# Stress and Residents' Lifestyle

## *Survey of family medicine residents at McGill University*

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**SUMMARY**

**To study the effects of training on quality of life and work satisfaction, we distributed questionnaires to all McGill family medicine residents. Residents lacked leisure time and were concerned that the heavy workload would affect subsequent quality of care. However, they adapted well to the stress of training. A spouse or partner was an important source of support.**

**RÉSUMÉ**

**Afin d'analyser les effets des programmes de formation sur la qualité de vie et la satisfaction au travail, nous avons demandé à tous les résidents du programme de médecine familiale de l'Université McGill de compléter un questionnaire. Les résidents disent manquer de temps pour les loisirs et s'inquiètent que l'imposante charge de travail ne vienne affecter négativement la qualité des soins qui en résulte. Toutefois, ils s'adaptent bien au stress inhérent à la formation. Le conjoint ou le partenaire est considéré comme un soutien important.**

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RESIDENCY CHANGES MOST people's lives. Many residents complain that the stress of residency affects their personal lives, their performance, and their satisfaction with their career.

Several authors have looked at this aspect of training. Three types of stressors have been identified:

- work-related stressors: long working hours,[1,2] heavy workloads,[3] time pressure, and low self-confidence[4];
- personal stressors: lack of time for oneself and family can cause or worsen marital difficulties[2,5,6] (although a steady relationship can be an important source of support)[5,7]; and
- economic stressors: financial burden caused by cost of training.[1,5]

In this study, we describe, from a resident's viewpoint, the stressors family medicine residents deal with in their training; the effects of these stressors on lifestyle, quality of care, and self-confidence; and common coping mechanisms. Although our results are limited to a single university, they might be applicable to family medicine residents in general.

**Dr Damestoy** *and* **Dr Brouillette** *were family medicine residents at McGill University, at Jewish General Hospital, and at CLSC Côte des Neiges in Montreal at the time of the study.*

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## METHODS

For this descriptive study, we designed a 62-item questionnaire[8,9] with mostly definitive and a few open-ended questions. The questions addressed the amount and use of leisure time in the preceding week, financial concerns, and the stability of the respondents' relationships during training, particularly relationships with marital or common-law partners. Respondents were asked about their workload, their satisfaction with the quality of care they provided, their professional self-confidence, their coping strategies, and the adequacy of available help. The final section of the questionnaire gathered demographic information.

The questionnaire was pre-tested for clarity and appropriateness on a group of 10 first- and second-year McGill University internal medicine residents. In January 1990, all first- and second-year family medicine residents in all four of McGill's teaching units were surveyed.

With the permission of the program directors, we addressed a weekly residents'

meeting at each location to introduce the study. We discussed the purpose of the survey and encouraged residents to participate, stressing confidentiality and anonymity. We then delivered a questionnaire to each resident's hospital mailbox, along with an explanatory letter, a blank return envelope, and a loose card bearing the resident's name. Respondents were asked to return the completed questionnaire within 1 month, in the blank, sealed envelope, to a response box in each unit. The card was to be dropped in separately, allowing us to acknowledge respondents while maintaining anonymity of responses. Reminders were then sent to nonrespondents, allowing an extra 2 weeks. The study was completed in March 1990.

Data were entered into the computer by an independent observer.

Descriptive statistics of the results are presented. No inference was necessary because we surveyed the total population of McGill family medicine residents.

## RESULTS

### Response rate

Eighty-eight of the 120 questionnaires (73.3%) were returned. They were distributed as follows among the four McGill family medicine units: 30 (34.1%) from the Jewish General Hospital, 22 (25%) from the Queen Elizabeth Hospital, 21 (23.9%) from St Mary's Hospital, and 15 (17.1%) from the Montreal General Hospital. The response rate within each hospital varied from 64% to 88%. Some returned questionnaires contained unanswered questions. For all results, the percentage has been calculated using denominators that exclude missing values.

### Demographics

There were 39 first-year residents (44%) and 49 second-year residents (56%). Fifty-one respondents were men (58%) and 37 (42%) women. The proportion of men to women was the same in first and second year. Mean age of respondents was 27.3 years, with a range of 24 to 38 years. Twenty-six respondents (30%) were married, evenly distributed among men and women; 18.6% of all residents had children. Nonrespondents were comparable to respondents in sex and training experience.

