and the health care system. These different systems operate at different levels yet do interact with each other, by both positive and negative inputs. In addition, the levels of stress strategies interact in parallel systems to the stress factors. Although previous studies have described some of these stressful inputs,[13-15] this study provides a new framework for understanding the issue of physician stress in a systems approach.

The personal system comprises the many components of the self: personality, physical health, connectedness, and values. At the level of the person, there are positive inputs (strategies) and negative inputs (stresses). Strategies balance and maintain the system of the person and add to personal growth. These can be categorized as spiritual, psychological, social, and biological strategies (**Figure 2**).

Spiritual strategies include prioritizing values, self-reflection, and developing self-awareness. Acceptance of limitations and the use of high-level defence mechanisms,[16] such as humour, were psychological strategies used by participants in this study. Social strategies included spending time with family and friends, having outside interests, and having hobbies. Physical activity, exercise, proper sleep, and good nutrition were biological strategies that were found to be helpful.

The occupational system comprises various components: the family physician, patients, staff, colleagues, and the interactions among these components (**Figure 3**).

The diminution of the system by negative inputs such as heartsink or demanding patients and time pressures can be counterbalanced by positive inputs such as setting limits, improving the patient-physician relationship, and scheduling realistically and appropriately. The negative input of high responsibility with heavy workload, issues of competency, the need to keep up-to-date, complex and challenging medical problems, and an abundance of paperwork could be countered in a similar fashion by positive inputs such as participating in continuing medical education, using technology, and working in teams. A negative input such as stress from practice management issues can be countered by fostering a supportive work environment and using a team approach; collegiality can counter potential stress caused by inadequate support from colleagues.

The health care system comprises many components, including family physicians, specialists, support staff, other health care providers, hospitals, academic institutions, governments, regulatory bodies, insurers, health care–related industries, the public, and other various stakeholders and the interactions among all of these players.

Figure 2. The personal system: *Outward arrows indicate negative inputs (stresses) that diminish the system and inward arrows indicate positive inputs (strategies) that augment the system.*

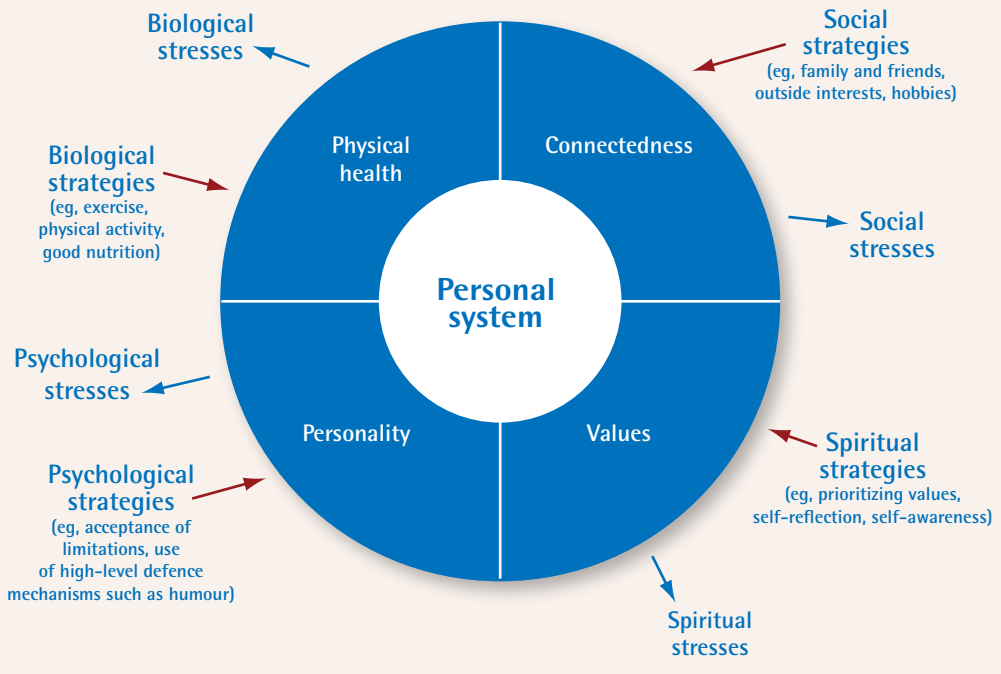
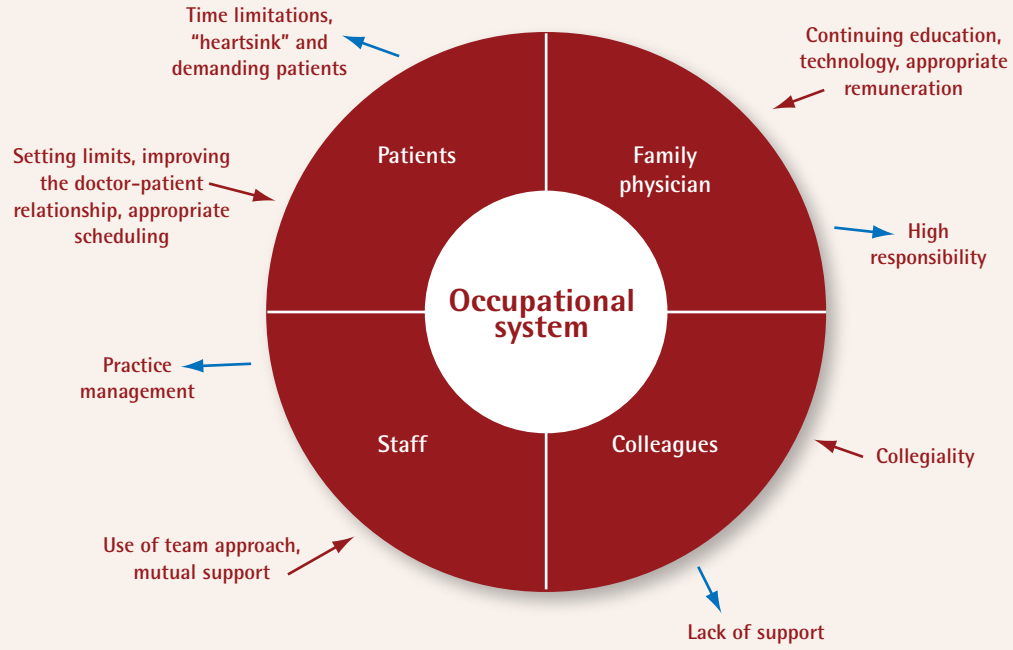


