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ORIGINAL ARTICLE

## Emotionally exhausting factors in general practitioners' work

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### Abstract

**Background.** Emotional exhaustion is central in burnout syndrome and signals its development. General practitioners' (GP) work is emotionally challenging but research on these aspects is lacking. **Objective.** To study the prevalence of emotional exhaustion among GPs and to evaluate how their characteristics and work experiences are associated with emotional exhaustion. **Design and methods.** A questionnaire survey was carried out among GPs in Finland in 2011 in which questions were posed regarding their experience of emotional exhaustion and items related to their work experiences and professional identity. A statement "I feel burnt out from my job" (never, seldom, sometimes, quite often, or often) enquired about emotional exhaustion. Those responding quite often or often were categorized as emotionally exhausted. **Results.** Among the GPs, 68% responded (165/244). Of the respondents, 18% were emotionally exhausted. Emotional exhaustion was associated with older age, longer working history, experiences of having too much work, fear and reports of having committed a medical error, low tolerance of uncertainty in their work, and feeling alone at work. No differences in positive work experiences were found. In logistic regression analysis working experience > 5 years (OR 4.1, 95% CI 1.6–10.8;  $p = 0.0036$ ) and feeling alone at work (OR 2.9, 95% CI 1.2–7.1;  $p = 0.020$ ) predicted emotional exhaustion, having committed a medical error in the past three months predicted it marginally significantly (OR 2.4, 95% CI 1.0–5.9,  $p = 0.057$ ), whereas tolerating uncertainty well protected against it (OR 0.2, 95% CI 0.09–0.7;  $p = 0.0098$ ). **Conclusions.** Emotional exhaustion among GPs was common and associated with longer working history, having committed a medical error, and feelings of isolation at work. GPs should receive more support throughout their careers.

**Key Words:** Burnout, emotional exhaustion, experiences at work, Finland, general practice, general practitioner, medical errors, professional identity, uncertainty

### Introduction

Emotional exhaustion is a chronic state of physical and emotional fatigue [1]. Work-related emotional exhaustion refers to feelings of overextension and exhaustion of one's emotional and physical resources [2] due to excessive job demands [1]. Emotional exhaustion is one dimension of burnout, a multifaceted response to long-term emotional and interpersonal work stress, or to an unfavourable job context or both [3–5]. The other two dimensions of burnout syndrome are depersonalisation and low personal accomplishment [2,4]. However, emotional exhaustion is increasingly accepted as the first stage in the development of burnout, as the key component of the syndrome, and as an indicator of burnout [3,6–9].

Emotional exhaustion and burnout can negatively affect doctors' mental health [10] and job satisfaction [11]. Studies have also shown that emotional exhaustion and burnout may have an impact on job turnover [12] and on patient care [13]. Patients under the care of emotionally exhausted doctors report lower rates of satisfaction with their consultations [11].

Burnout and emotional exhaustion occur among doctors at all stages of their training and professional career and across all specialties [9,12,14–16]. The reported proportions of doctors experiencing high emotional exhaustion range from 15% to 68% [16–19]. However, these proportions depend on the measurement instrument used.

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- GPs' work is emotionally challenging.
- One in five GPs felt emotionally exhausted from work.
- Emotionally exhausted GPs were older and had longer working history than those not emotionally exhausted.
- Emotional exhaustion was associated with poorer tolerance of uncertainty, fear of or actual commitment of a medical error and feeling alone at work.
- Emotionally exhausted GPs did not differ from those not emotionally exhausted in their positive experiences of professional performance.

Several studies have explored the incidence and prevalence rates of emotional exhaustion and burnout among GPs [17,20–25]. A Danish study reported a 13.5% incidence of burnout among GPs during seven-year follow-up [25]. A recent study has calculated an average prevalence of emotional exhaustion among GPs in Europe of 43%, and a corresponding figure for burnout of 31.5% [17]. Emotional exhaustion and burnout among GPs have been associated with working more hours per week, higher perceived stress, lack of work-home balance, and lower income [19,22,26].