### Leisure time

Most respondents (77%) reported at least 8 hours of leisure in the preceding week. As expected, second-year residents had more free time than first-year residents (*Table 1*). Medical concerns were, however, present during some of that leisure time and 29 respondents (33%) admitted being "frequently" preoccupied with their work. This feeling was not correlated to sex or year of training.

Fifty-six respondents (64.4%) spent from 1 to 5 hours per week reading medical literature; of these, 37 (66%) felt uncomfortable with the amount of reading they did. No differences in sex or year of training affected the amount of reading done weekly.

Twenty-five respondents (28.4%) reported that they had gone out with friends once in the preceding 2 weeks; 21 (23.9%) had gone out twice; 26 (30%) had gone out from three to 12 times. Overall, 59 respondents (68.6%) were dissatisfied with the frequency of their outings. Forty residents (46.5%) reported that they socialized mostly with medical colleagues.

*Table 1.* **Leisure time in preceding week by year of training**

| LEISURE TIME | FIRST-YEAR RESIDENTS | SECOND-YEAR RESIDENTS | TOTAL |
|---|---|---|---|
| | (N = 39) | (N = 48) | (N = 87) |
| <8 hours | 11 (28.2%) | 9 (18.8%) | 20 (23.0%) |
| 8-15 hours | 18 (46.2%) | 19 (39.6%) | 37 (42.5%) |
| >15 hours | 10 (25.6%) | 20 (41.6%) | 30 (34.5%) |

Other leisure-time activities included going out with a spouse or partner (once, on average, in the 2-week period), reading nonmedical material (an average of 1 to 5 hours a week) and watching television (an average of 1 to 5 hours a week).

Respondents, on average, said they would ideally spend 5 to 6 hours a week playing sports; they actually spent an average of 1.5 hours a week on sports.

### Relationship with partner

The term "partner" is used here to refer to a spouse, common-law spouse, or a person with whom the respondent was having a steady relationship. Twenty-six residents (29.5%) were married; 6 (6.8%) were divorced, separated, or widowed; and 56 (63.6%) had never been married. Of the last group, 18 respondents (32.1%) did not have a steady relationship at the time of the survey, 11 (19.6%) were living with a partner, and 27 (48.2%) had a partner with whom they did not live. We did not know the present relationship status of the six residents who were separated or divorced.

*Table 2.* **Preferred coping mechanisms**

| COPING MECHANISM | 1ST CHOICE (%) | 2ND CHOICE (%) |
|---|---|---|
| Discussing problems | 34.9 | 21.2 |
| Humour and laughing | 23.3 | 29.4 |
| Physical activity | 19.8 | 22.4 |
| Hobbies | 9.3 | 16.5 |
| Relaxation therapy | 2.3 | 1.2 |
| Psychotherapy | 1.2 | 1.2 |
| Alcohol, drugs | 0 | 3.5 |
| Other | 9.2 | 4.6 |

Forty-nine of 83 respondents (59%) believed that residents lacked time to look for a relationship, and 38 of 81 (47%) agreed that being a physician interfered somewhat with their ability to find a mate: ie, some potential partners would rather not become involved with a physician.

Most were satisfied with their sex lives (25% very satisfied, 36.4% somewhat satisfied). Sixty respondents (69.8%) agreed that their workload and schedule influenced their degree of satisfaction.

Of those residents with partners (66), the majority (92.4%) said their partners supported them in their residency work. One third reported that they were frequently torn between familial and residency obligations. On this question, sex or year of training made no difference. Forty-nine of the respondents (74.2%) with partners thought that their relationships would survive their training. Thirty-four respondents answered the question about relationship difficulty. For some, this question was hypothetical, 21 (61.7%) did not believe that residency stress was or would be the source of their difficulty. One-third of respondents with partners were involved with medical students or physicians. This group showed no difference from the rest in the degree of marital stress experienced nor in the support they received from their partners.

### Finances

Seventy-one respondents (80.7%) had loans outstanding, ranging from $5000 to $15 000; of these, 41 (57.7%) had taken the loan solely for medical school. Overall, 61 respondents (71.8%) described themselves as financially comfortable, and 24 (28.2%) were able to save money.

