Work-Related Stress, Job Resources, and Well-Being Among Psychiatrists and Other Medical Specialists in Finland

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Objectives: **Previous studies suggest that psychiatrists may be more stressed than other medical specialists and mental health professionals. This study examined differences in stress factors, job resources, psychological distress, and job satisfaction between psychiatrists and other medical specialists. In addition, the study examined whether stress factors or job resources accounted for possible differences between the groups in psychological distress or job satisfaction.** ***Methods:*** **In 2010, the authors obtained cross-sectional, Web-based survey data from a random sample of 2,776 Finnish physicians, including 1,647 women (59%), ranging in age from 25 to 69 years old. Comparisons between the two groups used analyses of covariance adjusted for gender, age, and employment sector.** ***Results:*** **Psychiatrists were less satisfied with their jobs, felt more stressed about patients, and experienced more psychological distress compared with other medical specialists. However, psychiatrists had more opportunities to control their jobs and better team climate compared with other medical specialists. High psychological distress among psychiatrists was partly accounted for by high patient-related stress. The differences in psychological distress and job satisfaction between the two groups were not accounted for by work-family conflicts or optimism.** ***Conclusions:*** **It is important to try to alleviate the high levels of patient-related stress among psychiatrists and to further increase their job resources. Doing so may enhance the attractiveness of psychiatry as a specialty choice. (*Psychiatric Services* 65:796–801, 2014; doi: 10.1176/appi.ps.201300200)**

Many countries suffer from the shortage of psychiatrists and problems in the recruitment of psychiatrists (1–3). Psychiatry has been found to be the least desirable specialty among medical graduates in the United Kingdom (4). In Finland, it has been estimated that the number of psychiatrists will decline in the future, even though the country is already experiencing a shortage of psychiatrists (3).

One reason for the reluctance to specialize in psychiatry may be the high work-related demands and associated stress among mental health professionals (5). Among British psychiatrists, 54% experienced irritation and 39% experienced emotional exhaustion weekly (6). Two-thirds of New Zealand psychiatrists reported moderate to severe emotional exhaustion and low levels of personal accomplishment (7). A review article concluded that psychiatrists experience significant levels of stress because of several factors, including overwork, lack of time, and management and resource issues (8). Margison (9) has suggested that overwork, relationships with other staff, inadequate resources, and dealing with "difficult," violent patients are among important sources of stress among psychiatrists. Psychiatry residents have been found to have higher numbers of traumatic stress experiences and to be at higher risk of threats and violent acts by patients compared with residents in general medicine, surgery, and obstetrics and gynecology (10).

Psychiatrists have been found to be dissatisfied more often with their medical career compared with other specialists or general practitioners (11). Moreover, psychiatrists have elevated suicide risk compared with other physicians (12). Research also suggests that psychiatrists have a higher level of burnout than other physicians (13). Psychiatrists also reported higher work-related emotional exhaustion and severe depression compared with a combined group of physicians and surgeons (14). One factor that may contribute to these findings is personality profile.

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Research suggests that psychiatrists are more prone to negativity compared with other physicians, and this personality profile might predispose them toward stress (14). Psychiatrists' personality has also been found to be associated with a proneness to burnout (15).

Thus previous studies suggest that psychiatrists may feel worse and be more stressed than other medical specialists and mental health professionals. However, more information is needed about how specific work-related stress factors affect psychiatrists' well-being and how work-related resources may serve to buffer some of these stressors. The aim of this study was to examine whether there were differences in stress factors, job resources, and well-being between psychiatrists and other medical specialists. It also examined whether differences in stress factors, job resources, or personal optimism accounted for potential differences in well-being between psychiatrists and other medical specialists. It also analyzed whether interactions of specialty and stress factors, job resources, and personal optimism had any effects on well-being. For example, high levels of job resources might mitigate the negative consequences of stress factors, such as time pressure or patient-related stress. We expected that psychiatrists would have higher levels of stress factors and lower well-being compared with other medical specialists and that stress factors and job resources would partly account for the differences in well-being.

