

1-7-2005

Job stressors and coping strategies as predictors of mental health and job satisfaction among Irish general practitioners.

Bernadette O'Sullivan
Royal College of Surgeons in Ireland

A.M. Keane
National University of Ireland, Galway

Andrew W. Murphy
National University of Ireland, Galway

Citation

O'Sullivan B, Keane AM, Murphy AW. Job stressors and coping strategies as predictors of mental health and job satisfaction among Irish general practitioners. *Irish Medical Journal*. 2005;98(7):199-200, 202.

This Article is brought to you for free and open access by the Department of Psychology at e-publications@RCSI. It has been accepted for inclusion in Psychology Articles by an authorized administrator of e-publications@RCSI. For more information, please contact epubs@rcsi.ie.

Footer Logo

— Use Licence —

Creative Commons License

This work is licensed under a [Creative Commons Attribution-Noncommercial-Share Alike 4.0 License](https://creativecommons.org/licenses/by-nc-sa/4.0/).

Job Stressors and Coping Strategies as Predictors of Mental Health and Job Satisfaction among Irish General Practitioners

B O' Sullivan, AM Keane, AW Murphy

Ir Med J. 2005 Jul-Aug;98(7):199-200,202

Abstract

Previous research has shown that many general practitioners were experiencing stress levels detrimental to their well-being. To examine coping strategies of Irish general practitioners and the possible impact of their stress on mental health and job satisfaction. Anonymous questionnaires were posted to 226 general practitioners in the Western Health Board. Just over one third of stressors caused moderate to considerable stress. Coping was important in the stress process. Sometimes, coping strategies predicted stress-related outcomes better than stressors. General practitioners' mental health was slightly better than that of a normative group. They tended to be satisfied with all aspects of the job, except hours of work. The provision of counselling services for general practitioners suffering from stress should be encouraged. Stress-management strategies should include training in coping skills and time management. The increased use of co-operatives could help alleviate the stress of out-of-hours work.

Introduction

As early as 1968, Mechanic¹ commented that the average doctor responded to an increasing practice by working on an assembly-line basis. In the mid-eighties in the United Kingdom, interest in research on occupational stress and general practitioners was beginning to gain momentum. This research took the various forms of cross-sectional,^{2,3} qualitative,⁴ longitudinal,⁵ and observational studies.⁶ Many general practitioners were experiencing stress levels that were detrimental to their well-being. These findings prompted the first study of stress and morale among Irish general practitioners (1997).⁷ General practice in Ireland was found to be a stressful occupation. A third of respondents rated themselves as highly or very highly stressed. The above study did not consider the possible impact of stress on the pertinent outcomes of job satisfaction and psychological well-being. It also failed to examine the effects of general practitioners' coping methods, despite their importance in the stress reaction. According to the transactional model of stress⁸ the way people appraise something as a threat and the way they cope with it influences whether or not psychological stress will result. The present study examines both these issues.

Methods

Design

This study took the form of an anonymous postal questionnaire survey. Statistical analyses were carried out using the Statistical Package for Social Sciences (SPSS), Version 9.0. Firstly, means and medians were used to describe the data. Then, two Stepwise Multiple Regression analyses were used to examine which stressors and coping strategies were predictive of mental health and job satisfaction. Finally, a oneway Multivariate Analysis of Variance (MANOVA) tested for possible gender differences.

Participants

Participants were general practitioners registered with the Primary Care Unit of the Western Health Board, a total of 226 general practitioners. Usable questionnaires were returned by 128 general practitioners (57% response rate). Almost half (48%) of respondents were in the 45-54 age group. Nearly three quarters (72%) were male. Just over half (52%) of

general practitioners worked in solo practices. Nearly three quarters (74%) of respondents had access to deputy or locum cover arrangements, even if they did not use them.

