BMJ Open Burnout, coping strategies and help-seeking in general practitioners: a two-wave survey study in Denmark

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To cite: Pedersen AF, Vedsted P. Burnout, coping strategies and help-seeking in general practitioners: a two-wave survey study in Denmark. *BMJ Open* 2022;**12**:e051867. doi:10.1136/bmjopen-2021-051867

► Prepublication history for this paper is available online. To view these files, please visit the journal online (<http://dx.doi.org/10.1136/bmjopen-2021-051867>).

Received 06 April 2021

Accepted 13 January 2022

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ABSTRACT

Objective Work pressure remains an issue among general practitioners (GPs). Nevertheless, GPs rarely seek help for symptoms of burnout. The aim of this study was to examine whether burnout level was associated with coping strategies and help-seeking behaviour during time pressure.

Design A two-wave nationwide survey (2016 and 2019) based on questionnaire data from 1059 GPs.

Setting Primary care in Denmark.

Methods Burnout was measured by the Maslach Burnout Inventory (MBI), whereas coping strategies and help-seeking behaviour were measured by questions developed for the study. A composite score of quartile points was calculated for the three subscales of the MBI subscales. A score ≥ 9 was categorised as high level of burnout, and the composite score of 2019 was used as outcome. Data were analysed with logistic regression adjusted for sex, age and composite burnout score in 2016.

Results High scores in 2016 on four key factors were associated with increased risk of high composite burnout score in 2019. These factors were compromising work ($OR_{adjusted}=2.27$, 95% CI=1.45 to 3.56), postponing decisions ($OR_{adjusted}=1.53$, 95% CI=1.04 to 2.24), delaying tasks ($OR_{adjusted}=1.61$, 95% CI=1.16 to 2.25) and reducing breaks ($OR_{adjusted}=1.46$, 95% CI=1.01 to 2.11) during time pressure. A lower risk of high composite burnout score was seen in 2019 in GPs who had sought help compared with GPs who did not seek help despite a perceived need ($OR_{adjusted}=0.59$, 95% CI=0.35 to 0.97).

Conclusion Certain coping strategies used in 2016 were associated with increased risk of high burnout score in 2019, whereas lower risk of high burnout was seen in the GPs seeking help. These findings are relevant to reduce burnout rates among GPs.

INTRODUCTION

Burnout is a syndrome involving emotional exhaustion, depersonalisation and reduced personal accomplishment.¹ Burnout is an area of major interest in the field of primary care, as the prevalence rates in general practitioners (GPs) are high and increasing.^{2–5}

Physician burnout has been associated with negative impact on patient care, the healthcare system and physician health.⁶ Burnout has also been linked to increased risk of medical errors among physicians from

Strengths and limitations of this study

- This nationwide two-wave survey used a valid register for identification of participants and obtained satisfactory response rates (51% in 2016 and 56% in 2019).
- Data were linked on an individual level through the civil registration number, while securing the anonymity of respondents.
- Burnout was measured by a validated scale, and the scoring approached burnout as a multidimensional construct.
- Coping strategies were assessed by questions developed for the purpose of this study, and these items have not been validated elsewhere.
- Merging the two surveys reduced the number of general practitioners (GPs) included in the analyses, and selection bias might have occurred if burned-out GPs abstained from completing one of the surveys.

multiple medical specialities.⁷ Among GPs, burnout has been associated with increased frequency of hospitalisation of patients for ambulatory care sensitive conditions⁸ and higher likelihood of patients to change GPs; the latter can be seen as a proxy for patient satisfaction with provided care.⁹ Physicians with burnout have higher risk of alcohol dependence⁴ and motor vehicle crashes.¹⁰