Although researchers have defined emotional exhaustion and burnout fairly well and explored their prevalence rates quite extensively, there are still scarce studies focusing on GPs' work-related factors associated with emotional exhaustion. The work of a GP is multifaceted, challenging, and requires a wide range of knowledge and skills [27]. To our knowledge, features such as tolerance of uncertainty, risk of committing medical errors, working alone, or continuous GP-patient relationships have not received any attention.

Our study aimed to determine the prevalence of emotional exhaustion among GPs and to explore how emotional exhaustion is associated with GPs' characteristics, challenging and rewarding work experiences, uncertainty at work, and medical errors.

## Material and methods

### Participants

We included in the study GPs of both sexes, of all ages, and with shorter and longer working experience. We therefore collected our data using a convenience sample. We had contact-doctors in health centres in Southern Finland who shared us with the e-mail addresses of all the doctors working in their health centres. In 2011, we invited these doctors via

e-mail to participate anonymously in a web-based survey; reminders were sent in a second email.

### Questionnaire

We assessed emotional exhaustion with questions from the Maslach Burnout Inventory (MBI) [2]. The MBI is a validated and most common measure for burnout [28,29] and it includes three subscales (emotional exhaustion, depersonalisation, personal accomplishment). However, its length limits its utility in surveys of doctors [28]. Two questions from the MBI, "I feel burnt out from my job", and "I have become more callous toward people since I took job", have shown strong associations with burnout among medical professionals [28].

In our study emotional exhaustion was inquired about, posing "I feel burnt out from my job". GPs responding they feel burnt out from their job *quite often* or *often* were considered as emotionally exhausted. The other MBI items from the subscale of emotional exhaustion were "I feel frustrated by my job", "I feel I have to work too hard at my job", and "I feel my job is emotionally draining". We used the MBI depersonalisation item "I think I've become more callous towards people since I took this job". GPs' personal accomplishment and involvement at work [30] and positive work experiences were asked posing "I feel I can positively influence my patients' lives through my work", "I can use my professional skills comprehensively at work", and "I feel my patients trust me". All of these items had the response options *never*, *seldom*, *sometimes*, and *quite often* or *often*. The responses were categorised into two groups: *quite often* or *often* for yes, and *never*, *seldom*, or *sometimes* for no.

We used questions from our previous survey of fifth-year medical students [31] to enquire about tolerance of uncertainty, concerns about medical errors, and social support at work. These questions were "How do you tolerate uncertainty when making medical decisions?" with the answer options well, quite well, or poorly, "Are you afraid of committing a medical error?" and "Have you committed a medical error in the past three months?" both with options yes or no. To enquire about social aspects of their working life we posed the item "I feel alone at my work" with response options *never*, *sometimes*, *often*, or *always*. *Often* or *always* were grouped as "feels alone at work" and *never* or *sometimes* as "does not feel alone at work".

The socio-demographic variables of our questionnaire included age, gender, marital status, length of working experience, work position, and specialisation.

We used SPSS™ version 20 (IBM Corp, Armonk, NY, USA) to perform the statistical analysis. The categorical variables were compared with the Pearson

chi-square test or Fisher's exact test when appropriate. The Mann-Whitney test served to test non-normally distributed continuous variables. We used logistic regression analysis to explore which factors predicted emotional exhaustion among the GPs.

## Result

Of the 244 GPs who received the questionnaire, 165 (68%) responded and participated in the study. Of the responders, 30 (18%) were emotionally exhausted by their work. The mean age of those who were emotionally exhausted was higher than the mean age of those who were not emotionally exhausted (43.3 years vs. 38.5 years,  $p = 0.029$ ). GPs with more than five years of working experience more often felt emotionally exhausted than did those with less working experience (67% vs. 44%,  $p = 0.028$ ). Gender, marital status, work position, or specialisation showed no association with emotional exhaustion (Table I).

