General practitioners’ psychosocial resources, distress, and sickness absence: a study comparing the UK and Finland

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Abstract

Background. Many countries, including the UK and Finland, face difficulties in recruiting GPs and one reason for these difficulties may be due to negative psychosocial work environments. Objective. To compare psychosocial resources (job control and participative safety), distress and sickness absences between GPs from the UK and those from Finland. We also examined differences in how psychosocial resources are associated with distress and sickness absence and how distress is associated with sickness absence for both countries.

Methods. Two independent cross-sectional surveys conducted in general practice in the UK and Finland. Analyses of covariance were used for continuous outcome variables and logistic regression for dichotomized variable (sickness absence) adjusted for gender, qualification year and response format.

Results. UK GPs reported more opportunities to control their work and had higher levels of participative safety but were more distressed than Finnish GPs. Finnish GPs were 2.3 (95% confidence interval = 1.8–3.1) times more likely to report sickness absence spells than UK GPs. Among Finnish GPs, job control opportunities and high participative safety were associated with lower levels of distress, but not among UK GPs. Among UK GPs, higher distress was associated with 2.1 (95% confidence interval = 1.3–3.6) times higher likelihood of sickness absence spells, but among Finnish GPs there were no such association.

Conclusion. In Finland, primary health care organizations should try to improve participative safety and increase control opportunities of physicians to decrease GP distress, whereas in the UK, other work or private life factors may be more important.

Keywords: Finland, general practitioners, psychosocial resources, sickness absence, UK, work-related stress.

Introduction

Epidemiological investigations have consistently demonstrated an increased risk of psychological stress among physicians and specifically among GPs (1). In a British study based in a single city, half of GPs reported high levels of psychological distress and over half felt that work had affected their health (2). Although evidence is limited, the combination of low job satisfaction, poor mental health and poor subjective physical health may be a more common experience for GPs than is realized (2).

Psychosocial resources at work may help physicians to cope with the high levels of stress in their work. A recent study among Finnish specialists concluded that job control is among the most important work-related factors in relation to physicians’
work-related well-being (3). Increased opportunities for employee participation at work have been associated with less stress (4) and with a higher intent to stay in the current position (5). Another important psychosocial resource is team climate, such as participative safety, which has been found to be important for the satisfaction of both staff and patients treated in general practice (6). Poor team climate has been associated with 1.6 times higher likelihood of depression and 1.5 times higher likelihood of antidepressant use, compared with good team climate (7). Among hospital employees, poor team climate has been found to predict higher likelihood of actually quitting and among stayers reporting higher levels of intentions to leave in follow-up 2–4 years later (8).

The health service system and the client structure that the system provides may have a big effect on GPs well-being and psychosocial resources. Finnish health care is primarily publicly funded and the entire population has a right to public health care services. Municipalities are responsible for providing these services that include primary health care and specialized hospital care. The private health care sector also provides health care services and all Finnish citizens are covered by the National Health Insurance, which can reimburse part of the costs of using private health services. The private sector consists of occupational health services in which employers provide services for their employees and private surgeries where clients themselves purchase a major part of care or finance them by voluntary insurance. Only a part of Finnish GPs have patient lists and for those GPs, the mean patient list size is 1 825. Clients in primary care are more likely to be from lower income classes and to have less clearly defined health problems than clients in other sectors. GPs take care of a higher proportion of older people, patients with multiple comorbidities and those who are unemployed. Thus, a Finnish GP’s work may be highly demanding and, perhaps as a consequence, the Finnish primary health care sector suffers from a shortage of GPs and there is a trend for physicians to move from working in the public sector to working in the private sector (9).

In the UK, health care is also primarily publicly funded by taxation and the entire population has a right to public health care services. GPs are not employees but instead have ‘independent contractor’ status; a proportion of income is derived from capitation fees determined by the number of patients registered with a GP (usually about 1800) and providing services against a range of contracted criteria. GPs care for the full range of clinical conditions and provide a gatekeeper function for access to secondary care. Over the past 40 years there has been an increasing move towards GPs working together in groups (an average general practice will have four GPs) along with other health care professionals such as nurses and midwives (some of whom they employ).

Thus, even though both the UK and Finnish systems are mainly funded by taxation, there are also differences in the systems, given that in the UK GPs are more like their own employers and more responsible for the financial means, whereas in Finland GPs work for municipalities in health centres and have no personal responsibilities for the finances. In addition, Finnish GPs may have to deal with more problematic clients due to the fact that patients who are working mainly go to occupational health services. Therefore, the aim of this study was to compare the psychosocial resources and well-being between GPs from the UK and those from Finland. Specifically, we aimed to examine whether there were differences between the UK and Finnish GPs in their distress levels, sickness absences and psychosocial resources (job control and participative safety). In addition, we aimed to examine whether there were national differences in how psychosocial resources are associated with distress and sickness absence and how distress is associated with sickness absence.