Burnout rates have been shown to differ across medical specialities. For instance, lower burnout rates have been reported in occupational medicine, whereas higher burnout rates are seen in emergency medicine and general internal medicine.¹⁰ Physicians on incentivised or performance-based income have been found to be more prone to burnout compared with salaried physicians.¹⁰ Additionally, inefficient work processes and long working hours have been associated with high burnout rates. However, since most research on work factors has been designed as cross-sectional studies, the direction of the causality is difficult to establish. Very little is currently known about the role of individual factors in the development of

burnout. Studies have documented that female physicians have higher risk of burnout compared with male physicians and that younger physicians (<55 years) have higher risk of burnout compared with older physicians.¹⁰ Moreover, some individual characteristics, such as the tendency to experience negative emotions like anger, anxiety and depression have been linked to burnout, but the relationship between causes and effects has not been established clearly.¹¹ Current models of burnout emphasise the interaction between the individual and their environments.¹¹ Likewise, according to the transactional model of stress and coping, psychological stress emerges when an individual perceives external demands to exceed one's available resources.¹² On average, more than three problems are addressed during a visit in primary care. Furthermore, the number of problems addressed affects the GP's perceived workload due to the strict time constraints.¹³ This suggests that time pressure is a common working condition in primary care. Nevertheless, only few studies have explored the significance of strategies used to cope with lack of time and the association with burnout. Furthermore, some GPs with symptoms of burnout are reluctant to seek help, and they often practice self-treatment.¹⁴ The consequences of this are unclear.

This study is based on questionnaire data from a nationwide GP survey, which was conducted in Denmark in 2016 and 2019. The objective was to explore whether coping strategies under time pressure (in 2016) and help-seeking behaviour (during 2016–2019) were associated with burnout level in GPs (in 2019).

METHODS

Setting

In Denmark, 98% of citizens are listed with a specific general practice, which they must consult for medical advice. The Danish healthcare system is tax-funded, and Danish GPs act as gatekeepers to the specialised healthcare system. GPs in Denmark work as independent contractors for the public health service, and they are remunerated through a mixture of fee-for-service (approx. 75%) and capitation (approx. 25%). All practicing GPs are organised in the Organisation of General Practitioners in Denmark (PLO).

Study population

In May 2016, we invited all GPs in Denmark to participate in a questionnaire survey focussing on their working conditions and mental well-being. Of 3350 eligible GPs, 1697 responded (response rate: 50.2%). The survey has been described in detail elsewhere.⁵ In November 2019, the questionnaire survey was repeated. Of 3364 eligible GPs, 1866 responded (response rate: 55.5%). The 1059 GPs responding to both questionnaires were included in the present study.

Data collection

In May 2016 and November 2019, all Danish GPs listed with a valid email address at PLO received an email with a link to an electronically administered questionnaire. The questionnaire surveys were announced approx. 1 week before in a PLO newsletter. Non-respondents received a reminder after 2 weeks and after 3 (2019) and 4 weeks (2016 and 2019). The link to the questionnaire was personal and contained a unique serial number. The research group collected the survey data and transferred the data to Statistics Denmark. PLO provided data on GPs' sex, age and civil registration number (CRN), which is a unique personal identification number assigned to all Danish citizens.¹⁵ Data were linked by the CRN, which was anonymised prior to analysis.

Burnout

Burnout was measured by the 22-item Maslach Burnout Inventory—Human Services Survey (MBI-HSS), which consists of three subscales corresponding to three burnout dimensions: emotional exhaustion (9 items), depersonalisation (5 items) and personal accomplishment (8 items). The three subscales of the MBI-HSS should not be combined to form a single burnout scale.¹ Thus, to handle burnout as a multidimensional construct, we categorised each subscale according to quartiles of the subscale sum scores (reversed score for personal accomplishment).¹⁶ One point was assigned for subscale scores in the first quartile, whereas two, three or four points were assigned for scores in the second, third and fourth quartiles. The quartile points were added up, and the composite score was categorised into two groups: 3–8 points (low/middle composite burnout score) and 9–12 points (high composite burnout score). The English version of the MBI-HSS was translated into Danish and culturally adapted in accordance with the WHO guidelines.¹⁷

Coping strategies used under time pressure were measured in 2016 by seven items. These items had been developed for the study on the basis of interviews with GPs (when short of working time: (1) I stay longer, (2) I shorten the consultations, (3) I postpone decisions and arrange another consultation, (4) I reduce the number of tasks, (5) I delay tasks, (6) I shorten my breaks and (7) I compromise on the quality of my work). Each item was scored on a 5-point Likert scale ranging from 1 ('To a very high degree') to 5 ('To a very small degree'). For this study, scores were categorised into two groups: 'high users' (scores 1 and 2) and 'low users' (scores 3–5).

