Research

Building physician resilience

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ABSTRACT

OBJECTIVE To explore the dimensions of family physician resilience.

DESIGN Qualitative study using in-depth interviews with family physician peers.

SETTING Hamilton, Ont.

PARTICIPANTS Purposive sample of 17 family physicians.

METHOD An iterative process of face-to-face, in-depth interviews that were audiotaped and transcribed. The research team independently reviewed each interview for emergent themes with consensus reached through discussion and comparison. Themes were grouped into conceptual categories.

MAIN FINDINGS Four main aspects of physician resilience were identified: 1) attitudes and perspectives, which include valuing the physician role, maintaining interest, developing self-awareness, and accepting personal limitations; 2) balance and prioritization, which include setting limits, taking effective approaches to continuing professional development, and honouring the self; 3) practice management style, which includes sound business management, having good staff, and using effective practice arrangements; and 4) supportive relations, which include positive personal relationships, effective professional relationships, and good communication.

CONCLUSION Resilience is a dynamic, evolving process of positive attitudes and effective strategies.

EDITOR'S KEY POINTS

- Why do some physicians seem to handle the stress of being a physician well and others become dissatisfied, physically drained, and emotionally exhausted?
- This study interviewed 17 physicians with a reputation for resilience in their practice communities. Four key areas contributing to resilience were identified; each of these areas has support in the literature.
- While some might argue that resilience is a result of inherited personality traits, some of the factors described in this study as contributing to resilience can be learned behaviours.

Recherche

Améliorer la résistance des médecins

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RÉSUMÉ

OBJECTIF Examiner les éléments contribuant à la résistance des médecins de famille.

TYPE D'ÉTUDE Étude qualitative à l'aide d'entrevues en profondeur avec des médecins de famille.

CONTEXTE Hamilton, Ontario.

PARTICIPANTS Échantillon raisonné de 17 médecins de famille.

MÉTHODE Un processus itératif d'entrevues individuelles en profondeur enregistrées sur bande magnétique et transcrites. L'équipe de recherche a révisé indépendamment chaque entrevue pour identifier les thèmes émergents; un consensus était ensuite obtenu par comparaison et discussion. Les thèmes ont été regroupés par catégories conceptuelles.

PRINCIPALES OBSERVATIONS Quatre aspects principaux de la résistance du médecin ont été identifiés: 1) attitudes et perspectives, incluant valoriser le rôle du médecin, maintenir l'intérêt, développer la perception de soi et accepter ses propres limites; 2) équilibre et choix des priorités, incluant établir ses limites, adopter un plan de développement professionnel adéquat et reconnaître sa propre valeur; 3) style de pratique, incluant bien gérer sa pratique, s'entourer d'un personnel compétent et prendre des arrangements de pratique efficaces; et 4) support relationnel, incluant des relation interpersonnelles positives, des relations professionnelles efficaces et une bonne communication.

CONCLUSION La résistance est un processus dynamique en constante évolution, fondé sur des attitudes positives et des stratégies efficaces.

POINTS DE REPÈRE DU RÉDACTEUR

- Pourquoi certains médecins semblent-ils supporter aisément le stress de leur profession alors que d'autres développent de l'insatisfaction et de l'épuisement physique et émotionnel?
- Dans cette étude, on a interviewé 17 médecins réputés pour leur résistance dans leurs milieux de pratique. On a identifié 4 éléments-clés contribuant à la résistance, chacun étant appuyé par des publications.
- Bien qu'on pourrait prétendre que la résistance est le résultat de traits de personnalité héréditaires, certains des éléments contribuant à la résistance qui sont décrits dans cette étude peuvent être des comportements appris.

The concept of physician resilience is emerging in response to increasing evidence of physician stress.[1-4] The Canadian Medical Association reported that 55% of its members claimed their family and personal lives had suffered because they chose medicine as a profession.[5] The journal *Hippocrates* reported that, among their readers, fewer than half (44%) of male physicians and only a quarter (26%) of female physicians were very satisfied with their practices.[6]

Physician stress is attributed to changes in organizational structures[7] with loss of clinical autonomy and with third-party control by managers, government, insurance companies, and medical corporations,[8,9] as well as demanding work,[10] long hours, poor ergonomics,[5,11] escape into work,[12] personality,[13] and interpersonal problems.[14] Although the data are not conclusive, work stress is theorized as manifesting as a triad of doubt, guilt, and exaggerated sense of responsibility resulting in emotional exhaustion, depersonalization, a low sense of personal accomplishment,[10] and psychiatric disorders.[15] While rates of depression[16,17] are reported to be higher among physicians than in the general population, physician alcoholism and drug dependency are not substantially higher than in age-matched peers.[18] Physician suicide rates are substantially higher compared with the general population,[19-21] yet physicians are slow to seek help[22,23] owing to fears of judgment, stigma,[12] and punitive actions.[17] McCue and Sachs argue that the "conspiracy of silence" about the nature and level of stress inherent in the physician role has inhibited the sharing of problems and solutions.[24]

