

# Stress and morale in general practice: a comparison of two health care systems

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## SUMMARY

**Background.** Poor morale and high levels of stress among general practitioners (GPs) are causing concern. Little research has previously been carried out to study possible differences in morale and stress between GPs working in two different but geographically similar health care systems.

**Aim.** To compare perceived levels of stress and morale between GPs working in two different health care systems — one having a state monopoly (Northern Ireland) and the other having mixed private and state funding (Republic of Ireland) — and to look for factors that might help explain any differences in stress levels and morale between the two systems.

**Method.** Anonymous and confidential questionnaires were sent to all 986 National Health Service (NHS) GPs in Northern Ireland (NI) and a random sample of 900 GPs in the Republic of Ireland (ROI). A common set of core questions on demographic details, partners and work patterns, perceived levels of stress and morale, safety, violence, and complaints were asked.

**Results.** Response rates were high in both areas: 91% in NI and 78% in the ROI. GPs in NI had significantly higher stress levels and significantly lower levels of morale than GPs in the ROI. The NI sample expect matters to get worse over the following year. Doctors in the ROI were more likely to be single handed and to work from two sites. Also, more GPs in ROI had fears for their safety and had been the subject of physical violence, but fewer had received complaints and medico-legal actions than in NI.

**Conclusions.** A significant proportion of both groups of doctors report feeling highly stressed but GPs in NI appear more unhappy and have a poorer outlook for the future. It is suggested that the structure, management, and expectations of the NHS have taken a severe toll on its GPs, whereas a system in which doctors have less practice support but more control is good for morale.

**Keywords:** Northern Ireland; Republic of Ireland; stress; morale; questionnaire survey.

## Introduction

PRIOR to the GP Charter of 1966, Cartwright found high levels of stress, discontent, and frustration among GPs,<sup>1</sup> and a follow-up study in 1977 indicated that little had changed.<sup>2</sup> Other studies have shown that these problems particularly affect young practitioners,<sup>3,4</sup> and recognition has been given to a higher level of burnout in a sample of British GPs compared with a North American sample.<sup>5</sup>

Since the introduction of the new contract for UK general practice in 1990, there is evidence that the workload of GPs has increased.<sup>6</sup> Several studies have reported high levels of stress and poor mental health in the profession,<sup>7</sup> with higher levels of stress being associated with increased workload.<sup>8-10</sup> In response, the British Medical Association launched a counselling service for doctors<sup>11</sup> and the Royal College of General Practitioners has participated in Stress Fellowships.<sup>12,13</sup> A recruitment crisis is evident as more young doctors decide against general practice as a career.<sup>14,15</sup>

Stress and morale are terms that are commonly used together or interchangeably but specific definitions are seldom used in research despite important differences in their definition and meaning. Stress has been defined by an organizational psychologist as the 'perceived inability to cope with demands'.<sup>16</sup> Individual stress levels are likely to vary and to react readily to changes in circumstances. Morale, on the other hand, is likely to be less variable, less transient, and more resistant to change. It is probably less affected by individual than by group circumstances as it is often used to explain the success or failure of companies, armies, and political parties. While specific measurement scales have been used to measure GPs' stress,<sup>17</sup> morale has not received the same attention from researchers. For the purpose of this study, morale has been defined as a 'feeling of confidence in one's situation with a positive hope for the future' (derived from the definitions given in the Oxford English Dictionary).<sup>18</sup>

In Northern Ireland (NI), the UK NHS has served the whole population since its inception in 1948. In the Republic of Ireland (ROI), services in public hospitals are free to all, but only 36% of the population are entitled to free, means-tested GP services; the remainder pay their GP directly. In both health care systems, the GP is regarded as the main route by which people access secondary care services at either public or private levels.

This study sought to compare perceived levels of stress and morale between GPs working in two different health care systems: one having a state monopoly (NI) and the other having a mixed economy (ROI). Factors that were thought to be associated with stress and morale in general practice were also examined.