In the 2016 survey, two items assessed holiday duration and presenteeism (ie, working while sick). Respondents were asked: 'How many consecutive weeks does your main annual holiday usually last?' The following response categories were used: 1 week, 2 weeks, 3 weeks and 4 weeks or more. In this study, these responses were categorised into two groups: '3 weeks or longer' and 'less than 3 weeks'. Respondents were also asked: 'How many days did you go to work sick in the past 12 months?' The following response categories were used: 0 days, 1–2 days,

3–6 days, 1–4 weeks and more than 4 weeks. In this study, the responses were categorised into two groups: '1 week or longer' and 'less than 1 week'.

In the 2019 survey, one item assessed the help-seeking behaviour: 'Have you received any help for distress and/or mental illness during the past three years?' The provided response categories were: 'I did not need to seek help', 'I have not sought help although I might have benefitted from it', 'I have received help from a peer support group', 'I have received help from a GP' and 'I have received help from a psychologist and/or psychiatrist'. Due to small numbers, support from peers, GP and psychologist/psychiatrist was collapsed and treated as a single entity: 'received help'.

Statistical methods

A composite burnout score ≥ 9 (high composite burnout score) was used as the outcome in 2019. Associations between a high composite burnout score and four independent variables (coping strategies, duration of holiday, presenteeism and help-seeking) were investigated by logistic regression analyses. Coping strategies were measured by seven items, which have not been validated as a psychometric scale. Therefore, the associations were tested individually. Both unadjusted and adjusted analyses were carried out; we adjusted for the influence of sex, age (<45 years, 46–54 years and ≥ 55 years) and composite burnout score in 2016. As cut-off values for burnout scores are controversial, a sensitivity analysis was conducted to repeat the analyses with a composite score >11 as outcome. A p value of ≤ 0.05 was considered statistically significant. Analyses were performed with Stata V.16.1.

Patient and public involvement

GP representatives were involved in refining the questionnaire survey in 2016. It was difficult to involve GPs in other areas of the study design due to data protection restrictions. The results of the study will be disseminated to GPs at national conferences, to medical students through teaching and to the public through social media and podcasts. No patients were involved in the study.

RESULTS

Participants

A total of 1059 GPs responded to both questionnaires; the majority were women (59.6%) and middle aged (46–54 years; 39%). Approximately 30% of the GPs were young (≤ 45 years) and senior (≥ 55 years). The descriptive data are shown in table 1.

Combining the composite burnout scores from 2016 and 2019 produced four groups: 593 GPs (56.0%) with low composite burnout score in both 2016 and 2019 ('resilient'), 102 GPs (9.6%) with low score in 2016 and high score in 2019 ('vulnerable'), 114 GPs (10.8%) with high score in 2016 and low score in 2019 ('recovered') and 250 GPs (23.6%) with high score in both 2016 and

Table 1 Characteristics of the GPs included in the study (n=1059)

GP characteristics	n (%)
Sex	
Female	631 (59.6)
Male	428 (40.4)
Age in 2016	
≤ 45 years	324 (30.6)
46–54 years	413 (39.0)
≥ 55 years	322 (30.4)
Duration of main holiday in 2016	
<3 weeks	133 (12.6)
≥ 3 weeks	926 (87.4)
Presenteeism in 2016 (worked for ≥ 1 week despite illness)	
No	972 (91.8)
Yes	87 (8.2)
Coping strategies when pressed for time at work (2016)	
I stay longer	
No	315 (29.8)
Yes	744 (70.3)
I shorten consultations	
No	878 (82.9)
Yes	181 (17.1)
I postpone decisions and arrange another consultation	
No	863 (81.5)
Yes	196 (18.5)
I reduce the number of tasks	
No	867 (81.9)
Yes	192 (18.1)
I delay tasks	
No	743 (70.2)
Yes	316 (29.8)
I shorten the breaks	
No	287 (27.1)
Yes	772 (72.9)
I compromise on the quality of my work	
No	926 (87.4)
Yes	133 (12.6)
Help-seeking during the past 3 years (2019)	
I have not needed to seek help	700 (66.1)
I have not sought help even though I might have benefitted from it	168 (15.9)