Our advisory team of 8 researchers with 5 family physicians met on 5 occasions to explore research direction and design. After an extensive literature review on physician stress and emergent research on resilience, we decided to take the more positive approach and focus on physician resilience. Four recent works guided us. The qualitative study of physician self-protective practices by Weiner et al[25] identifies 5 strategies: relationships,

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religion or spirituality, self-care, work attributes, and life philosophies. Huby et al[26] define 3 predictors of physician morale: workload, personal style, and practice arrangements. Polk[27] identifies 4 factors of resilience: dispositional, relational, situational, and philosophical. Barankin et al describe resilience as "a dynamic process of actively managing life events and rebalancing work and family life."[28]

METHODS

Open inquiry[29] permits subjects to define issues and allows the wisdom of experience to emerge, while using physician peer interviewers ensures greater understanding of issues and meaningful conversations.[30] We began by posing nonpersonal questions to establish the domain of inquiry and to build rapport in the interview before moving to more personal inquiries. Ethics approval was granted by the McMaster University Research Ethics Board.

Interview questions
Physician participants were asked the following questions:
1. Suppose a young person is considering medicine as a career and asks for your advice. What would you say?
2. If a resident asks you about physician resilience—how to avoid stress and burnout—what kind of advice would you offer?
3. Making clinical errors is often a source of stress. How do you deal with this?
4. Keeping up in medicine can be a difficult task. How do you manage this?

Probes are follow-up questions, used when needed to deepen the level of response and to increase the richness of the data without directing the response.[31] Probe question topics drawn from the literature on physician roles included competing time demands, clinical work issues, range of professional activities, and leadership roles.

Sample
Our 8-member advisory committee identified a purposive sample of 20 senior practitioners with reputations for resilience in a community population of 350 family physicians in Hamilton, Ont. When half had been selected systematically and interviewed, saturation was reached on core elements. It became apparent the sample needed to be expanded to reflect the changing demographics of family medicine and to include physicians of all ages, stages, and practice types. Of a total of 20 potential subjects contacted, 2 did not respond to 3 phone messages, 1 interview was excluded owing to audiotape technical difficulties, and none declined. The resulting 17 interviews were found to be sufficient for saturation.

Data collection

The potential sample was divided between 2 peer interviewers (K.T.K., H.W.) who selected those they did not know or know well. Physician subjects were asked to participate in audiotaped interviews of 30 to 60 minutes and to sign consent forms. Interviews were numbered with only the interviewers knowing identities of subjects. (H.W.'s interview numbers are 200s; K.T.K.'s interview numbers are 300s.) Transcribed tapes have numbered lines and were kept in a locked file before being erased. Quotations are referred to by interview number and line of text (eg, 201:9).

Interview transcriptions were examined at 3 stages: early (after 5 done), halfway (10 completed), and late (after 17), when it was determined that saturation had been reached.

Data analysis

Each interview, when completed, was read independently at least twice by 3 researchers (P.M.J., K.T.K., H.W.) for themes identified in the literature, new findings, and possible saturation. Constant comparison of themes guided the search for meaning and relative importance of concepts. These were organized into an axial coding scheme for text processing in NVivo. Face validity was assured through an internal review by 2 members of the McMaster University Department of Family Medicine.

RESULTS

Response rate

The inclusion of physicians in early stages of practice (start to 10 years) with heavy family responsibilities slightly skews the sample in favour of women (59%) and salaried academics (35%). Two-thirds of late-career physicians (>20 years' experience) were men. A quarter (24%) of the sample were solo practitioners. Hamilton was one of the first cities in Ontario to embrace primary care reform and currently has a high proportion of family physicians working within some form of capitated payment system, so there was a lower number of fee-for-service physicians (41%) compared with the rest of Canada. Almost all subjects had partners (94%) and 82% were parents (**Table 1**).

Themes

Four resilience themes were identified with attributes and related approaches: attitudes and perspectives; balance and prioritization; practice management style; and supportive relations (**Table 2**).