Methods

The Finnish sample was a random sample of 7000 physicians in Finland from the 2010 database of physicians maintained by the Finnish Medical Association. The database covers all licensed physicians in Finland (20934 in 2010). The data were gathered in 2010 by either a web-based or postal survey. First, an e-mail invitation to participate in the web-based survey was sent, which was followed by two reminders. For those who did not respond to these, a postal questionnaire was also sent once. E-mail and postal addresses were obtained from the Finnish Medical Association. The total number of respondents was 3782 physicians (response rate 54%). The present sample included more women and slightly older respondents compared with physician population in Finland. Of the respondents, 421 were GPs (72% women) and formed the Finnish sample for this study.

In the UK, the data were collected as part of the Improving Quality of Care in Diabetes (iQuaD) study, a study exploring the predictors of high quality care for patients with type 2 diabetes described in detail elsewhere (10). In summary, an initial invitation to participate in the iQuaD study was sent to all GPs who were members of the UK Medical Research Council General Practice Research Framework in Scotland, Wales and Northern Ireland, and a random sample of practices in UK up to a total of 500 practices. One hundred practices were recruited, of which one practice was subsequently excluded due to low completion rates for all data collection. The baseline postal questionnaire, including the psychosocial organizational questions used in this study, was sent in 2008 to all clinical and administrative personnel (N = 2079; of which 529 were GPs). The questionnaires were delivered to the nominated study contact in the practice who then delivered the questionnaires to practice colleagues. Two reminders were sent to non-respondents. Completed questionnaires were returned by 423 GPs (response rate 80%; 47% women), who formed the UK sample of this study. The response rates are discussed in detail elsewhere (10).
Measures

*Job control* was measured by the scale of decision authority (3 items) derived from Karasek’s Job Content Questionnaire (11). Decision authority measures the freedom to make independent decisions and possibilities to choose how to perform work (e.g. ‘I have a lot of say about what happens in my job’). *Participative safety* was measured with 4 items derived from participative safety subscale from Team Climate Inventory (12). Participative safety measures team participation, such as interaction frequency and information sharing (e.g. ‘We have a “We are together” attitude’ and ‘There are real attempts to share information throughout the team’). In the Finnish sample, the job control and participative safety items were rated on a 5-point Likert scale, ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). In the UK sample, items were rated on a 7-point Likert scale, ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). The UK scores were re-coded so that their scale also varied between 1 and 5 (1). Psychological distress was measured with the 4 items from the GHQ-12 (13), representing factor anxiety/depression suggested by Graetz (14). Graetz’s three-factor structure has been suggested to be the most preferable factor model for GHQ-12 (15). The answer options ranged from 1 to 4. In the UK questionnaire, the first answer option differed slightly from the one that has usually been used (instead of the usual ‘Not at all’, it was ‘Much less than usual’). The reliabilities of these scales can be seen in Table 1. The self-reported existence of sickness absence spells was coded as 0 = no sickness absence spells during the past 12 months and 1 = sickness absence spells during the past 12 months. Adjustment variables included gender and year of qualification.

Statistical analyses

Analysis of covariance was used to examine the main effects of country (UK versus Finland) on job control, participative safety and distress, i.e. whether scores on psychosocial constructs differed between countries. Logistic regression analysis was used to predict the dichotomous sickness absence scores. Analyses of main effects were conducted in two steps. First, the univariate effects were examined. In the second step, the main effects were adjusted for gender, qualification year and response format. In addition, we examined the interactions between (i) country and psychosocial resources, for distress and sickness absence; and (ii) country and distress, for sickness absence. Analyses of covariance were used for distress and logistic regression for sickness absence. These analyses were adjusted for gender, qualification year and response format (web-based/paper).

Results

The responding Finnish GPs were 2.9 [95% confidence interval (CI) = 2.2–3.9] times more likely to be women than their counterparts from the UK. Finnish sample included 72% women, whereas the UK sample included 47% women. GPs from the UK (mean qualification year 1986) had been qualified longer than the Finnish GPs (mean qualification year 1992; $F = 74.36, P < 0.001$). Men were 0.6 (95% CI = 0.4–0.8) times less likely to have sickness absence spells than women and those who had qualified later were more likely to have sickness absence spells than those who had qualified earlier [odds ratio (OR) = 1.04, 95% CI = 1.02–1.05].

Differences between the UK and Finland

Table 1 shows the results of the analyses of covariance for job control, participative safety and distress. GPs from the UK perceived having more job control and higher participative safety levels than Finnish GPs. Moreover, UK GPs reported statistically significantly higher levels of distress than GPs from Finland (though the absolute difference in mean scores of 0.16 of a scale point was not large). These associations were robust against adjustments for gender, qualification year and response format.

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<td>Participative safety (1–5)</td>
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<td>Distress (1–4)</td>
<td>0.75</td>
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<td>Distress (1–4)</td>
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$^a$Adjusted for gender, qualification year and response format.
Finnish GPs were 2.31 (95% CI = 1.75–3.07) times more likely to report having at least one sickness absence spell than their UK counterparts. However, this association became non-significant (OR = 1.37, 95% CI = 0.92–2.04) after adjusting for the effects of gender, qualification year and response format.