Figure 3. The occupational system: *Outward arrows indicate negative inputs (stresses) that diminish the system and inward arrows indicate positive inputs (strategies) that augment the system.*



Proactive planners and reactive responders

Proactive behaviour has been described as taking responsibility for one's own situation. Each individual has the ability to show initiative and take responsibility to make things happen.[17,18] A proactive planner at the personal level can have a positive input not only on the personal system but also on the next system level. As an example, one participant scheduled regular exercise and time with family and friends. As a result, he felt great and was more likely to facilitate healthy occupational strategies, such as settings limits, using teams, and garnering support from staff and colleagues. This, in turn, decreases his likelihood of leaving the profession prematurely, which benefits the health care system as a whole.

In contrast, a reactive responder might choose to respond to professional stress by reducing his or her scope of practice. Although this strategy might be positive and healthy at the personal level, it would be negative for the next levels of systems. At the occupational system level, patients might have reduced access to care and colleagues and staff might be adversely affected. At the level of the health care system, this strategy adds to the limited resources and the shortage of physician services available.

Similarly, reactive responding at the level of the entire health care system might not be healthy for physicians at the occupational and personal levels. For example, medical school enrolments in Canada were reduced over the past decade in reaction to the challenge of financial deficits faced by governments. The ensuing physician shortage has challenged patients, staff, and physicians at the occupational level. At the personal level, many physicians have found it challenging to balance career with family as a result of the public demand for services.

Limitations and implications

Because of the qualitative design of this study, the results cannot necessarily be generalized to all family physicians, but greater awareness of the phenomenon of professional stress experienced by family physicians adds to the known literature and could lead to further study on the subject.

The aim of this study was to explore stress and strategies to manage stress, primarily at the level of the individual physician; however, how the effects of one level affected other levels was also examined. Proactive planning at the larger health care system level by professional bodies, hospitals, and governments to address the many systemic stresses might lead to healthier individuals, including family physicians, other health care professionals, and the public in general.