Attitudes and perspectives
Valuing the physician role

Sense of contribution: Central to building resilience is valuing the physician role with its unique contributions, privileges, and rewards. "I can't think of anything else that I would rather be doing." (204:9) "I'm really privileged to be able to do this." (201:9) The physician-patient relationship provides opportunities to play a special and meaningful role in the lives of others and to learn from them. "I feel honoured to be part of those conversations because they change my life; they change how I live." (201:9)

Maintaining interest in role: Physician ability to maintain interest in work varies. For some, interest is inherent to the practice itself, while for others, interest is something that has to be cultivated. "I think like a marriage where the romance of the honeymoon goes after a little while, you have to use your imagination and you have to work at keeping your relationship with your spouse, and the same thing with your job." (302:55)

Acceptance of professional demands: An ability to accept the demands of the physician role builds resilience. Lack of time is cited as a stressor and time management the key to resilience. As physicians become experienced, they learn to creatively juggle unexpected demands and speak of setting aside administrative time to organize office hours and external commitments (hospital visits, housecalls, and long-term care). "[I]t's usually just a matter of shutting the door ... sitting down and looking big picture, what's on the plate, what are

Table 1. Sample characteristics: *N = 17.*

CHARACTERISTIC	N (%)
Sex	
• Men	7 (41)
• Women	10 (59)
Career stage	
• Early (< 10 y)	2 (12)
• Middle (10 to 20 y)	7 (41)
• Late (> 20 y)	8 (47)
Practice type	
• Solo	4 (24)
• Group	13 (76)
Practice location	
• Community	11 (65)
• Academic	6 (35)
Payment system	
• Fee-for-service	7 (41)
• Alternate payment	7 (41)
• Salary	3 (18)
Family status	
• Partnered	16 (94)
• Not partnered	1 (6)
Children	
• At home, younger than 12 y	4 (24)
• Teenagers at home	4 (24)
• Grown children	6 (35)
• None	3 (18)

Table 2. Attributes and approaches in building physician resilience

RESILIENCE THEMES	ATTRIBUTES AND APPROACHES
Attitudes and perspectives	**Valuing physician role** • Sense of contribution • Maintaining interest in role • Acceptance of professional demands **Self-awareness** • Acceptance of personal limitations
Balance and prioritization	**Professional arena** • Setting limits • Continuing professional development **Personal arena** • Honouring the self • Recreation and exercise • Vacation and avocations • Spirituality
Practice management style	**Business management** • Work organization • Workload **Office personnel** • Staffing • Delegating **Practice arrangements** • Group practice • Alternate payment systems **Technology** • Computerization
Supportive relations	**Professional support** • Peer support • Consultant support • Multidisciplinary teams **Personal support** • Partner, family, and friends • Family physician

the priorities, what needs to be done …. I make incredibly good use of little bits of time." (300:23)

Self awareness

Acceptance of personal limitations: Through self-awareness, a growing sense of expertise emerges along with realistic expectations, acceptance of personal limitations, and self-forgiveness for medical errors. "[I]t takes a certain amount of humility to be able to say 'you know what, I can't figure this out by myself' … and there's nothing wrong with that." (208:84) "I still reflect on errors that I made over the years and you feel bad about it but I can permit myself to be human." (202:85)

Balance and prioritization

Professional arena. Balance in the professional arena is achieved through prioritization.

Setting limits: Balance requires knowing and setting limits, being able to say "no." This comes with experience. "I think it's taken me a long time to realize that I'm allowed to set limits and to give myself permission to do that." (202:25) Setting limits might require changing or restricting practice.

Continuing professional development (CPD): Respondents identified 4 strategies for CPD:
- Prioritizing educational needs. "[I]f I need to learn something to manage my patient then that's what I read … you cannot learn it all." (300:60)
- Scheduling CPD. "I spend a half an hour each day looking at the journals." (301:41) "[Continuing professional development is] scheduled for a year in advance." (208:71)
- Peer learning occurs through direct questioning and practice-based small groups (PBSGs). "[I]f I don't know something … I'll ask." (201:29) Learning in PBSGs is more than CPD; it counters isolation, increases knowledge, and provides professional support. "[T]he small group thing is terrific for me …. It's really the best way for me to be up to date." (203:73)
- Teaching is a way to keep current and contributes to role stimulation. "Teaching in particular is just wonderful … the residents just constantly challenge you … they'll catch you up in a heartbeat." (300:7)

Personal arena

Honouring self: Balance requires honouring self to avoid exhaustion. "I have to look after myself and I can't believe how much more productive and energetic I am if I pay attention to that piece."(306:69) Time off must be protected. "The old advice, you need to set limits, you need to walk out the door; you need to make sure you're looking after yourself. It's the advice they give you on the airplane—if you're traveling with a child, [in an emergency] put your own [oxygen] mask on first and then put the child's on. Working in here, you have to look after yourself or you can't look after your patients." (203:52)

Recreation and exercise: Time out should include recreation and physical exercise.