Interactions
The interaction between country and job control was significant for distress ($F = 25.6, P < 0.001$). Figure 1 shows that job control was associated with distress among Finnish GPs but not with UK GPs. In addition, there was a significant interaction between country and participative safety for distress ($F = 21.5 P < 0.001$). Similarly, as with job control, high participative safety levels were associated with less distress in Finnish GPs but not among UK GPs (Fig. 2). The interactions between country and job control/participative safety were non-significant for sickness absence.

The interaction between country and distress was significant for sickness absence (Wald’s $= 3.9 P = 0.049$). When analyses were done separately for GPs from the UK and Finland, results showed that distress was significantly associated with sickness absence spells among UK GPs (OR = 2.1, CI 95% = 1.3–3.6) but not among Finnish GPs (OR = 1.13, CI 95% = 0.82–3.64).

Discussion
This study found that UK GPs had more opportunities to control their work and experienced higher levels of participative safety but reported being more distressed than Finnish GPs. Finnish GPs were 2.3 times more likely to have sickness absence spells, but this association seemed to be mainly due to the fact that Finnish GPs were more likely to be women and younger compared with UK GPs. Moreover, we found that among Finnish GPs job control opportunities and participative safety were associated with lower distress but not among GPs from the UK. Among UK GPs, higher distress levels were associated with 2.1 times higher reporting of sickness absence spells, which is consistent with findings examining the relationship between distress and sickness absence in all practice staff (clinical and administrative) (16), but among Finnish GPs there were no such association.

We were able to use large samples with good response rates. This study relied on self-reported measures, which may lead to problems associated with an inflation of the strengths of relationships due to common method variance. Moreover, although we controlled for gender, qualification year and response format, we cannot rule out the possibility of residual confounding. In addition, the Finnish and UK samples were gathered in different ways that may have influenced the results; the Finnish sample was a random sample of all physicians in Finland, whereas the UK sample was recruited from general practices registered with a national research network. Moreover, results regarding higher levels of distress among the UK GPs should be taken cautiously, given that the first answer option among the UK GPs differed from the one that was used among Finnish GPs and generally. Thus, it is possible that the UK GPs are scoring higher on distress by virtue of having the option ‘much less than usual’ instead of ‘not at all’ option. There were also some differences among the respondents in Finland and the UK. Finnish respondents were more likely women and younger than respondents from the UK. Attrition analyses among Finnish respondents showed that when compared to all licensed physicians in Finland our Finnish respondents were more likely women and older. Unfortunately, we cannot say anything about the non-responders in the UK survey.

Our findings are consistent with previous findings showing that GPs from the UK have high levels of distress (2). In addition, it has previously been shown that English male GPs have higher scores on anxiety and depression than are reported by a normative population (17). Moreover, burnout levels have also been found to be higher among English GPs compared with North American physicians (18). English GPs also have higher
levels of pressure at work and lower job satisfaction than English nurses (17). The higher distress levels among UK GPs compared with Finnish GPs may reflect actually higher work load levels. Finnish full-time GPs work on average 42 h a week, whereas GP partners in the UK work on average 44 h per week (19,20). In addition, GPs from the UK have contractor status and financial responsibilities, whereas Finnish GPs work for municipalities and have no financial responsibilities; this fact may also influence here.

Finnish GPs work generally in larger units than UK GPs. In an international observational study during 2008 and 2009, it was found that mean full-time equivalent number of GPs per practice was 3.8 in England and 11.7 in Finland (21). Thus, it may be natural that there are more problems in participative safety and less control opportunities in Finland. Similarly, this may explain why problems in psychosocial work environment are linked with negative outcomes especially in Finnish GPs. A previous study showed the importance of job control for the well-being of Finnish physicians (3). Possibly also UK’s ‘contractor’ system with patient registrations gives more sense of one’s control opportunities than Finnish health centre system.

Implications for practice
According to our results, UK GPs had higher levels of distress than Finnish GPs and this high distress was associated with sickness absences but was not related to work’s psychosocial resources. As mentioned, UK GPs work in smaller practices than their Finnish counterparts, thus they may have more alone working and lower levels of collegial support, which may be a source of distress. Therefore, it would be important to promote collegial support and tutoring for UK GPs. In addition, UK GPs have financial responsibilities that may have an effect of distress levels. Thus, future studies should examine the effects of financial issues and other work-related factors, such as organizational justice, social support and work arrangements, for the well-being of UK GPs. However, distress is multifactorial and also other factors than work-related may be responsible for high distress among UK GPs.

Finnish GPs, on the other hand, seemed to have problems in their team climate and control opportunities that affected their distress levels. Bigger unit size may pose a problem to arranging social relations, dividing work load, organizing work and leadership. Thus, according to our results the Finnish trend of increasing unit size should be questioned. At least, more effort should be put to improve teams’ functioning, information sharing and participation opportunities in Finland. Job control could be improved by giving GPs greater freedom over starting and finishing times, a greater variety of tasks, opportunities to fully use and develop their skills and a stronger voice in decisions.

Declarations
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