Continued

Table 1 Continued

GP characteristics	n (%)
I have received help from peer support group, GP, psychologist and/or psychiatrist	185 (17.5)
Composite burnout score in 2016	
3–4 (low)	210 (19.8)
5–6 (low)	244 (23.0)
7–8 (low)	241 (22.8)
9–10 (high)	209 (19.7)
11–12 (high)	155 (14.6)
Composite burnout score in 2019	
3–4 (low)	229 (21.6)
5–6 (low)	248 (23.4)
7–8 (low)	230 (21.7)
9–10 (high)	193 (18.2)
11–12 (high)	159 (15.0)
Burnout categories	
Resilient (low composite scores in 2016 and 2019)	593 (56.0)
Vulnerable (low composite score in 2016, high in 2019)	102 (9.6)
Recovered (high composite score in 2016, low in 2019)	114 (10.8)
Chronic (high composite scores in 2016 and 2019)	250 (23.6)

GP, general practitioner.

2019 ('chronic burnout'). The odds of having a high composite burnout score in 2019 were 12 times higher among those with a high composite burnout score in 2016 compared with those with a low composite burnout score ($OR_{adjusted}=12.65$, 95% CI=9.30 to 17.21) in 2016 (see [table 2](#)).

Coping when short on time on work

In 2016, the most frequently used coping strategy in case of time pressure was staying longer at work (reported by 70.3%). This strategy was not associated with increased risk of reaching a high composite burnout score in 2019. The least frequently used coping strategy was compromising the quality of the work (reported by 12.6%). When controlling for burnout level in 2016, we found that compromising the quality of the work in 2016 was significantly associated with increased risk of reaching a high composite burnout score in 2019 ($OR_{adjusted}=2.27$, 95% CI=1.45 to 3.56). Likewise, increased risk of high composite burnout score in 2019 was also seen for postponing decisions and arranging a new consultation with the patient ($OR_{adjusted}=1.53$, 95% CI=1.04 to 2.24), delaying tasks ($OR_{adjusted}=1.61$, 95% CI=1.16 to 2.25) and reducing breaks ($OR_{adjusted}=1.46$, 95% CI=1.01 to 2.11) in 2016. Shortening the length of consultations and reducing the

number of tasks were not associated with increased risk of reaching a high composite burnout score in 2019.

Holiday duration, presenteeism and help-seeking

In 2016, 12.6% of the GPs reported that their main holiday usually consisted of less than three consecutive weeks. Only 8.2% reported in 2016 that they had worked while sick for 1 week or more. Neither short holiday ($OR_{adjusted}=0.83$, 95% CI=0.53 to 1.33) nor presenteeism ($OR_{adjusted}=1.52$, 95% CI=0.89 to 2.60) reported in 2016 was associated with risk of high composite burnout score in 2019 (see [table 2](#)).

In 2019, 700 GPs (66.1%) reported that they did not need to seek help during the past 3 years due to poor psychological well-being. Another 168 (15.9%) reported that they had not sought help although they might have benefitted from support, and 185 (17.5%) had sought help from others, for example, peer support group, psychologist or psychiatrist. GPs who had sought help had a lower risk of a high composite burnout score ($OR_{adjusted}=0.59$, 95% CI=0.35 to 0.97). This lower risk was also seen for GPs with no perceived need for help ($OR_{adjusted}=0.29$, 95% CI=0.19 to 0.44) (see [table 2](#)). Among GPs who had sought help, 43.8% had a high composite burnout score in 2019 (see [table 2](#)).