Regular vacation: Regular vacations promote mental health and can be combined with distant educational events. "You don't have to run yourself ragged before you can take time off. Take it off when you're still feeling not too burnt out or too tired and you enjoy it better." (208:47)

Spirituality: Reflection on deep philosophical questions arising in medical practice is a spiritual task, putting work within a larger context. One physician recommended prayer to gain perspective. "Prayer is very important …. I think it helps." (305:70)

Practice management style

Business management. Physicians emphasized that medical practice is a business. "Obviously people have

to have some sort of business sense, some ability to recognize that medical practice is also a business." (202:61)

Work organization: Work organization includes time planning and systematic patient scheduling. Time needs to be budgeted for paperwork. "[A]cknowledge the fact that you are going to need another chunk of time every single week for paperwork." (306:49)

Workload: The level of workload must be a conscious decision. "I've just had to deliberately just stop doing things .... I do restrict my practice and try to restrict my other professional responsibilities as much as I can." (300:13-17)

Office personnel

Staffing: Hiring quality personnel is critical. "If you've got a good staff, your office runs well, if you've got a bad staff, your office is going to be just a disaster." (203:113)

Delegating: Delegation and teamwork are important. "I give a lot of the tasks to others who enjoy doing them ... we have multidisciplinary teams doing things for the patients." (300:46)

Practice arrangements

Group practice: Benefits of group practice are described as collegiality, mentorship, and reliable on-call coverage. "I'm in a very supportive group. I think the other really important piece to sustainability is who you are working with day to day." (306:41)

Alternate payment systems: The greater Hamilton area has a substantial proportion of physicians participating in primary care reform, with rostered patients, alternate payment systems (capitation), and funding for allied professional staff. Cited advantages are flexibility, regular income, vacation, and improved on-call coverage. "[G]oing into the primary care reform, financially, was the best thing I could have done ... and now I think I am being paid appropriately ... getting paid for doing forms and all the administrative part." (304:10-12)

[I]t's a really highly satisfied group of physicians ... you cut the phone at 5 o'clock ... there's an after hours clinic ... there's someone carrying their pager through the night ... the patients are happy and they are looked after ... when I leave the office, I leave the office, which is probably for the first time in my life. (200:41)

Technology. Technology—pagers, faxes, cellular telephones, and computers—can make life easier. One has to feel confident in turning them off to protect personal time. E-mail is described as a mixed blessing—an after-hours challenge. "I went ahead and computerized the office .... I think that has added years to my career .... It's not for everybody because some people feel overwhelmed when they look at a screen .... I would never, ever advise anybody to even think of setting up an office with the chart system, it's just too complex, too passé, too disorganized." (200:25)

Supportive relations

Professional support

Peer support: Peer support is essential with open communication around difficult cases and stress-related issues. "We usually just sit down and talk ... offer general support to whoever it is." (201:23) For some, PBSGs provide peer support, and over the years special friendships often develop. Colleagues who can step in at a moment's notice are invaluable.

Consultant support: Building relationships with consultants is important for family physicians who increasingly manage very ill patients in the community. "I refer. I don't tend to tinker; I try to stay away from tinkering because then you end up in trouble." (200:25)

Multidisciplinary teams: Multidisciplinary teams can provide vital support. "We have nurses in our office and certainly they play a very large role." (202:25)

Personal support

Partner, family, and friends: A personal support system of partner, family, and friends builds resilience. "I just have the most supportive home environment imaginable and it's probably the major thing in my life that allows me to get through the weeks, so marry well." (300:101) "Just having someone not related to medicine that I can talk to ... can be a big help." (206:17)

Physicians recommend allocating time for personal life, warning that it can easily be eroded. Obtaining help with household chores can be useful.

Family physician: Having a family physician is critical. It eliminates treatment of self and family members; it provides the opportunity to discuss personal health or stress concerns.

DISCUSSION

One could argue attitudes contributing to building resilience are inherent personality traits[13] rather than learned behaviours.[32] But our study physicians reported learning to set limits, resulting in improvements in sense of well-being and productivity. Hamilton family physicians' recommendations for building resilience shift the focus from pathological stress to successful adaptation emphasizing 4 dynamic elements, each of which has research support.

