



Psychological distress among GPs

Who is at risk and how best to reach them?

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OBJECTIVE

To identify key characteristics of psychologically distressed general practitioners and whether these GPs volunteered for a 'GP health' educational program.

Setting: Eight Australian divisions of general practice responding to an invitation to participate in the research in 1999, representing 1356 GPs.

Main outcome measure: The General Health Questionnaire (GHQ-12), together with demographic and practice questions.

Design: Observational study of GPs invited to participate in a voluntary education program on GP health offered through each division of general practice.

Participants: 819/1356 GPs responded to the baseline questionnaire (60%). Of these, 233/819 (28%) scored above the GHQ-12 threshold indicating psychological distress. Ninety GPs enrolled in the program, data were available for 69 GPs.

RESULTS

General practitioners who were identified as being psychologically distressed were over-represented in the 35–49 years age group ($p=0.02$) and were more likely to be the practice principal ($p=0.04$). Over 62% of enrolled GPs had scores that indicated none to mild distress. Of those GPs who were distressed, 42% were from the identified at risk age group, and 44% were practice principals.

DISCUSSION

Alternative targeted interventions may be needed to reach GPs with high levels of psychological distress.

Stress is common in many Australian occupations, and its cost, both to industry and human suffering is rising.^{1–4} General practitioners are one occupational group who have increased prevalence rates of perceived stress and psychological distress.^{5–10} While these rates are comparable to similar service orientated occupations such as teachers,^{11,12} the rates are higher than those recorded for general population data.¹³ Information about demographic and practice information of GPs who are psychologically distressed is limited. Studies that do exist have contradictory findings, especially on the relationship of gender differences, with some identifying

that females had higher rates,^{14,15} males had higher rates;^{16,17} while other studies found no gender differences.^{18,19}

Several barriers may prevent GPs from accessing support for psychological concerns including a belief that they can self diagnose and self medicate, time constraints, and concerns over confidentiality.^{20–23} Adverse outcomes for doctors who delay seeking support or self medicate have been identified.^{21–23}

Two systematic reviews of occupational stress management interventions found that the most effective strategies are a combination of individual centred and

organisation centered strategies.^{24,25} The most commonly used approach to address GP health has been through individual centred interventions such as educational programs. However, rigorous evaluation of these strategies for doctors – especially their ability to recruit those identified as 'at risk' – is limited. One of the major concerns with voluntary educational approaches is the 'inverse care' law; when programs designed to minimise risk preferentially attract those least in need.²⁶

The aim of this study was to identify demographic and practice variables of psychologically distressed GPs and to identify what percentage of this group voluntarily enrol in a GP health education program.

Method

Study population

We extended an invitation to participate in the study to all divisions of general practice in one Australian state. Eight divisions volunteered for the program. An extra division was recruited from another state following the withdrawal of one that previously volunteered. They provided a list of a total of 1458 GPs. After 102 were deleted because of moves, retirement, holidays or maternity

leave, 1356 GPs remained. In 1999 there were approximately 17 500 Australian GPs,²³ so our denominator represented approximately 7% of the total Australian GP population.

Recruitment

A baseline questionnaire containing nine demographic questions, the General Health Questionnaire (GHQ-12), and a space for general qualitative comments together with a consent form and explanatory sheet about

the research, was sent to eligible GPs in May 1999. One reminder letter was sent in June 1999; 819 responded (60%).

GP health educational program

The GP health program 'You and your practice' was a combination of individual and organisational strategies, adult learning principles, and reflective writing activities and was piloted in the Sunshine Coast Division of General Practice (Queensland) in 1998.

The final content of the program was based on issues identified through the literature review, the baseline questionnaire, and the pilot program.