Sensitivity analysis

All sensitivity analyses pointed in the same direction for associations between coping strategies used in 2016 and high composite burnout score (11–12) in 2019. The adjusted OR for delaying tasks was reduced from 1.61 to 1.35, and the p value increased above statistical significance. The adjusted OR for shortening of breaks increased from 1.46 to 1.53, but the reduced number of observations caused wider CIs, and the association was no longer statistically significant. The adjusted OR for reducing the number of tasks decreased from 0.97 to 0.56 and became statistically significant. The results for holiday duration, presenteeism and help-seeking were highly comparable to the results of the main analyses.

DISCUSSION

Summary of findings

This study shows that the coping strategies employed by GPs during time pressure at work are associated with their composite burnout score at 3 years later. The association was also seen when we adjusted for baseline burnout status, which is likely to affect the choice of coping strategy. Compromising the quality of work, delaying tasks, postponing decisions and arranging a new consultation with the patient and reducing breaks (length or number) were all coping strategies that prospectively increased the risk burnout (ie, high composite score). Staying longer at work was not associated with the risk of a high composite burnout score. Shortening consultations was significantly associated with the risk of a high composite burnout score in the unadjusted analysis, but not in the adjusted

Table 2 Summary of logistic regression analyses (n=1059)

	High composite burnout score (9–12) in 2019				
	Unadjusted			Adjusted*	
	n (%)	OR	95% CI	OR	95% CI
Composite burnout score in 2016					
3–8 (low)	102 (14.7)	1		1	
9–12 (high)	250 (68.7)	12.75	9.40 to 17.30	12.65	9.30 to 17.21
Sex					
Female	210 (33.3)	1		1	
Male	142 (33.2)	1.00	0.77 to 1.29	0.87	0.63 to 1.19
Age in 2016					
≤45 years	122 (37.7)	1		1	
46–54 years	145 (35.1)	0.90	0.66 to 1.21	0.90	0.62 to 1.29
≥55 years	85 (26.4)	0.59	0.42 to 0.83	0.73	0.49 to 1.08
Duration of main holiday in 2016					
3 weeks or longer	307 (33.2)	1		1	
<3 weeks	45 (33.8)	1.03	0.70 to 1.51	0.83	0.53 to 1.33
Presenteeism, 2016					
No	309 (31.8)	1		1	
Yes	43 (49.4)	2.10	1.35 to 3.26	1.52	0.89 to 2.60
Coping strategies when pressed for time at work in 2016					
I stay longer					
No	100 (31.8)	1		1	
Yes	252 (33.9)	1.10	0.83 to 1.46	1.17	0.83 to 1.64
I shorten consultations					
No	275 (31.2)	1		1	
Yes	77 (42.5)	1.62	1.17 to 2.25	1.16	0.78 to 1.72
I postpone decisions and arrange another consultation					
No	268 (31.1)	1		1	
Yes	84 (42.9)	1.67	1.21 to 2.89	1.53	1.04 to 2.24
I reduce number of tasks					
No	292 (33.7)	1		1	
Yes	60 (31.2)	0.90	0.64 to 1.25	0.97	0.64 to 1.45
I delay tasks					
No	222 (29.9)	1		1	
Yes	130 (41.1)	1.64	1.24 to 2.15	1.61	1.16 to 2.25
I shorten the breaks					
No		1		1	
Yes		2.02	1.48 to 2.76	1.46	1.01 to 2.11
I compromise on the quality of my work					
No	270 (29.2)	1		1	
Yes	82 (61.7)	3.91	2.68 to 5.70	2.27	1.45 to 3.56
Help-seeking during the past 3 years (2019)					

Continued

Table 2 Continued

	High composite burnout score (9–12) in 2019				
	n (%)	Unadjusted		Adjusted*	
		OR	95% CI	OR	95% CI
I have not sought help even though I might have benefitted from it	97 (57.7)	1		1	
I have not needed to seek help	173 (24.7)	0.24	0.17 to 0.34	0.29	0.19 to 0.44
I have received help from peer support group, GP, psychologist and/or psychiatrist	81 (43.8)	0.57	0.37 to 0.87	0.59	0.35 to 0.97

Values in bold indicate statistically significant results.

*Adjusted for sex, age and composite burnout score in 2016.