Measures

The Job Stress Inventory² was used to measure occupational stress. Participants are asked to rate the amount of stress caused by 38 possible stressors using 5-point Likert-type rating scales (1 = no stress at all, 5 = a source of considerable stress). A factor analysis was carried out to establish the internal reliability of this scale. Seven items were dropped because they did not load sufficiently high on any of the six factors that emerged. Coping was measured using the COPE (see Table 1).⁹ It consists of 15 sub-scales of four items each. Responses are made using a 4-point Likert scale (1 = I usually don't do this at all, 4 = I usually do this a lot). The internal consistencies (Cronbach's alpha) of the subscales were acceptably high (>0.60), except for the mental disengagement scale (.45).

| Table 1 Description of coping strategies included in the COPE | |
|--|--|
| Coping Strategy | Description |
| Active coping | Taking active steps to try to remove or avoid a stressor or to improve its effects. |
| Planning | Thinking about what steps to take and how best to handle the problem. |
| Seeking instrumental Social Support | Seeking assistance, information or advice about what to do. |
| Seeking emotional Social Support | Getting moral support, sympathy, or understanding. |
| Suppression of Competing Activities | Trying to avoid becoming distracted by other events, in order to deal with the stressor. |
| Turning to religion | Turning to religion in times of stress. |
| Positive reinterpretation and growth | Making the best of the situation by growing from it. |
| Restraint Coping | Waiting until an appropriate opportunity to act presents itself. |
| Acceptance | Accepting the reality of a stressful situation. |
| Focus on and venting of emotions | Focusing on whatever distress one is experiencing and ventilating those feelings. |
| Denial | An attempt to reject the reality of the stressful event. |
| Mental disengagement | Using alternate activities to take one's mind off a problem, daydreaming, sleep, or escape by immersion in TV. |
| Behavioural disengagement | Giving up the attempt to attain the goal with which the stressor is interfering. |
| Alcohol/Drug use | Using alcohol or drugs in order to think less about the stressor or to make oneself feel better. |
| Humour | Laughing or making fun of the situation. |

Mental health was assessed using the 18-item mental health scale of the Occupational Stress Indicator.¹⁰ The items are answered on 6-point Likert scales. A high total score is indicative of poor mental health. The split-half reliability (internal consistency) of this scale was satisfactory (i.e. 0.78). Finally, job satisfaction was measured using a shortened version of the Warr, Cook and Wall Job Satisfaction Scale.¹¹ Six items were dropped from this scale as they were not applicable to the general practitioner sample. The remaining eight items were rated on a 7-point Likerttype scale (1 = I'm extremely dissatisfied, 7 = I'm extremely satisfied). Cronbach's alpha for the shortened scale was satisfactory (i.e. 0.83).

Procedure

Anonymous questionnaires were posted in the last week of March, 2000. A reminder was sent two weeks later. A postcard reply system, used by O' Dowd et al. (1997)⁷ was adopted to identify respondents. General practitioners were given the opportunity to receive feedback about the study results if they wished. Book vouchers worth £20 (supplied by the Primary Care Unit) were provided to those general practitioners, who participated in the study.

Results

The general practitioners scored on average between two and three on the stressor items, which is indicative of slight to moderate stress. However, 15 of the 38 stressors caused moderate to considerable stress (median scores of 3 or 4). The biggest stressors were night calls, dealing with problem patients, coping with phone-calls during night and early morning, and emergency calls during surgery. The most frequently used coping strategies were active coping, planning, restraint, and acceptance. Religion, denial, alcohol/drug use, and humour were the least used coping strategies. The mean score for mental health of general practitioners ($M = 50.59$, $SD = 14.58$) was slightly lower than in a normative population ($M = 55.51$, $SD = 12.59$).¹² This means that their mental health was better. The normative data were collected in the United Kingdom and approximated a general population of over 7000 people. General practitioners tended to be satisfied with all aspects of the job except for hours of work, which they found moderately dissatisfying (median = 3).