### Work satisfaction

Fifty-nine respondents (67%) found their workload too heavy; women and first-year residents were more likely to find their workload too heavy. Sixty-one (69.3%) thought that the workload interfered with the quality of care they provided; this was so for a higher proportion of first-year residents. Sixty respondents (68.2%) felt self-confident in their practice of medicine. Men and second-year residents felt, on average, more confident than women and first-year residents. Only one resident admitted totally lacking confidence in his or her clinical capacities.

If they had to start all over, just over half the respondents would choose to enter medicine. Supposing a medical career given, 55 (63.2%) would choose family medicine again. Thirty-one respondents (35.6%) were thinking seriously at the time of leaving the program.

### Coping

Respondents rated lack of time for themselves and for friends as being the two most frustrating aspects of their present life.

They coped with stress in a variety of ways, most commonly through discussing their problems with others and through humour (*Table 2*). None used the professional help available within or outside their unit. The first line of emotional support was their partner for 46 respondents (52.3%), followed by friends or colleagues

for 18 (20.5%), and family for 10 (11.4%). Most believed there was enough help available within their teaching unit, although 16 of the 82 respondents to this question (19.5%) were unaware of the resources available.

## DISCUSSION

We began this study with the hypothesis that residents were pressured at work and lacked free time to unwind, and that the stresses would be worse from a family burden or a limited support system. We thought residency stress could undermine residents' satisfaction with their lives and with their careers.

However, our data suggest that most residents adapt relatively well to their training. Although our respondents are preoccupied with their heavy workload during what should be leisure time, they are able to vary their activities.

Some interesting similarities and differences appeared in comparing our results with those of previous studies.

### Work-related stress

Our residents had working hours similar to those of the 375 Ontario family medicine residents surveyed by Rudner.[2] Twenty-seven percent of the Ontario residents surveyed by Lewittes and Marshall[3] considered their workload overwhelming. We found a similar concern about the heavy workload and its effect on quality of care, especially among first-year residents. Our findings that first-year residents, particularly women, lacked self-confidence in their practice of medicine echoed the findings of surveys in Albany[1] and Ontario.[4] Finally, the major stressors identified (lack of time for self and lack of leisure time), were similar to those in Smith and colleagues' group.[1]

### Personal stressors

Here, our findings differed from earlier studies. In our group, marital partners were an important emotional support, and a solid majority of our respondents were confident that their relationships were durable. This contrasts with Koran's and Litt's findings[5] that 46% of a group of 401 university house staff expressed concern that their relationships would not persist through training. Similarly, 40% of the internal medicine residents surveyed by Landau and colleagues[6] in 1984 believed that the stress of training caused serious difficulties in their relationships. Yet in our survey, only a small proportion of respondents with "fragile" relationships related their problems directly to residency training.

### Economic stressors

Unlike an American survey group,[6] our respondents did not think that their financial situation was precarious, a difference that could reflect the differences in the funding of medical training in Canada and the United States.

### Coping strategies

Our group coped mainly by talking over problems with their partners and colleagues. None used professional help, unlike American residents,[1] who used resident support groups, relaxation training, and counseling.

### Limitations of the study

We were concerned about a social desirability bias,[10] but could not control for it. Although we stressed confidentiality, we were concerned that some respondents might have distorted their answers to personal questions, knowing that the responses would be read by peers. On the other hand, the fact that the study was being done by fellow residents probably contributed to the high response rate.

It is possible that nonrespondents differed from respondents. Arguably, those who did not return the questionnaire might have been those residents most uncomfortable with their training, those doing heavier rotations, or those most in need of support, who feared being identified by colleagues. We did not have time to conduct a telephone follow up, which might have identified reasons for not returning the questionnaire.

### Conclusion

This study confirmed some of our hypotheses about the effect of the stress of residency on lifestyle, but showed a population on the whole coping well. It showed that most residents use personal coping

strategies and that a significant proportion are uninformed about the support systems offered by their home-base facilities. This finding suggests that the support services offered by the teaching units should be redirected, perhaps to provide more information about available resources and to offer more informal support. ■


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