Methods

Data source and context

In 2010, we drew a random sample of 7,000 Finnish physicians who were born in 1941 or later from a database maintained by the Finnish Medical Association of all licensed physicians in Finland. An e-mail invitation to participate in a Web-based survey was sent to each member of the sample and was followed by two reminder e-mails. A postal questionnaire was sent once to those who did not respond. A total of 3,826 individuals responded to the survey, for a response rate of 55%. The respondents included more women and were slightly older than the physician population in Finland (16).

We excluded 591 respondents who were not specialists and 459 specialists and residents who did not provide the information regarding their specialty. Thus the final sample included 2,776 physicians, including 1,647 women (59%), with a mean±SD age of 49.2±11.3 (range 25–69 years). Data regarding race-ethnicity are not collected by the survey, but a great majority of Finnish physicians are native Finns (Caucasians). Because of incomplete data for some variables, the number of participants included in the statistical models varied. Ethical approval was provided by the National Institute for Health and Welfare.

In Finland, health care is funded mainly by taxation, and the entire population has a right to public health care services. Municipalities are responsible for providing mental health care services to their inhabitants. Lately, mental health care services in Finland have actively been shifted from hospitals to the community (17,18). Patients who have received long-term care in institutions have been transferred to outpatient care in health centers, mental health offices, and psychiatric hospital outpatient departments and to transitional services, such as supported housing. At the same time, the length of treatment in inpatient care facilities has decreased significantly. These changes are similar to changes that have transpired in many other countries, such as the United States (19). However, there are marked differences in the financing of mental health care in Finland and the United States, given that in the United States, mental health care is funded mostly by private insurance and out-of-pocket payments (20).

Measurements

Specialty. Respondents were asked whether they were specialists, residents, or nonspecialists. In Finland, the specialist degree requires five or six years of medical practice, including at least nine months of service in public health centers, theoretical and administrative courses, and a passing grade on a national written exam. The specialist and residents were asked to choose their specialty. If they had more than one specialty, they were advised to report the last one. The specialties were categorized as psychiatry (including all psychiatrists) and other medical specialties.

Stress factors. Stress factors included time pressure, patient-related stress, and work interference with family. Time pressure was measured with five items that were developed on the basis of previous research involving health care staff that reported adequate psychometric properties for similar items (21). The items measure stress attributed to time shortages at work and to scheduling problems, for example, "How often have you been distracted, worried, or stressed about (during the past half-year period) not being able to do your work properly?" The items are rated on a 5-point Likert scale ranging from 1, never, to 5, very often. The reliability for the sample was .90.

Patient-related stress was measured by using three items (α=.83) that were developed from earlier studies that were carried out in the health care sector (21). The items include "The patients are restless and irritated," "The patients are agonized or anxious," and "The patients behave disruptively." Participants were asked how often the situation described in each item had disturbed them, worried them, or caused them stress during the past half-year period. The items are rated on a 5-point Likert scale ranging from 1, never, to 5, very often, with higher scores indicating higher stress.

The measure of work interference with family was measured by three items (α=.89), derived from research by Frone and colleagues (22), that assess how often the participant's job interferes with family life. For example, one item asks, "How often does your job or career interfere with your responsibilities at home, such as cooking, shopping, child care, home maintenance, and repairs?" The items are rated on a 5-point Likert scale ranging from 1, never, to 5, very often.

Job resources. Job resources were assessed by measuring job control and team climate. Job control was measured by a three-item decision

authority scale (α=.77) derived from Karasek's Job Content Questionnaire (23). The scale measures the freedom to make independent decisions and choose how to perform work; one item states, for example, "I have a lot of say about what happens in my job." The items are rated on a 5-point Likert scale ranging from 1, totally disagree, to 5, totally agree.

Team climate was measured with a participative-safety subscale of the Team Climate Inventory (24). The four-item subscale measures team participation, such as interaction frequency and information sharing (α=.89); one item states, for example, "People feel understood and accepted by each other." The items are rated on a 5-point Likert scale ranging from 1, totally disagree, to 5, totally agree.

Well-being. Well-being was assessed by measuring psychological distress and job satisfaction. Psychological distress was measured with the four items (α=.81) from the General Health Questionnaire (GHQ-12) (25) representing a factor for anxiety and depression (26). Graetz's (26) factor model, which includes the factor for anxiety and depression, is the preferred way of categorizing the GHQ-12 (27). The answer options range from 1 to 4. In this study, scores on the scale were used as a continuous variable.