Two Stepwise Multiple Regression analyses were used to examine the possible impact of stress and coping strategies on job satisfaction and mental well-being. The alcohol/drug use subscale was dropped from these and further parametric analyses because of its skewness. The linear combination of three stressor factors and four coping strategies was significantly related to mental health, $F(7, 120) = 21.30$, $p < .001$. The sample multiple correlation coefficient was .74, indicating that approximately 55% of the variance in mental health could be accounted for by this linear combination. The stressor factor called demands of the job and patients' expectations was the best predictor of mental health, accounting for 22% of its variance. It was associated with poor mental health. This factor includes the stressors of finding a locum, fear of assault during night visits, and unrealistically high expectations by others of the doctor's role. The two coping strategies,

1. focusing on and venting of emotions and
2. positive reinterpretation and growth accounted for the most additional variance (i.e. 23% in total).

The former coping strategy was associated with poor mental health, whereas the latter was associated with good mental health. The linear combination of four stressor factors and two coping strategies was significantly related to job satisfaction, $F(6, 121) = 17.91$, $p < .001$. The sample multiple correlation coefficient was .69. Therefore, 47% of the variance in job satisfaction could be accounted for. The stressor factor called the home-work interface and social life was the most important predictor, accounting for 32% of the variance. It was associated with low job satisfaction. The other variables only accounted for a small amount of additional variance ($\leq 5\%$). A one-way Multivariate Analysis of Variance (MANOVA) was used to examine gender differences. Significant differences were found, Wilks' $\lambda = .63$, $F(22, 105) = 2.81$, $p < .001$. Follow-up analysis of variance (ANOVA) tests were significant for three stressor factors and five coping strategies. An examination of the means for male and female general practitioners (See Table 2) on these variables revealed that females found the stressor factors more

stressful than males. They also used four of the coping strategies more often. Male general practitioners used the coping strategy of acceptance more often than females.

Table 2 Gender differences in stressor factors and coping strategies

| Variable | Gender | M | SD |
|---|--------|-------|------|
| Demands of the job and patients' expectations | Male | 10.91 | 3.41 |
| | Female | 12.61 | 2.66 |
| Dealing with friends and relatives as patients | Male | 3.01 | 1.37 |
| | Female | 3.98 | 1.72 |
| Interruptions (e.g. emergency calls during surgery) | Male | 11.81 | 3.01 |
| | Female | 13.36 | 2.46 |
| Seeking instrumental social support | Male | 9.25 | 2.66 |
| | Female | 11.25 | 2.85 |
| Seeking emotional social support | Male | 8.26 | 3.42 |
| | Female | 11.53 | 2.96 |
| Turning to religion (log) | Male | 0.77 | 0.21 |
| | Female | 0.89 | 0.20 |
| Focusing on and venting of emotions | Male | 7.97 | 3.10 |
| | Female | 9.97 | 2.78 |
| Acceptance | Male | 11.16 | 2.42 |
| | Female | 10.25 | 2.06 |

Discussion

Over a third (i.e. 39%) of stressors caused general practitioners moderate to considerable stress. The stressors rated most stressful were night calls, dealing with problem patients, coping with phone-calls during night and early morning, and emergency calls during surgery. These are very similar to the stressors identified in the studies in the UK and in O'Dowd et al.'s (1997)⁷ study of Irish general practitioners.

The importance of coping in the stress process was confirmed in this study. Sometimes, coping predicted stress-related outcomes better than the stressor factors themselves. Significant gender differences were found in relation to coping strategies used. Females used the two coping strategies of seeking instrumental and emotional social support more frequently than males. This is consistent with previous research.³

There was a positive finding in relation to general practitioners' mental health. It was slightly better than that of a normative population.¹² General practitioners tended to be satisfied with all aspects of their job, except for hours of work. They found this moderately dissatisfying. Two of the most satisfying aspects of work were the freedom to choose one's own method of working and the amount of responsibility given. However, it is possible that such autonomy will have to be increasingly traded for proof of quality of care.⁷

This study has some limitations. Firstly, the sample was limited to general practitioners registered with the Primary Care Unit in the Western Health Board. In addition, the incomplete response rate (i.e. 57%) may have reduced the representativeness of the results. There is a tendency for non-respondents to health-related questionnaires to be less healthy.¹³ Therefore, the results may be an underestimate of the stress and stress-related outcomes experienced by general practitioners. Secondly, this study is cross-sectional. Consequently, it is not possible to delineate cause-effect links between stress and coping strategies and the stress-related outcomes of mental health and job satisfaction. It is

recommended that future studies place a greater emphasis on a longitudinal design to overcome this.