The proportion of emotionally exhausted GPs who were also frustrated with their job (17% vs. 4%,  $p < 0.001$ ), felt they had to work too hard (80% vs. 21%,  $p < 0.001$ ), or were emotionally drained by their work (33% vs. 7%,  $p < 0.001$ ) was higher than the same proportion of GPs who were not emotionally exhausted, and marginally significantly higher in GPs who felt they were becoming callous towards other people (24% vs. 12%,  $p = 0.087$ ).

The groups showed no differences in their uncertainty about their own professional skills. A larger proportion of emotionally exhausted GPs than of non-exhausted GPs (10% vs. 2%,  $p = 0.040$ ) tolerated uncertainty poorly. Emotionally exhausted GPs also felt alone at work more often (50% vs. 26%,  $p = 0.010$ ) and were more often afraid of committing a medical error (83% vs. 54%,  $p = 0.003$ ) and also a

larger proportion of them reported having committed a medical error in the past three months than did those who were not emotionally exhausted (59% vs. 38%,  $p = 0.042$ ). The emotionally exhausted GPs showed no differences from those who were not emotionally exhausted in how they felt about their ability to positively influence other people's lives through their work, whether their patients trust them, or their experiences of using their professional skills comprehensively at work (Table II).

Logistic regression analysis showed that working experience  $> 5$  years (OR 4.1, 95% CI 1.6–10.8;  $p = 0.004$ ) and feeling alone at work (OR 2.9, 95% CI 1.2–7.1;  $p = 0.020$ ) predicted emotional exhaustion, and having committed a medical error in the past three months predicted it marginally significantly (OR 2.4, 95% CI 1.0–5.9,  $p = 0.057$ ) whereas tolerating uncertainty protected well against emotional exhaustion (OR 0.2, 95% CI 0.09–0.7;  $p = 0.010$ ), while gender (OR 1.0, 95% CI 0.34–2.8;  $p = 0.99$ ) showed no association with emotional exhaustion in this model (Table III).

## Discussion

One in five of the GPs felt emotionally exhausted. These GPs were older and had longer working experience than those who were not exhausted. Emotional exhaustion was associated with a poorer tolerance of uncertainty and fear of medical error and actually committing a medical error in the recent past, and feeling alone at work. The emotionally exhausted GPs showed no differences from those not emotionally exhausted in their positive experiences of professional performance.

The strengths of our study are its high response rate from a sample of both experienced and young doctors working in primary health care. Respondents, who had completed our questionnaire meticulously,

Table I. Associations of the characteristics of GPs with emotional exhaustion.

	Emotionally exhausted GPs* (n = 30)	Not emotionally exhausted GPs (n = 135)	p-value**
Mean age, years (SD)	43.3 (11.9)	38.5 (10.1)	0.029
Gender, female, n (%)	22 (73.3)	101 (75.4)	0.820
Married, n (%)	24 (82.8)	111 (82.2)	0.950
Work experience over 5 years, n (%)	20 (66.7)	60 (44.4)	0.028
Work position/specialization, n (%)			0.390
Junior doctor	9 (30.0)	29 (21.5)	
Specialist doctor***	11 (36.7)	38 (28.1)	
Trainee in general practice	7 (23.3)	52 (38.5)	
Other	3 (10.0)	16 (11.9)	

Notes: \*The question "I feel burnt out from my job" with answer options *never*, *seldom*, *sometimes*, and *quite often or often* enquired about emotional exhaustion. Those responding *quite often* or *often* were considered emotionally exhausted. \*\*Chi-square test or Fischer's exact test was used to compare categorical variables and Mann-Whitney U-test to compare non-normally distributed continuous variables; p-values  $< 0.05$  were considered significant. \*\*\*Trained qualification in general practice including also two specialists in general internal medicine.