## Method

Questionnaires were sent to all NI GPs actively working as principals in general practice ( $n = 986$ ). Assistants and locums were not included in the study. A national list of GPs compiled by amalgamating those doctors registered with the Irish College of General Practitioners (ICGP) with those listed in the Irish

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Medical Directory,<sup>19</sup> identified a total of 2556 doctors in ROI. Survey questionnaires were sent to a random sample of 900 (35.2%) GPs, stratified by county.

The questionnaire used in both surveys contained a common set of core questions and covered 51 individual items: it included a single five-point Likert scale to assess the subjects' perceived levels of stress and a similar item to assess the level of morale perceived. It sought information about the age, sex, marital status, length of time in general practice, number and location of practice premises, number of partners, the frequency of on-call duty, access to deputizing or locum arrangements, the amount of free time available to each doctor, and medical commitments outside the practice. Enquiries were made about personal safety while working, patients' complaints, and medico-legal actions.

Anonymity was ensured by using a reply card technique,<sup>20</sup> which consisted of providing a card with each questionnaire upon which the respondent certified that he or she had returned the anonymous questionnaire. The reply card was returned in a separate stamped addressed envelope. Three requests were sent to non-responders at monthly intervals. The survey, which was ethically approved, took place between September and December 1995 during the ceasefires in Northern Ireland, which was a time of raised morale in the whole of Ireland.

Differences between groups were tested using the two-tailed Student's *t*-test and Pearson's chi-squared test. The chi-squared test for linear trend was used to assess the association between variables with ordered categories. Factors associated with high levels of stress and morale in both areas were examined separately using ordinal logistic regression. Stress outcome was regrouped into three ordinal categories (very low/low, average, and high/very high); morale was similarly regrouped (very good/good, average, and poor/very poor). Final models were chosen on the basis of statistical significance, *a priori* reasoning, and parsimony. Data were analysed using JMP 3.2 (SAS Institute Inc., 1997) and STATA 5.0 (STATA Corporation, 1997).

## Results

In NI, 905 completed questionnaires were returned, giving a response rate of 91.2%. In the ROI, a total of 753 (83.7%) questionnaires were returned: of these, 50 (6.6%) were not eligible for entry into the study because the doctor was either retired or had left general practice ( $n = 32$ ), or the responder was a locum ( $n = 15$ ) or a trainee ( $n = 3$ ). GPs in NI were slightly younger than their ROI counterparts (mean age 43.2 years ( $SD = 8.8$ ) versus 45.3 years ( $SD = 10.6$ )), and a significantly larger number of NI doctors had only been in practice for fewer than ten years (42% versus 33%;  $\chi^2 = 16.1$ ;  $df = 1$ ;  $P < 0.001$ ). In both groups, over 70% of responders were male and over 85% were married.

General practitioners in the ROI were more likely than those in NI to work from two or more centres (37% versus 13%;  $\chi^2 = 48.6$ ;  $df = 1$ ;  $P < 0.001$ ) and to indicate that their practice location was urban (44% versus 31%;  $\chi^2 = 30.9$ ;  $df = 1$ ;  $P < 0.001$ ). Only 55 (6%) responders in NI were single-handed practitioners compared to 360 (51%) in the ROI (Table 1). In NI, partnerships tended to be larger than in the ROI. Most GPs rated their relationships with their GP partners as good or very good.

More GPs in NI than in the ROI cover nights and weekends. However, on-call rotas in NI tend to be bigger so that doctors are on call less frequently, but, when on call, 72.4% of GPs in NI personally cover throughout the night compared with 44.8% in the ROI. Many GPs indicated that they did not have access to locum or deputizing services (368 (41%) in NI compared to 495 (55%) in the ROI).

General practitioners in NI spent more time on paperwork at

home; almost 60% spending more than two hours during the week prior to completing the questionnaire. Doctors in NI also had less free time during the day than had their counterparts in the ROI.

Respondents in NI were significantly more likely to report that their morale was poor and their stress level was high ( $P < 0.001$ ) than were those in the ROI (Table 2). In addition, more NI GPs felt that their morale was going to deteriorate over the following year and, similarly, more GPs in NI reported that their levels of stress were higher compared to the previous year.