A number of recommendations can be made based on the results of this study. Just over a third of stressors caused moderate to considerable stress. In light of this, the recent introduction by the Irish College of General Practitioners of a confidential counselling service to its members is to be welcomed.

This study provides evidence for possible targets of stress management strategies. The findings in relation to coping suggest that training should be given in the effective use of coping strategies. In addition, time pressure and dividing time between the job and family were identified as moderate sources of stress. This suggests that consideration should be given to providing time-management skills training.

Many of the stressors identified by general practitioners as causing moderate to considerable stress were related to out-of-hours work (e.g. night calls, interruption of family life by telephone, and finding a locum). A possible way of organising out-of-hours work is through the establishment of co-operatives (large groups of general practitioners, who share the responsibility for out-of-hours work). Fletcher et al. (2000)¹⁴ showed an improvement in the health status of general practitioners in Buckinghamshire between 1995 and 1998, which coincided with the increased use of co-operatives. Since this study was conducted, an out of hours co-operative (Westdoc) has been established in the Western seaboard region. It is planned to determine the impact of this development on the job stressors of general practitioners participating in Westdoc.

References

1. Mechanic D. General medical practice in England and Wales: its organisation and future. *N Engl J Med* 1968; 279: 680-689.
2. Cooper CL, Rout U, Faragher B. Mental health, job satisfaction, and job stress among general practitioners. *Br Med J* 1989; 298: 34-35.
3. Sutherland VJ, Cooper CL. Identifying distress among general practitioners: predictors of psychological ill-health and job dissatisfaction. *Soc Sci Med* 1993; 37: 575-581.
4. Myerson S. Doctors' methods of dealing with "on-going" stress in general practice. *Medical Science Research* 1991; 19: 267-269.
5. Firth-Cozens J. Individual and organizational predictors of depression in general practitioners. *British Journal of General Practice* 1998; 48: 1647-1651.
6. Howie J.G.R., Hopton J.L., Heaney D.J., Porter A.M.D. Attitudes to medical care, the organization of work, and stress among general practitioners. *British Journal of General Practice* 1992; 42: 181-185.
7. O' Dowd T, Sinclair H, McSweeney M. Stress and morale in General Practice in the Republic of Ireland. Dublin: The Irish College of General Practitioners; 1997.
8. Lazarus RS, Folkman S. Stress, appraisal, and coping. New York: Springer; 1984.
9. Carver CS, Scheier MF, Weintraub JK. Assessing Coping Strategies: A Theoretically Based Approach. *J Pers Soc Psychol* 1989; 56 (2), 267-283.
10. Cooper CL, Sloan SJ, Williams S. Occupational Stress Indicator Management Guide. Windsor: NFER-Nelson; 1988.
11. Warr P, Cook J, Wall T. Scales for the measurement of some work attitudes and aspects of psychological well-being. *Journal of Occupational Psychology* 1979; 52: 129-148.
12. Cooper CL, Sloan SJ, Williams S. Occupational Stress Indicator. Data Supplement. Berkshire: Nfer-Nelson; 1994.

13. Vernon SW, Roberts RE, Lees ES. Ethnic participation in longitudinal health studies. Am J Epidemiol 1984; 119: 99-113.
14. Fletcher J, Pickard D, Rose J et al. Do out-of-hours co-operatives improve general practitioners' health? Br J Gen Pract 2000; 50: 815-816.

Author's Correspondence

Bernadette O'Sullivan, Health Services Research Centre, Psychology Department, Royal College of Surgeons in Ireland, Mercer Building, Mercer Street Lower, Dublin 2. **Tel:** 353-1-402 2715 **E-mail:** bosullivan@rcsi.ie

Acknowledgement

No Acknowledgement

Other References

No References