


BMJ Open Predictive value of burnout complaints and depressive symptoms for medically certified sickness absence among physicians in Sweden: a 1 year follow-up observational study

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To cite: Brulin E, Wilczek A, Ekberg K, *et al*. Predictive value of burnout complaints and depressive symptoms for medically certified sickness absence among physicians in Sweden: a 1 year follow-up observational study. *BMJ Open* 2025;**15**:e090966. doi:10.1136/bmjopen-2024-090966

► Prepublication history and additional supplemental material for this paper are available online. To view these files, please visit the journal online (<https://doi.org/10.1136/bmjopen-2024-090966>).

Received 08 July 2024
Accepted 31 March 2025



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ABSTRACT

Objective This study aimed to explore the predictive value of severe burnout complaints, symptom dimension of burnout and depressive symptoms for subsequent all-cause medically certified sickness absence (ACMCSA) during the pandemic among physicians in Sweden.

Design A 1 year follow-up panel cohort observational study—the Longitudinal Occupational Health Survey for HealthCare in Sweden. At baseline (February–May 2021), a representative sample of 6699 physicians was drawn from the Swedish occupational register and invited to participate in the study. At follow-up (March–May 2022), the full sample (excluding those who died, retired, stopped working as a physician or migrated, n=94) was invited to answer the survey.

Setting Swedish primary and specialist healthcare.

Participants At baseline, the response rate was 41.3% (n=2761) of which 1575 also answered at follow-up.

Primary and secondary outcome measures ACMCSA data came from the Swedish Social Insurance Agency. The Burnout Assessment Tool (BAT-23) was used to measure burnout, including a burnout total score and scores for the four symptom dimensions of exhaustion, mental distance, emotional impairment and cognitive impairment. Depressive symptoms were assessed using the Symptom Checklist-core depression (SCL-CD6). Associations between baseline burnout and depressive symptoms and subsequent ACMCSA were estimated with logistic regression analyses.

Results ACMCSA was found in 9% of the participating physicians. In the sample, 4.7% had severe burnout complaints, and 3.7% had depressive symptoms. Burnout (OR=2.57; 95% CI=1.27 to 5.23) and the burnout symptom dimensions emotional impairment (OR=1.80; 95% CI=1.03 to 3.15) and cognitive impairment (OR=2.52; 95% CI=1.12 to 5.50) were associated with a higher likelihood of subsequent ACMCSA. Depressive symptoms were not associated with ACMCSA when adjusted for severe burnout complaints and other covariates.

Conclusion This study demonstrates the distinction between burnout and depressive symptoms, particularly in predicting future ACMCSA. Early intervention targeting

STRENGTHS AND LIMITATIONS OF THIS STUDY

- ⇒ The geographical and demographic spread represented in the sample is more likely to contribute to the generalisability of results.
- ⇒ The use of data from the Swedish Social Insurance Agency on all-cause medically certified sickness absence contributes to the objectivity and generalisability of results.
- ⇒ The limitation of the study is the attrition.
- ⇒ The work relies partly on self-reported data.

exhaustion and burnout may mitigate symptom development and reduce the risk of ACMCSA.

INTRODUCTION

The prevalence of burnout and depressive symptoms among working physicians in Sweden in 2021 was high.¹ During this time, healthcare services were burdened by the COVID-19 pandemic with increased exposure to several stressors.^{2–5} Longitudinal studies show that mental health problems have increased,⁶ while others show no change^{6,7} or even a decrease.^{4,8} The variation across studies can result from many factors; for example, studies often focused on front-line single clinics or physicians, leaving out a large share of physicians. Moreover, many previous studies were based on small samples⁴ and short follow-up times, often focusing on the initial phase of the pandemic.⁷ However, physicians experienced extreme stress and high demands, no matter whether they worked directly with COVID-19 patients or not,^{1,3,4,9,10} which likely contributed to an increase in burnout and depressive symptoms. Symptoms of burnout and depression impair workability^{11,12} and increase the risk



of long-term sickness absence and turnover intention. Statistics from the Swedish Social Insurance Agency show an increase in sickness absence due to mental health impairment among physicians in recent years,¹³ and this amounts to enormous societal costs.¹⁴

While there is an established diagnosis of burnout in Sweden, there is an ongoing scholarly and clinical debate about the concept.¹⁵ A weakness in previous international research exploring burnout is the lack of a comprehensive measurement of burnout, resulting in prevalences between 0% and 80% among physicians.¹⁶ This has caused a debate about the mere existence of burnout as a state.¹⁷ A significant issue raised in the discussion against the existence of burnout has been the overlap between symptoms of burnout and symptoms of depressive symptoms.^{17–20}

According to Schaufeli and Taris,²¹ burnout is not a condition but consists of symptoms that develop continuously over time. Burnout results from chronic exposure to job stress that is not successfully managed.^{21–24} This leads to extreme physical and mental fatigue, impairing cognitive and emotional regulation processes, and difficulties controlling one's emotions or feeling empathy.²¹ To manage the situation, emotional distancing develops, meaning that work no longer feels meaningful and that one becomes cynical and avoids contact with others. This becomes a counterproductive and ineffective way of coping, leading to even more fatigue and reinforcing the negative spiral.²¹ Based on this definition and robust theoretical foundation,^{23 25} the Burnout Assessment Tool (BAT) was developed to measure burnout among workers. The BAT scale has many strengths, one being the possibility of exploring both symptom dimensions of burnout occurring in earlier phases of prolonged exposure to stress, that is, (i) exhaustion (extreme tiredness, severe loss of energy), (ii) mental distance (mental withdrawal and psychological detachment), (iii) cognitive impairment (reduced functional capacity to regulate cognitive processes) and (iv) emotional impairment (reduced

functional capacity to regulate emotional processes) and burnout.