Table II. Emotional exhaustion in the work and professional experiences of GPs.

	Emotionally exhausted GPs* (n = 30)	Not emotionally exhausted GPs (n = 135)	p-value*****
Emotional exhaustion (modified from MBI**):			
I feel frustrated by my job*** ( <i>quite often or often</i> ), n (%)	5 (16.7)	5 (3.7)	0.007
I feel I have to work too hard at my job *** ( <i>quite often or often</i> ), n (%)	24 (80.0)	28 (20.7)	<0.001
I feel my job is emotionally draining*** ( <i>quite often or often</i> ), n (%)	10 (33.3)	10 (7.4)	<0.001
Depersonalisation (modified from MBI**):			
I think I've become more callous towards people since I took this job*** ( <i>quite often or often</i> ), n (%)	7 (24.1)	16 (11.9)	0.087
Tolerance of uncertainty, medical errors and isolation at work:			
I feel uncertainty about my own professional skills*** ( <i>quite often or often</i> ), n (%)	8 (26.7)	22 (16.3)	0.180
I tolerate uncertainty well, n (%)	6 (20.0)	59 (43.7)	0.013
quite well, n (%)	21 (70.0)	73 (54.1)	
poorly, n (%)	3 (10.0)	3 (2.2)	
I am afraid of committing a medical error**** ( <i>yes</i> ), n (%)	25 (83.3)	72 (54.1)	0.003
I have committed a medical error in the past 3 months**** ( <i>yes</i> ), n (%)	17 (58.6)	51 (38.1)	0.042
I feel alone at work***** ( <i>often or always</i> ), n (%)	15 (50.0)	35 (25.9)	0.010
Personal accomplishment and positive aspects at work:			
I feel I can positively influence my patients' lives through my work*** ( <i>quite often or often</i> ), n (%)	19 (63.3)	105 (77.8)	0.100
I feel my patients trust me*** ( <i>quite often or often</i> ), n (%)	24 (80.0)	123 (91.1)	0.077
I can use my professional skills comprehensively at work*** ( <i>quite often or often</i> ), n (%)	21 (70.0)	111 (82.8)	0.110

Notes: \* The question "I feel burnt out from my job" with answer options *never, seldom, sometimes*, and *quite often or often* enquired about emotional exhaustion. Those responding *quite often or often* were considered emotionally exhausted. \*\*MBI = Maslach Burnout Inventory. \*\*\*Answer options: *never, seldom, sometimes, quite often or often*. \*\*\*\*Answer options: *yes, no*. \*\*\*\*\*Answer options: *never, sometimes, often, always*. \*\*\*\*\*p-values were based on the Pearson chi-square test; p-values < 0.05 were considered significant.

represented GPs of all ages, both genders, and with both shorter (< 5 years) and longer (5 or more years) of working experience in health centres. Studies of emotional exhaustion among GPs are few, as many studies focus on hospital doctors or on young doctors. The use of single MBI items for measuring emotional exhaustion [2,28] was feasible but it should be kept in mind that burnout is a multifaceted construct. In addition, we did not use the original MBI seven-point Likert scale with the items. However, a Likert scale with four options was more feasible than with seven options when we piloted our questionnaire and considered the hurried responders. A four-point Likert scale is well validated and it discriminates

responders as well as the seven-point scale when the item question is understandable.

The Finnish context may limit the generalisability of the results. The small sample size also reduces the statistical power of the analysis. The biases of self-reporting surveys such as the possibility of variation in interpretation and of non-disclosure should also be considered. The anonymity of the survey, however, may have enhanced the participants' sincerity in sharing their experiences. The cross-sectional nature of our study does not permit us to conclude causal relationships.