Fewer GPs in NI expressed concerns for their personal safety than did their colleagues in the ROI (Table 3). Although the numbers were small, fewer doctors in NI than in the ROI reported that they had been a recipient of physical violence from a patient. Less than 20% in both systems had been threatened with physical violence by a patient in the previous year. GPs in NI were more likely to have received a written complaint within the past year or to have been the subject of a medico-legal action than their colleagues in the ROI.

More GPs in NI had considered leaving general practice and more had regretted becoming a GP (Table 4). Interestingly, a large number in both groups would be reluctant to give up clinical work completely when they retire.

Predicted probabilities for each of the three categories of stress and morale were estimated by ordinal logistic regression modelling.<sup>21</sup> For this paper attention is focused on the computed probabilities of high (including very high) stress and separately on poor (including very poor) morale. Factors identified as being associated with high stress and poor morale in both NI and ROI are listed separately in Table 5.

For NI, the probability of a high stress outcome increased from 6%, when none of the factors were present, to 90%, when all the factors were present. In terms of morale, the corresponding probabilities ranged from 9% to 57%. For the ROI, the probability of a high stress outcome increased from 6%, when none of the factors were present, to 75%, when all the factors were present. In terms of morale, the corresponding probabilities ranged from 5% to 30%.

## Discussion

A study of such a topical and emotive issue is particularly vulnerable to sample selection and response bias. Both are, however, particular strengths of this study. Previous studies of stress in GPs that used a specific job stress indicator questionnaire yielded only approximately 50–61% response rates.<sup>9,22,23</sup> Response rates of other studies that used shorter questionnaires to gather demographic data to assess mental health status varied from 65% to 83%.<sup>3,6,7,24</sup>

Clearly, many GPs in NI are unhappy and have a poor outlook on the future. This is a cross-sectional study so we cannot establish causation but we may draw comparisons, note differences between the two health care systems, and speculate on underlying reasons for these based on the results and in the light of previous work. When we compare these two groups, we are comparing not just two health care systems but doctors and their relationships with patients in two countries. A previous international comparison between GPs in Northamptonshire and a sample of doctors in North America found significantly higher rates of burnout in the United Kingdom.<sup>5</sup> While this comparison may be confounded by national differences, one would expect that doctors and patients on the relatively small island of Ireland would be broadly homogenous and comparable, and that the differences would be related to differences in the health care systems.

The NHS in NI imposes a much more structured style of prac-

**Table 1.** Comparison of general practitioner relationships with partners and work patterns in Northern Ireland and the Republic of Ireland.

Variable	Northern Ireland (n = 905)	Republic of Ireland (n = 703)	P-value
	No (%)	No (%)	
Number of GP partners:			
0	55 (6.1)	360 (51.2)	<0.001 <sup>a</sup>
1-3	502 (55.5)	322 (45.8)	
4+	342 (37.8)	18 (2.6)	
Not classified	6 (0.7)	3 (0.4)	
How would you rate your relationship with your GP partners?: <sup>b</sup>			
Very good/Good	745 (84.6)	290 (85.2)	0.128 <sup>a</sup>
Average	83 (9.8)	39 (11.5)	
Poor/very poor	15 (1.8)	10 (3.0)	
Not classified	7 (0.8)	1 (0.3)	
Average night/weekday rota calls in the past three months?:			
1 in 1	15 (1.7)	105 (14.9)	<0.001 <sup>a</sup>
1 in 2-3	149 (16.5)	196 (27.9)	
1 in 4-6	450 (49.8)	214 (30.5)	
1 in 7+	226 (25.0)	34 (4.8)	
None	61 (6.7)	114 (16.2)	
Not classified	4 (0.4)	40 (5.7)	
Do you do practice paperwork at home?:			
Yes	761 (84.1)	493 (70.1)	<0.001 <sup>c</sup>
No	143 (15.8)	205 (29.2)	
Not classified	1 (0.1)	5 (0.7)	
Amount of time spent on paperwork at home in past week (hours): <sup>b</sup>			
≤2	212 (27.9)	169 (34.3)	0.001 <sup>c</sup>
>2	513 (67.4)	272 (55.2)	
Not classified	36 (4.7)	52 (10.5)	
Amount of free time available to doctor during a typical day (hours):			
None	159 (17.6)	116 (16.5)	<0.001 <sup>a</sup>
<1	449 (49.6)	232 (33.0)	
1-2	238 (26.3)	233 (33.1)	
>2	48 (5.3)	106 (15.1)	
Not classified	11 (1.2)	16 (2.3)	