Attitudes and perspectives. Attitudes and perspectives reflect 2 factors identified by Polk in a systematic review of the literature on resilience: dispositional (sense of self and personal competence) and philosophical aspects (personal beliefs).[27] They also correlate with 5 resilience factors identified in a recent

workshop by the Toronto Health Project: 1) being self-aware, reflective, and attuned, 2) having core values and an optimistic philosophy of life and being altruistic, 3) having a healthy temperament and a sense of humour, 4) acceptance of self and others and being able to forgive self and others, and 5) feeling that one is making a difference in one's profession.[28]

Balance and prioritization. Balance and prioritization are supported by Polk's situational factor of resilience and studies on workload[26] that show sense of control over the practice environment is a key contributor to physician morale.[9] While early studies describe "physician work addiction" as a way of life,[33] more recent research in Australia,[34] Canada,[6,35] the United Kingdom,[36] and the United States,[2] identify heavy workload and time pressures inherent to the role itself and not the person. Time pressures affect perceptions of having adequate time for patient care and do influence job satisfaction.[9] Time for personal life includes family,[37] leisure, fitness, and health maintenance.[38] Some studies show men and women perceive work stress differently,[39] with women more likely to report having difficulties balancing professional and personal commitments[40,41]; but the evidence remains inconclusive.[42,43] Options some women choose when their children are young are salaried positions and part-time work.[44]

Practice management. Study physicians advised careful decision making about personal capacity for work,[45,46] avoiding comparisons with others, and delegating to allied health professions. Studies of work organization and physician job satisfaction from the United Kingdom[36,47] report 3 factors related to physician morale: partnership dynamics, personal styles, and workload.[26] Hamilton family physicians stressed the importance of well structured work routines and practice arrangements that foster supportive networks of colleagues, consultants, and allied staff. Good communications with colleagues and patients is key to dealing with medical errors, and an essential element of enjoying practice.[14,48]

Supportive relations. Regular and strong peer interaction allows physicians to find practical answers to difficult clinical questions, and to address pervasive occupational stresses.[47] Methods in Australia include voluntary educational programs,[49] health and well-being programs for doctors with weekend retreats,[50] stress management training,[51] and Balint groups, which are also popular in the United States[52] and the United Kingdom.[3] Support services in Wales[53] and one-to-one peer support in New Zealand[54] permit exploration of issues in confidential settings. The most popular option for the Hamilton physicians in this study was PBSGs, which provide CPD, mentoring, and

peer support. The Ontario Physician Health Program offers resources for those at risk and workshop training to build resilience.[28]

Balance between personal and professional life is deemed essential.[55] Hamilton physicians in this study stressed the importance of personal relations, exercise, relaxation, spirituality,[56] and cultivating outside interests.[2] Personal support networks are necessary,[44,57] but if family life is dysfunctional, it can magnify work-related stress.[12,58] Hamilton physicians strongly recommended having a family doctor as an important part of self-care[17] and avoiding the trap of self-treatment.[12,44]

Limitations
Our study's main limitation is its descriptive nature, which does not distinguish between innate and learned elements of resilience or the relative importance of the 4 resilience themes. While only family physicians were interviewed, we assume the challenges they face and the resilience strategies discussed are generalizable to other medical specialties.

Conclusion
Hamilton family physicians identified 4 dynamic elements for building resilience: attitudes and perspectives; balance and prioritization; practice management; and supportive relations. Attitudes and perspectives include valuing the physician role, maintaining interest in one's career, accepting career demands, developing self-awareness, and accepting personal limitations. Balance and prioritization of work and personal life include setting limits to work, scheduling time off, and maintaining healthy relationships. Despite varied practice management styles, common contributors to resilience are identifiable: efficient organization, trusted and experienced office staff, supportive group practices with good on-call systems, and effective communication with colleagues and patients. Positive personal relationships protect against stresses of busy medical practices.

The next step is to pilot-test this theoretical model of physician resilience using a survey instrument based on the concepts with a random sample of all physician specialties.

Contributors
Dr Jensen *was the principal researcher and project leader and participated in conception and design of the study;*

analysis and interpretation of data; and drafting, revising, and approving the manuscript.

Dr Trollope-Kumar *participated in conception and design of the study; acquisition, analysis, and interpretation of data; and drafting sections of, revising, and approving the manuscript.* **Dr Waters** *participated in acquisition, analysis, and interpretation of data and drafting sections of, revising, and approving the manuscript.* **Dr Everson** *participated in conception and design of the study; sample selection; analysis and interpretation of data; and drafting sections of, revising, and approving the manuscript.*

Competing interests
None declared

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