In our study, the prevalence of GPs' emotional exhaustion was 18%. Similar figures have been reported among Swiss primary care doctors (19%) [22], among French and Australian trainees in general practice (16%) [26,32], and among Danish GPs (14%) [25]. In a study from the UK, 46% [33] and, in another study from Serbia, 58% [19] of GPs experienced high emotional exhaustion. However, comparing the prevalence of GPs' emotional exhaustion is challenging because the definitions, measurement instruments, and target populations vary from study to study.

We found that GPs who were emotionally exhausted were older and more experienced than their non-exhausted colleagues, but they showed no

Table III. Logistic regression analysis for emotional exhaustion.

Variable	OR	95% confidence interval	p-value
Gender	1.0	0.34–2.8	0.990
Work experience > 5 years	4.1	1.6–10.8	0.004
Tolerates uncertainty well	0.2	0.09–0.7	0.010
Has committed a medical error in the past 3 months	2.4	1.0–5.9	0.057
Feels alone at work	2.9	1.2–7.1	0.020



differences with respect to gender, marital status, specialization, or work position. In line with our results, emotional exhaustion among GPs in the other studies is independent of gender [10,25]. However, that older and more experienced GPs are more often emotionally exhausted is different from what is suggested in other literature. Many studies have identified emotional exhaustion and burnout among medical residents [9,26,32,34] and some have shown an association with younger GPs [17]. Whether GPs are at higher risk for emotional exhaustion in the course of their careers deserves further investigation. Studies have suggested that job satisfaction among GPs is low [35], and intentions to leave the job are common among GPs [36,37]; emotional exhaustion has been associated with voluntary job turnover [1].

Emotionally exhausted GPs more often felt frustrated with their jobs, emotionally drained from their work, and overworked in their jobs than did GPs who did not experience emotional exhaustion. This was as expected, as items relating to emotional exhaustion from the original MBI have been shown to associate with each other [28]. An item from depersonalisation, "Feelings of becoming callous towards other people", showed a marginally significant association with emotional exhaustion. Depersonalisation has been viewed as being on an equal footing with emotional exhaustion in the burnout literature [2]. It correlates moderately with emotional exhaustion [2].

Emotionally exhausted GPs tolerated uncertainty less well and more often feared committing and had committed medical errors than did those who were not emotionally exhausted. Emotional exhaustion and burnout in doctors have been associated with the inclination to self-report suboptimal patient care [9]. According to the literature, emotionally exhausted employees exhibit diminished job performance [1]. Our finding that emotionally exhausted GPs have committed a medical error more often than those not emotionally exhausted is a signal of suboptimal performance and risk of patient safety. Even though this item was only marginally significant in the logistic regression model it warrants more studies on this area.

Emotionally exhausted GPs more often felt alone at work than did GPs who were not emotionally exhausted. Some studies have shown that emotionally exhausted individuals use maladaptive coping mechanisms [38] and overemphasize such mechanisms as avoidance or withdrawal [1,39]. Feelings of being alone at work deserve attention because of their possible effect on the attractiveness of being a GP. Other research has shown that working alone without backup from co-workers is a factor that

discourages doctors from working in primary care [40].

We found no significant differences in how emotionally exhausted GPs and those not emotionally exhausted felt about their ability to influence their patients' lives through their work or in their feelings as to whether their patients trust them. These are dimensions of job engagement, which is considered a positive antipode of job burnout [30]. Job engagement consists of energy, involvement, and efficacy [30], and correlates positively with experiences of significance and pride at work [41]. However, our study revealed a trend in which emotionally exhausted doctors scored lower on job engagement items than did GPs who were not emotionally exhausted. The small sample size may have diluted this effect.

## Conclusions

Emotional exhaustion among GPs was associated with longer working history, having committed a medical error, and feelings of isolation at work. The emotional exhaustion and consequently burnout can be a risk for GPs during their whole careers. Clinical supervision and sharing experiences in groups might be one means to support GPs' professional well-being.

## Declaration of interest

There are no conflicts of interest in connection with the paper. The authors alone are responsible for the content and writing of the paper.

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