<sup>a</sup> $\chi^2$  = test for trend; <sup>b</sup>Figures are based on applicable cases only; <sup>c</sup> $\chi^2$  test; all tests exclude the 'not classified' categories.

**Table 2.** Comparison of stress and morale among general practitioners in Northern Ireland and the Republic of Ireland.

Variable	Northern Ireland (n = 905)	Republic of Ireland (n = 703)	P-value <sup>a</sup>
	No (%)	No (%)	
How would you rate your morale?:			
Very good/good	262 (29.0)	394 (56.0)	<0.001
Average	377 (41.7)	228 (32.4)	
Poor/very poor	266 (29.4)	80 (11.4)	
Not classified	—	1 (0.1)	
Over the next year do you envisage your morale?:			
Improving	74 (8.2)	158 (22.5)	<0.001
Staying the same	538 (59.4)	476 (67.7)	
Deteriorating	287 (31.7)	60 (8.5)	
Not classified	6 (0.7)	9 (1.3)	
How would you grade your present level of stress?:			
Very low/low	61 (6.7)	99 (14.1)	<0.001
Average	396 (43.8)	348 (49.5)	
High/very high	448 (49.5)	251 (35.7)	
Not classified	—	5 (0.7)	
How would you rate your present level of stress compared with a year ago?:			
Less	59 (6.5)	107 (15.2)	<0.001
About the same	393 (43.4)	411 (58.5)	
More	451 (49.8)	175 (24.9)	
Not classified	2 (0.2)	10 (1.4)	

<sup>a</sup> $\chi^2$  = test for trend; all tests exclude the 'not classified' categories.

**Table 3.** Comparison of safety, violence, complaints, and legal action in general practice in Northern Ireland and the Republic of Ireland.

Variable	Northern Ireland (n = 905)	Republic of Ireland (n = 703)	P-value <sup>a</sup>
	No (%)	No (%)	
Do you have concerns for your personal safety while working?:			
Yes	208 (23.0)	239 (34.0)	<0.001
No	694 (76.7)	460 (65.4)	
Not classified	3 (0.3)	4 (0.6)	
During the past year have you been the recipient of physical violence from a patient?:			
Yes	31 (3.4)	46 (6.5)	0.003
No	874 (96.6)	653 (92.9)	
Not classified	—	4 (0.6)	
During the past year have you been threatened with physical violence by a patient?:			
Yes	152 (16.8)	130 (18.5)	0.361
No	753 (83.2)	571 (81.2)	
Not classified	—	2 (0.3)	
Has a patient made a written complaint about you in the past year?:			
Yes	170 (18.8)	76 (10.8)	<0.001
No	735 (81.2)	622 (88.5)	
Not classified	—	5 (0.7)	
Have you ever been the subject of a medico-legal action?:			
Yes	235 (26.0)	129 (18.4)	<0.001
No	668 (73.8)	572 (81.4)	
Not classified	2 (0.2)	2 (0.3)	

<sup>a</sup> $\chi^2$  test; all tests exclude the 'not classified' categories.**Table 4.** Comparison of opting out of medicine and retirement in Northern Ireland and the Republic of Ireland.