Conclusion

Family physicians face a multitude of challenges at

personal, occupational, and health care system levels. A systems approach provides a framework in which stresses diminish and strategies to deal with stress augment each system level. Proactive planning can augment more than one level of system and reactive responding can have negative effects on different system levels.

Dr Lee is Chair and Lead Physician of the Centre for Family Medicine Family Health Team in Kitchener-Waterloo, Ont; Site Director of the McMaster KW Family Medicine Residency Program; Academic Director at the Kitchener-Waterloo site of the Department of Family Medicine at the University of Western Ontario; and a Clinical Assistant Professor in the School of Pharmacy at the University of Waterloo. **Dr Brown** is a Professor in the Department of Family Medicine and the School of Social Work at King's College in London, Ont, and Chair of the Master of Clinical Science Program in Family Medicine. **Dr Stewart** is a Professor and Director of the Centre for Studies in Family Medicine at the University of Western Ontario and the Thames Valley Family Practice Research Unit in London.

Contributors

Dr Lee conceived and planned the study and its ethics submission, conducted the interviews and research for the study, and participated in the thematic development and interpretive analysis. **Dr Brown** provided advice and guidance on development of the research protocol and ethics submission, and participated in the thematic development and interpretive analysis. **Dr Stewart** provided advice and guidance on development of the research protocol and ethics submission, and provided commentary and suggestions on the findings, discussion, and conclusions.

Competing interests

None declared

Correspondence

Dr F. Joseph Lee, Centre for Family Medicine, 25 Joseph St, Kitchener, ON N2G 4X6; telephone 519 578-2100; fax 519 578-2109; e-mail **joelinda1@rogers.com**

References

1. Post DM. Values, stress, and coping among practicing family physicians. *Arch Fam Med* 1997;6(3):252-5.
2. Maslach C, Jackson S, Leiter M. *Maslach burnout inventory manual*. 3rd ed. Palo Alto, CA: Consulting Psychologists Press, Inc; 1996.
3. Thommasen HV, Lavanchy M, Connelly I, Berkowitz J, Grzybowski S. Mental health, job satisfaction and intention to relocate. Opinions of physicians in rural British Columbia. *Can Fam Physician* 2001;47:737-44.
4. 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.
5. Sotile W, Sotile M. *The resilient physician: effective emotional management for doctors and their medical organizations*. Chicago, IL: American Medical Association; 2002.
6. Johnston C. Suicide totals for MDs sad reminder of stresses facing medicine, conference told. *CMAJ* 1996;155(1):109-11.
7. Moukas E, Davidson A, Kaufmann V. OMA Physician Health Program explores help-seeking behaviours of women physicians. *Ont Med Rev* 2003;70(11):41-3.
8. Brown JB, Carroll J, Reid A. How family influences practice of obstetrics. Do married women family physicians make different choices? *Can Fam Physician* 1996;42:1319-26.
9. Carroll JC, Brown JB, Reid A. Female family physicians in obstetrics: achieving personal balance. *CMAJ* 1995;153(9):1283-9.
10. Brown JB. Female family doctors: their work and well-being. *Fam Med* 1992;24(8):591-5.
11. Sullivan P, Buske S. Results from CMA's huge 1998 physician survey point to a dispirited profession. *CMAJ* 1998;159(5):525-8.
12. O'Dowd TC. Five years of heartsink patients in general practice. *BMJ* 1988;297(6647):528-30.
13. Von Bertalanffy L. The meaning of general system theory. In: *General system theory: foundations, development, applications*. New York, NY: Braziller; 1968. p. 30-53.
14. Zuger A. Dissatisfaction with medical practice. *N Engl J Med* 2004;350(1):69-75.
15. Rout U. Stress among general practitioners and their spouses: a qualitative study. *Br J Gen Pract* 1996;46(404):157-60.
16. Appleton K, House A, Dowell A. A survey of job satisfaction, sources of stress and psychological symptoms among general practitioners in Leeds. *Br J Gen Pract* 1998;48(428):1059-63.
17. Schamess G. The use of defense mechanisms. In: Berzoff J, Melano Flanagan L, Hertz P. *Inside out and outside in. Psychodynamic clinical theory and practice in contemporary multicultural contexts.* Northvale, NJ: Jason Aronson Inc; 1996. p. 79-93.
18. Covey SR. Habit 1: be proactive. In: *The 7 habits of highly effective people*. New York, NY: Fireside; 1990. p. 65-94.