GP, general practitioner.

analysis. An interesting finding was that the risk of a high composite burnout score more than tripled in the GPs who did not seek help (despite awareness of potential benefits) compared with the GPs who reported no need to seek help. Notably, the GPs who did seek help still had two times the risk of a high composite burnout score compared with the GPs reporting no need for help.

Comparison with existing literature

Burnout was measured by the MBI-HSS, which is a validated scale. No well-established cut-off values exist to determine the negative and positive levels of the MBI-HSS.¹⁸ To evaluate burnout as a multidimensional construct, we used a composite score adding up points corresponding to the quartile of each subscale. This composite score of the MBI-HSS has previously been associated with higher likelihood of patients to change GPs¹⁶ and with hospitalisations among listed patients for ambulatory care sensitive conditions.⁸

We found that reducing the number of breaks and/or the duration of breaks significantly increased the risk of a high composite burnout score. This agrees with the findings from a qualitative study of GPs, which identified compulsory daily coffee breaks as a strategy to promote well-being,¹⁹ and with another qualitative study of physicians in different specialities, which also highlighted ritualised time-out periods as an effective strategy to relieve stress.²⁰ However, an intervention study found no evidence to support that 10 min breaks reduce perceived stress in hospital nurses, but the included nurses were monitored for only 4 days.²¹

Staying longer at work when short of time was a common coping strategy, and this was not related to increased risk of a high composite burnout score. This finding agrees with former findings revealing that many GPs dealing with increasing workload use remote access to complete tasks from home, and this enables them to deal with high workload without compromising patient care.²²

Strengths and limitations

A major strength of this two-wave survey is the use of a valid register for identification of participants in both

2016 and 2019, which minimised the risk of sampling bias. The response rates in the two surveys were 50% and 56%, respectively. These are satisfactory figures as response rates on employee satisfaction surveys are often below 40%.²³ In 2016, we compared respondents with non-respondents and found that caring for a higher number of elderly patients, a higher number of patients with comorbidity and a higher number of socially deprived patients were factors associated with non-response.²⁴ This suggests that GPs facing greater practice demands may have been less likely to take out time to respond to the questionnaire survey. Thus, the proportion of GPs experiencing high levels of burnout and stress may be underestimated, at least in the 2016 survey.

A limitation of the study was the use of self-report measures to assess coping strategies. The coping strategies were assessed by questions developed for the purpose of this study, and they have not been subjected to further validation. Coping strategies and burnout symptoms were assessed in the same questionnaire in 2016. Symptoms of burnout may have influenced the choice of coping strategies or may have caused recall bias. When short of time in practice, the opportunities for action here and now are limited, and none of the opportunities may actually be good. This also applies to the listed coping strategies in the survey, which could all be termed 'emergency solutions'. Another limitation is the risk of selection bias due to the combination of the two surveys, which diminished the number of GPs in the analyses. Additionally, there might be a selection of the less severely burned out GPs between the two surveys, which would tend to underestimate the associations.

Interpretation of results

Time pressure in primary care is very common.²⁵ Delaying tasks and postponing decisions by arranging another consultation when pressured for time significantly increased the risk of a high composite burnout score. These coping strategies may have short-term stress-buffering effects, but they may also cause long-term suffering. Problems often become less manageable

over time, and the stress is supplemented with feelings of self-blame and shame for not having solved the problem before. The escalating distress due to avoidance of an issue has been termed ‘an avalanche of ignoring’.²⁶

Compromising on quality of work was the coping strategy most strongly related to the risk of having a high composite burnout score; this coping strategy increased the risk more than two times, even after adjustments for several factors, including baseline burnout score. Studies have shown that low perfectionism protects against work-related distress²⁷ and that personality traits such as high (idealistic) expectations of self and high ambitions are risk factors for being a ‘self-burner’.²⁸ Hence, on the one hand, the increased risk of a high burnout score seen when compromising on quality during time pressure could reflect that many GPs desire to deliver high-quality healthcare to their patients. On the other hand, we have previously revealed an association between multimorbidity level in the listed patient population and risk of burnout in the GP.²⁹ These findings could suggest that the high patient flow in general practice is stressful because the allocated time slots are often too short to properly deal with the complex health needs in the patient. Consequently, a feeling of inadequacy will often lead to stress, regardless of personality.