Variable	Northern Ireland (n = 905)	Republic of Ireland (n = 703)	P-value <sup>a</sup>
	No (%)	No (%)	
Have you ever considered leaving general practice?:			
Yes	267 (29.5)	153 (21.8)	0.001
No	632 (69.8)	543 (77.2)	
Not classified	6 (0.7)	7 (1.0)	
Do you regret becoming a GP?:			
Yes	155 (17.1)	80 (11.4)	<0.001
No	549 (60.7)	507 (72.1)	
Unsure	200 (22.1)	112 (15.9)	
Not classified	1 (0.1)	4 (0.6)	
If you retire would you give up clinical work completely?:			
Yes	241 (26.6)	158 (22.5)	0.098
No	344 (38.0)	297 (42.2)	
Unsure	317 (35.0)	238 (33.9)	
Not classified	3 (0.3)	10 (1.4)	

<sup>a</sup> $\chi^2$  = test for trend; all tests exclude the 'not classified' categories.

tice than exists in the ROI, and major changes since 1990 have increased both workload and the time spent in organization, management, and paperwork.<sup>25</sup> Many GPs are unhappy with this additional burden of administration and feel that some of it is unnecessary.<sup>26</sup> Workload increased greatly between 1987 and 1993,<sup>8</sup> and, although this has been mostly organizational, there has also been increased clinical workload but no reduction in the time spent per patient.<sup>7</sup> Doctors are also more likely to complete paperwork at home and to report exhaustion or stress since the 1990 contract.<sup>8</sup> Evidence from Edinburgh confirms that pressures are high on those who take a major role in administration.<sup>27</sup> The effects of these factors are highlighted in our study, with the

absence of personal free time and doing paper work at home being associated with high stress in both groups.

Relatively more GPs in NI had been the subject of complaints and medico-legal actions. In spite of the international perception of NI as a violent society, relatively fewer doctors in NI reported fears for their safety than in the ROI. However, both complaints and fears for safety take a heavy toll on GPs' morale in both groups, and are thus likely to have a long-term impact on the individual practitioner.

General practitioners who have been in practice for over 20 years have better morale and lower stress. This may well be a survivor effect in that those who can cope with the stress and



**Table 5.** Factors associated with high stress and poor morale in Northern Ireland (NI) and the Republic of Ireland (ROI).

## Factors associated with high stress in NI

- Has concerns for personal safety ( $P < 0.001$ )
- Has had a written complaint in past year ( $P < 0.001$ )
- Does paper work at home ( $P < 0.001$ )
- Has no free time ( $P = 0.002$ )
- Participates in night/weekend calls ( $P = 0.002$ )
- Doctor in practice for 10 years ( $P = 0.012$ )
- Doctor in practice for 11–21 years ( $P < 0.001$ )
- Male doctor ( $P = 0.002$ )

## Factors associated with poor morale in NI

- Has concerns for personal safety ( $P < 0.001$ )
- Has had a written complaint in past year ( $P < 0.001$ )
- Does paper work at home ( $P = 0.006$ )
- Participates in night/weekend calls ( $P = 0.004$ )

## Factors associated with high stress in ROI

- Has concerns for personal safety ( $P < 0.001$ )
- Does paper work at home ( $P = 0.012$ )
- Has no free time ( $P < 0.001$ )
- Doctor in practice for 10 years ( $P = 0.003$ )
- Doctor in practice for 11–21 years ( $P < 0.001$ )
- Is a GMS doctor ( $P < 0.001$ )

## Factors associated with poor morale in ROI

- Has concerns for personal safety ( $P = 0.001$ )
- Has had a written complaint in past year ( $P = 0.047$ )
- Has no access to deputizing or locum cover ( $P < 0.001$ )
- Has no partners ( $P = 0.004$ )

maintain their morale remain in practice for a longer time, or perhaps those in the final years of practice are looking forward to escaping its rigours. Nonetheless, their experience is an untapped resource that could find useful expression in a mentorship system for their younger colleagues. Significantly, relatively few doctors in both NI and ROI want to give up the practice of clinical medicine when they retire from general practice, suggesting that the clinical content of the job is not itself a significant source of high stress or poor morale.

The factors that affect stress do not appear to be related to those aspects of clinical workload or to the traditional nature of general practice, such as patient contact, but the findings of our study suggest that the most important factors are those associated with differences in the health care systems, lack of personal time, time spent on paperwork, and the threats of complaints or medico-legal action by patients.

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