Job satisfaction was assessed with three items (α=.86) derived from Hackman and Oldham's (28) Job Diagnostic Survey; one item stated, for example, "I am generally satisfied with my work." Items are rated a 5-point scale ranging from 1, totally disagree, to 5, totally agree.

Optimism. Optimism was measured with six items (α=.83) from the revised Life Orientation Test (29). This instrument was chosen because it measures optimism versus pessimism and therefore is an indicator of a personality type characterized by negativity, which previously has been associated with psychiatrists (14). Items include, for example, "In uncertain times, I usually expect the best" and "If something can go wrong for me, it will [reverse coded]"). Participants indicate how well the statements describe them on a 5-point scale ranging from 1, not at all, to 5, very much so.

Covariates. Several variables—gender, age, and employment sector—were included as covariates. Employment sector was categorized as hospital; primary care; other municipal site of practice; state office or institution; university; private practice, including private medical centers or clinics; foundation, association, or organization; and other sites, such as the pharmaceutical industry.

Statistical analysis

First, we examined the association of specialty (psychiatrists versus other medical specialists) with stress factors, job resources, well-being, and optimism by using analyses of covariance (ANCOVA) adjusted for gender, age, and employment sector. Second, we examined the interactions of specialty with stress factors, job resources, and optimism and the effects of these interactions on well-being by using ANCOVAs adjusted for the main effects. Finally, we examined the effects of different adjustments of the regression analyses on the association between specialty and indicators of well-being. Model A was adjusted for age, gender, and employment sector. Model B was adjusted for the same variables included in model A as well as work interference with family, job control, team climate, and optimism. Model C was adjusted for the same variables included in models A and B as well as time pressure and patient-related stress (categorical variables were treated as dummy variables). The analyses were conducted by using Stata 12.0 statistical software.

Results

The characteristics of the study sample are shown in Table 1. Almost half (47%) of the participants worked at hospitals, 16% worked in the private sector, and 15% worked in primary care. Approximately 11% of the sample were psychiatrists. Compared with other medical specialists, psychiatrists were older, were more likely to be women, and were less likely to work in primary care. Table 2 shows the bivariate correlations among study variables.

Table 3 shows the results regarding the associations of specialty with outcome measures. Psychiatrists had higher levels of patient-related stress, job control, team climate, and distress compared with other medical specialists. In addition, psychiatrists had lower levels of job satisfaction than other medical specialists. There were no differences according to specialty in time pressure, work interference with family, and optimism.

In addition, we examined the effects of interactions of specialty with stress factors, job resources, and optimism on well-being but all the interactions were nonsignificant.

Table 4 shows the effects of different adjustments of the models examining the association of specialty and well-being (psychological distress and job satisfaction). The association between specialty and psychological distress was nonsignificant after the model was adjusted for time pressure and patient-related stress. However, the association between specialty and job satisfaction remained significant after all adjustments.

Discussion

Our results showed that psychiatrists were less satisfied with their jobs and had higher levels of patient-related stress and psychological distress compared with other medical specialists. However, psychiatrists had more job resources than other medical specialists, meaning they had better opportunities to control their jobs and better team climate. Our results suggest that the stress associated with difficult-to-treat patients was connected to the high rates of psychological distress among psychiatrists.

Our results are in line with previous studies showing lower job satisfaction and higher levels of traumatic stress experiences among psychiatrists or psychiatry residents than among other medical specialists or residents of other specialties (10,11). Psychiatrists have also been found to have higher suicide risk and higher levels of burnout, emotional exhaustion, and depression compared with other physicians (12–14). However, in Italy, there were no differences among GHQ-12 scores, an indicator of psychiatric morbidity, of psychiatrists and of a normative sample

and a sample of general practice and hospital physicians (13).

Our results highlight the strenuousness of working with anxious, restless, and disruptively behaving patients. Psychiatrists had significantly higher levels of patient-related stress compared with other medical specialists, and this stress seemed to be associated with higher psychological distress. Some research suggests that psychiatrists view aggressiveness among patients as the factor that causes them the most stress (8). Because of the nature of their work, psychiatrists are exposed to patients who have difficult and often violent behaviors (30). That is particularly true for residents and young psychiatrists (31). For example, in New Zealand 46% of psychiatrist had encountered verbal threatening, 39% had been physically intimidated by patients, and 16% had been assaulted (32).