The aim of the program was to provide information and practical strategies that would assist GPs to reduce stress in their personal and work lives. The program consisted of four 3 hour modules and was allocated 36 continuing medical education and 25 clinical audit points. The modules

Table 1. Characteristics of GP respondents and recruitment into educational program

| Demographics | Respondents n=819 | Scored >3 on GHQ-12 n=233 (% of respondents) | p value n=69 | Total enrolled in program |
|--------------------------------|----------------------|--|-----------------|------------------------------|
| Gender | Male | 552 | 155 (28) | 44 |
| | Female | 267 | 78 (29) | 25 |
| Age groups (years) | 20–34 | 84 | 21 (25) | 1 |
| | 35–49 | 486 | 156 (32) | 47 |
| | 50+ | 249 | 56 (23) | 17 |
| Years since basic graduation | <10 | 165 | 50 (30) | 11 |
| | 10–20 | 402 | 122 (30) | 40 |
| | >20 | 248 | 59 (24) | 18 |
| Number of GPs in solo practice | 124 | | 36 (29) | 12 |
| | 2–3 | 293 | 82 (28) | 31 |
| | ≥ 4 | 390 | 113 (29) | 26 |
| Position in practice | Employee | 301 | 74 (25) | 19 |
| | Principal | 509 | 159 (31) | 50 |
| | Locum/other | 9 | 0 | 0 |
| Weekly sessions | ≥6 | 654 | 196 (30) | 60 |
| | ≤5 | 163 | 37 (23) | 9 |
| Number of patients per week | ≤50 | 82 | 20 (24) | 5 |
| | 51–100 | 151 | 34 (23) | 12 |
| | 101–150 | 267 | 84 (31) | 20 |
| | 151–200 | 200 | 60 (30) | 20 |
| | >200 | 114 | 34 (30) | 12 |
| Type of practice | Rural | 116 | 31 (27) | 15 |
| | Provincial | 412 | 123 (30) | 35 |
| | City | 281 | 79 (28) | 18 |
| Billing structure | Bulk billing | 275 | 69 (25) | 12 |
| | Sliding scale | 441 | 131 (30) | 45 |
| | Private billing | 81 | 25 (31) | 12 |
| | Other | 22 | 0 | 0 |

were: 'surviving medicine', 'balancing work and self', 'practice organisation', and 'developing personal and work goals'. After the pilot, we trained GPs to facilitate the program in each division. A pharmaceutical company provided financial support for some aspects of the educational program, but took no part in the management of the study, nor promoted any pharmaceutical products during the educational program.

Analysis

Demographic characteristics were analysed using chi-square tests, where significance was determined when the p values were less than 0.05. GHQ-12 scores were analysed using mean comparisons and t-tests. Results whose 95% confidence intervals did not include zero were considered significant. A GHQ-12 score of 3 was the threshold for indicating psychological distress.

Results

Characteristics of GPs who are psychologically distressed

Of the 819/1356 (60%) GPs who responded, 233/819 (28%) scored 3 or more on the GHQ-12. Our finding of 28% of GPs returning a score indicating psychological distress is in keeping with that of 31% using the GHQ-12 with GPs in previous reports from Australia⁵ and New Zealand.⁷ Comparison of the demographic and practice information of the respondents was made with data from *Australian general practice* published by Medicare in 1994/1995.²⁷ Our sample represented approximately 5% of Australian general practice (819/17362). This comparison is not ideal as similar groupings were available for only four of the 9 variables: gender, age, number of patients and practice locality. However, the comparison showed that the respondents had a similar gender profile to Australian general practice and saw approximately the same number of patients per week.

The comparison of GPs in our research who scored over and under the GHQ-12 threshold found that only two variables were associated with a significant increased rate

Table 2. Comparison of GP characteristics in the two categories associated with increased psychological distress

| Demographics | | Enrolled in educational program n=69 | GPs who scored >3 on GHQ-12 n=26 (%) |
|----------------------|-------------|---|---|
| Age group (years) | 20–34 | 1 | 1 (100) |
| | 35–49 | 47 | 20 (42.5) |
| | 50+ | 17 | 5 (29.4) |
| Position in practice | Employee | 19 | 4 (21) |
| | Principal | 50 | 22 (44) |
| | Locum/other | 0 | 0 |

of distress: age group ($p=0.02$) and position in practice ($p=0.04$). General practitioners who were identified as being psychologically distressed were over-represented in the 35–49 years age group and were more likely to be the practice principal (*Table 1*).