When we adjusted for baseline burnout scores, higher risk of a high composite burnout score in 2019 was seen in the GPs reporting not to have sought help during the past 3 years, although they believed that they might have benefited from it, compared with the GPs who had sought help. Research has revealed that physicians often hesitate to seek medical help, especially for mental health issues.³⁰ Physicians with health problems often find it difficult to accept their illness, and many of them practice self-treatment.³¹ Still, 44% of GPs who had sought help had a high composite burnout score in 2019. This could suggest that some GPs do not benefit from the help provided. The poor outcome may be attributable to both the patient (ie, the GP) and the therapist. When physicians seek help, they might be afraid of showing their weakness and be reluctant to allow another professional to manage the treatment, which may compromise the therapeutic outcome.³¹ In addition, the treating therapist/physician may have difficulty defining own role,³¹ which stresses the importance of approaching counselling for burnout in physicians as a specialised treatment.¹⁴ Furthermore, there is evidence to support that burnout may overlap with other mental health issues, such as depression and anxiety in some individuals.¹¹ This could also explain why the healing of burnout can be a long-term process.

In agreement with other findings,³² we found an association between presenteeism and increased risk of a high composite burnout score in the univariate analysis, but not in the adjusted analysis. On the one hand, presenteeism may reflect high engagement as one might appear willing to go to work even when feeling ill.³² On the other hand, it may also be seen as a proxy for lack of self-care, and proper self-care has been identified as

an important factor for increasing physician resilience.¹⁰ The association between presenteeism and risk of having a high composite burnout score at 3 years later was not maintained when we included baseline burnout status in the model. This suggests that presenteeism could be seen as an indicator of actual burnout status rather than a risk factor for later burnout.

CONCLUSIONS

Coping strategies such as compromising on quality of work, delaying tasks, arranging a new consultation with the patient while postponing decisions and reducing breaks increased the risk of having a high composite burnout score at 3 years later. This was seen even when we adjusted for baseline levels of burnout symptoms. Practice managers and consultants can use this information to inform GPs about early warning signs and red flags indicating increased risk of future burnout. A high composite burnout score in 2016 strongly increased the risk of a high composite burnout score in 2019, and nearly one in four GPs reported a high composite burnout score in both 2016 and 2019. Although we have no information about any fluctuations in burnout symptoms in the time interval from 2016 to 2019, the fact that nearly 25% of the GPs in our sample experienced reduced quality of working life throughout more than 3 years is alarming, specifically in consideration of the high composite burnout score found in 2019 in nearly half of the GPs who had actually sought help. This calls for actions to ensure effective treatment strategies and tailored support for the GPs with the greatest need, not least in the aftermath of the global COVID-19 pandemic, which appears to have caused increased stress in healthcare workers.³³

Contributors AFP and PV conceptualised the study. AFP analysed the data, and PV participated in the interpretation of results. AFP drafted the manuscript, and PV contributed to the editing and reviewing process. AFP is responsible for the overall content as guarantor. AFP is fully responsible for the work and/or the conduct of the study, had access to the data, and controlled the decision to publish.

Funding The Danish Organisation of General Practitioners supported both surveys. They have not been involved in the analysis of data or the writing of this paper.

Competing interests None declared.

Patient and public involvement Patients and/or the public were involved in the design, or conduct, or reporting, or dissemination plans of this research. Refer to the Methods section for further details.

Patient consent for publication Not applicable.

Ethics approval This study involves human participants but was not approved by According to Danish law, the study needed no approval from the National Committee on Health Research Ethics as no biomedical intervention was included. Participants gave informed consent to participate in the study before taking part.

Provenance and peer review Not commissioned; externally peer reviewed.

Data availability statement No data are available. Data are kept at Statistics Denmark, Sejrøgade 11, 2100 København Ø and subjected to data protection regulations limiting access to data for external researchers.

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Author note The lead author affirms that the manuscript is an honest, transparent account of the study being reported. No important aspects have been omitted.

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