Thus to improve the retention and recruitment of psychiatrists and to increase the attractiveness of psychiatry as a specialty choice, it would be important to try to decrease problems with patients. Recent work in the United Kingdom found that psychiatry was rejected as a specialty most commonly because of factors related to job content, such as types of patient and nature of the work (33). Faulkner and colleagues (34) have concluded that incidents of threat and assault are probably inevitable in most psychiatric careers, and they suggested that psychiatrists should increase their awareness of this danger, consider various response options in advance, and ensure that their practice settings provide easy access to help and escape. Hoag-Apel (35) has suggested appointing a risk assessment team and training staff to prevent violence in health care, for example, by noticing body language, being alert to tone of voice, and avoiding taking anger personally. It has also been shown that reducing staff stress by improving staff's cognitive efficiency and emotional control can lead to reduced violence (36).

Our results showed that psychiatrists had more opportunities to control their jobs and had better team climate compared with other medical specialists. Psychiatrists' jobs include interacting with patients with difficult behaviors, and it can be quite challenging to try to reduce the confrontation of patients with aggressiveness and other difficult behaviors. Thus further improving job resources could be an important way to improve psychiatrists' well-being. For example, job control affects coping strategies, providing flexibility to avoid certain tasks and take breaks to regulate emotional responses (37). Thus opportunities to control one's job may be especially important for psychiatrists, given the challenges of interacting with difficult-to-treat patients. However, two-thirds of British psychiatrists perceived having less influence over their work than they wished (6). For example, greater freedom over start

Table 1

Characteristics of 2,776 Finnish physicians, by specialty

Characteristic	Total (N=2,776)		Psychiatrists (N=305)		Other medical specialists (N=2,478)		p[a]
	N	%	N	%	N	%	
Gender							<.001
Women	1,647	59	211	69	1,440	58	
Men	1,129	41	96	31	1,029	42	
Employment sector							<.001
Hospital	1,309	47	144	48	1,165	47	
Primary care	404	15	29	9	375	15	
Other municipal site of practice	94	3	21	7	73	3	
State office or institution	73	3	18	6	55	2	
University	82	3	6	2	76	3	
Private practice	448	16	40	13	408	17	
Foundation, association, or organization	65	2	9	3	56	2	
Other site	301	11	36	12	265	11	
Specialty							
Psychiatrist	303	11					
Other medical specialist	2,473	89					
Age (M±SD)	49.2±.22		50.6±.56		49.0±.23		.022

[a] Categorical variables were compared by chi square tests, and continuous variables were compared by analyses of variance.

Table 2

Correlations among specialty and other study variables for 2,776 Finnish physicians

Variable	1	2	3	4	5	6	7	8	9
1. Specialty[a]									
2. Gender[b]	.07**								
3. Time pressure	.02	.10**							
4. Patient-related stress	.14**	.05**	.38**						
5. Work interference with family	.02	.15**	.58**	.22**					
6. Job control	.06**	–.17**	–.39**	–.22**	–.28**				
7. Team climate	.05**	–.04*	–.19**	–.10**	–.16**	.37**			
8. Optimism	.00	–.00	–.19**	–.20**	–.14**	.24**	.24**		
9. Psychological distress	.05*	.12**	.37**	.21**	.44**	–.22**	–.20**	–.40**	
10. Job satisfaction	–.06**	–.05**	–.48**	–.31**	–.38**	.44**	.42**	.34**	–.43**

[a] Specialty was coded 0 for other medical specialists and 1 for psychiatrists.

[b] Gender was coded 0 for man and 1 for woman.

*p<.05, **p<.01

Table 3

Estimated marginal means for measures of work-related stress factors and other characteristics among psychiatrists and other medical specialists[a]