Recruitment into the educational program

Each division was sent the necessary resource material to conduct the program (which was offered to every GP within the division). Ninety GPs enrolled in the program and baseline data from 69 GPs were available. Of this 69, 43/69 (62.3%) scored 2 or less on the GHQ-12, indicating none to little psychological distress. Analysis of the two variables associated with psychological distress (age and position in practice) showed that of the 26/69 GPs who were identified with psychological distress, 42% were in the 35–49 years age group and 44% were a practice principal (*Table 2*). These 26 GPs were distributed evenly among each division, with 3–4 psychologically distressed GPs in each group.

The mean baseline GHQ-12 score of all GPs enrolled in the program was 2.96; the mean GHQ-12 score of the 26 who were identified as being psychologically distressed was 6, indicating a moderate to severe level of psychological distress. Paired samples analysis could be conducted on the GHQ-12 scores for the 54 GPs who completed both the baseline and postintervention questionnaires. The mean GHQ-12 score

decreased significantly ($p=0.01$) from baseline to postintervention. This equated to a small reduction in psychological distress from a mean GHQ-12 score of 2.96 to 1.81.

Process evaluations were completed as part of the program, including seminar evaluation forms, pre- and post-program questionnaires and a clinical audit activity. Approximately 95% of evaluation forms were returned and collated. Responses were generally extremely positive: GPs liked the program, finding it practical, relevant and well accredited. The majority (88%) indicated that they found the program 'useful' or 'very useful', and that it supported them to implement changes in their personal and/or professional lives that reduced stress. Participating division staff also reported that the education program was useful: it engaged some of the GPs about whom they had concerns, and the program stimulated the development of local GP health programs.

Discussion

The two significant associations (age 35–49 years and being a practice principal) with increased risk of psychological distress appear to be logical. There are anecdotes of practice principals reporting higher perceived stress levels because of the extra workload associated with running a business as well as being a clinician. Also, GPs in this age group often are dealing with stressors common to middle age (eg. mortgages, parenting, caring for elderly parents, and balancing work and family commitments).

Our efforts to recruit GPs with psychological distress into an education program had limited success. It appears that our concern about the inverse care law was founded with the majority of GPs who enrolled (62.3%), demonstrating none to minimal levels of psychological distress. The program was moderately successful in attracting GPs from the identified risk categories of age and position in practice, with approximately 40% from each of these categories being psychologically distressed. Our conventional education program was typical of many commonly found among groups of GPs seeking to overcome psychological problems. The GPs in our study thought they were of benefit, and even enjoyed them. However, these programs are expensive to set up and maintain. Our evaluation found a small improvement with time in mean psychological measures, but much of this effect might come from regression to the mean, Hawthorne effect, or other methods of weaknesses.

While 'one size fits all' programs may produce small changes in general populations, they do not adequately address or recruit GPs who are at the highest risk for psychological distress. Targeted approaches are needed. These approaches include direct mailed personalised interventions, direct contact through telephone or email, and personal contact. They have been found to be effective for a number of health related interventions for 'at risk' groups.²⁸⁻³¹ It is suggested that more research into the needs of GPs who are practice principals and/or aged 35-49 years be considered to assist in tailoring interventions to address their needs.

Implications of this study for general practice

What we already know

- GPs are an occupational group at risk of increased psychological stress

What this study shows

- Psychological distress was over represented among GPs:
 - aged 35-49 years
 - acting as practice principals
- most psychologically distressed GPs came from these risk groups.

Conflict of interest: none declared.

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