Characteristic	Psychiatrists		Other medical specialists					
	M	95% CI	M	95% CI	F	df	p	η^2
Stress factors								
Time pressure	3.18	3.07–3.28	3.12	3.08–3.16	.91	1, 2,489	.339	.000
Patient-related stress	2.70	2.62–2.79	2.30	2.27–2.34	71.04	1, 2,440	<.001	.026
Work interference with family	3.15	3.03–3.26	3.07	3.03–3.11	1.59	1, 2,622	.208	.001
Job resources								
Job control	4.19	4.11–4.28	4.03	4.00–4.06	12.25	1, 2,489	.001	.004
Team climate	3.94	3.85–4.03	3.82	3.79–3.85	5.99	1, 2,463	.015	.002
Well-being								
Psychological distress	1.86	1.79–1.93	1.77	1.74–1.79	5.83	1, 2,685	.016	.002
Job satisfaction	3.91	3.81–4.01	4.07	4.04–4.10	9.52	1, 2,486	.002	.004
Optimism	3.91	3.84–3.99	3.91	3.89–3.94	.00	1, 2,684	.984	.000

[a] The results are based on analyses of covariance. The means have been adjusted for gender, age, and employment sector. Possible scores for all measures range from 1 to 5, with higher scores indicating higher levels of the variable, except for possible scores for psychological distress, which range from 1 to 4.

and finish times, more discretion over how tasks are performed, and autonomous or self-regulated work teams could increase job control (38). Among Swedish and English psychiatrists, it has been found that participation in the work organization is among the important factors for well-being (39).

Team climate also seemed to be an important resource for psychiatrists. A previous study showed that poor work climate was a possible source of stress among physicians (40). Team climate refers to a team's shared perceptions of the quality of teamwork and cooperation (24). For clinical health care teams, the team climate has been improved by enabling team members to increase their own skills while working in an interprofessional team, empowering each team member to feel valued and promoting the effective contribution of employees' own professional expertise to the goals of the team (41). In addition, formal teamwork training focusing on team communication, plan execution, team skill improvement, maintenance of team structure and climate, and problem-solving strategies has been found to be effective in improving the quality of team behaviors (42).

Our results did not show differences between psychiatrists and other medical specialists in time pressure or in work interference with family. Overwork and lack of time have been suggested to be among the important reasons behind the stressful nature of psychiatrists' work (8,9). Our results imply, however, that patients who have difficult behaviors are a very important source of psychological distress among Finnish psychiatrists, at least as compared with results for other medical specialists.

This study relied on self-reported measures, which may lead to problems associated with an inflation of the strengths of relationships and with the common method variance. Because this study was cross-sectional, we cannot draw any causal inferences. It is possible that self-selection of physicians to psychiatry could explain part of our results. Therefore, we also examined the effect of personality, namely optimism, and found no difference in optimism between psychiatrists and other medical specialists. Optimism did not account for the differences between the two groups in psychological distress and job satisfaction. Moreover, although we controlled for age, gender, and employment sector, we cannot rule out the possibility of residual confounding. In addition, we used only a decision authority scale for assessing job control and only a participative-safety scale for assessing team climate; thus the scales did not catch all the aspects of these measures. The generalizability of our findings to psychiatrists from other countries should be attempted cautiously, given that there may be big differences in workload among psychiatrists in different countries. However, it seems that the weekly work hours of Finnish psychiatrists correspond quite well to those of psychiatrists in the United States, for example.

Table 4

Effects of specialty on psychological distress and job satisfaction among 2,776 Finnish physicians[a]

Variable and model	β	t	df	p	R^2
Psychological distress					
A	.04	2.07	10, 2,675	.038	.02
B	.04	2.11	14, 2,440	.035	.32
C	.02	1.44	16, 2,393	.149	.33
Job satisfaction					
A	–.07	–3.32	10, 2,476	.001	.05
B	–.09	–5.47	14, 2,435	<.001	.39
C	–.07	–4.10	26, 2,388	<.001	.43

[a] Each model of the regression analysis was adjusted for a different set of variables, including age, gender, and employment sector (all models); work interference with family, job control, team climate, and optimism (models B and C); and time pressure and patient-related stress (model C).

Conclusions

The study suggests that compared with other physicians, psychiatrists are at high risk of occupational stress. Psychiatrists were less satisfied with their jobs, felt more stressed about patients, and experienced more psychological distress compared with other medical

specialists. However, these stresses were compensated, in part, by more opportunities to control one's job and better team climate. Our results imply that among psychiatrists, high levels of patient-related stress are associated with high levels of psychological distress. However, further studies are needed to support our results and to find means to alleviate burden among psychiatrists and, perhaps, consequently, help to increase the attractiveness of psychiatry as a specialty choice.

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