Depressive symptoms, as classified in the International Classifications of Diseases (ICD) and Diagnostic and Statistical Manual of Mental Disorders IV, are based on a list of symptoms (table 1), of which some are necessary for a diagnosis.²⁶ Researchers have argued that burnout largely overlaps with depressive symptoms and questioned whether they can be explored as two distinct mental health issues.^{17 18} The opposite has also been proposed, and although burnout and depressive symptoms appear to share some common symptoms (eg, fatigue), a recent meta-analysis shows that burnout and depressive symptoms are associated but still constitute two separate constructs.^{19 27}

In this study, we seek to gain more information on the symptom development of burnout and depressive symptoms in Swedish physicians. Specifically, we aim to investigate the predictive value of severe burnout complaints, symptom dimension of burnout and depressive symptoms for subsequent all-cause medically certified sickness absence (ACMCSA) during the pandemic among physicians in Sweden.

METHOD

This study draws on data from the Longitudinal Occupational Health Survey for HealthCare in Sweden (LOHHCS), which is an open panel cohort. At baseline, a representative sample of physicians was drawn from the Swedish occupational register based on SSKY-codes. Baseline data were collected from February to May 2021. A total of 6699 physicians were invited to participate in the baseline survey, and 41.3% answered.¹ At follow-up (March to May 2022), all 6699, except those who died, retired, stopped working as a physician or migrated (n=94), received an invitation to participate in the study. In total, 1575 physicians answered the survey at both baseline and follow-up.

Table 1 Primary DSM-IV depression disorders, criteria for adults

| Depressive diagnoses | Symptoms |
|---|--|
| Major depressive episode: <ul style="list-style-type: none"> ▶ 5 or more depressive symptoms for ≥2 weeks ▶ Must have either depressed mood or loss of interest/pleasure ▶ Symptoms must cause significant distress or impairment ▶ No manic or hypomanic behaviour | <ol style="list-style-type: none"> 1. Depressed mood 2. Markedly diminished interest or pleasure in most or all activities 3. Significant weight loss (or poor appetite) or weight gain 4. Insomnia or hypersomnia 5. Psychomotor retardation 6. Fatigue or loss of energy 7. Feelings of worthlessness or excessive or inappropriate guilt 8. Diminished ability to think or concentrate or indecisiveness 9. Recurrent thoughts of death (not just fear of dying), or suicidal ideation, plan, or attempt |
| Minor depressive episode: <ul style="list-style-type: none"> ▶ 2–4 depressive symptoms for ≥2 weeks ▶ Must have either depressed mood or loss of interest or pleasure ▶ Symptoms must cause significant distress or impairment ▶ No manic or hypomanic behaviour | |
| DSM-IV, Diagnostic and Statistical Manual of Mental Disorders IV. | |

An analysis of missing data showed that the share of men and women, hierarchical positions, work hours and frontline work or not was almost identical (only differentiated by up to three percentage points) between those who responded two times and those who only responded in 2021 (online supplemental table S1). In the sample reporting to both the 2021 and the 2022 surveys, there was a lower representation of physicians who work in facilities other than primary care or hospitals (eg, occupational health). Sickness absence in 2022 was 11.8% among those only responding in 2021, while the corresponding figure among those in the sample, including both waves, was 9.3%.

The Swedish Ethical Review Authority reviewed and approved this study (Dnr: 2020-06613; 2021-05574-02; 2022-03105-01).

Patient and public involvement

The public (ie, physicians) was included in all steps of the study. The LOHHCS survey content was drafted in dialogue with physicians along with the labour union for physicians. The survey was then piloted with a group of physicians before being distributed to the full sample. One of the authors is a physician and has contributed to the design of the study. Results will be disseminated through social media and to the labour union for physicians.

Measurement

Outcomes

Data on ALMCSA is derived from the Swedish Social Insurance Agency register. The agency registers ALMCSA after 14 days of sick leave. Thus, it covers the number of days of ALMCSA exceeding 14 between June 2021 (ie, after the baseline data collection) and June 2022. The variable was dichotomised into 0 (no days of ACMCSA) and 1 (≥ 1 day of ACMCSA between baseline and follow-up).

Exposures

We assessed baseline burnout and symptom dimensions using the extended version of the BAT-23.²⁵ BAT-23 comprised 23 items divided into four subscales representing symptom dimensions of burnout: exhaustion (8 items), mental distance (5 items), emotional impairment (5 items) and cognitive impairment (5 items). By using all 23 items, we can assess burnout. Each item was rated on a five-point scale from 1 (never) to 5 (always). A grand mean was constructed for each symptom dimension and the entire 23-item compound, resulting in five scales ranging from 1 to 5. Each dimension and the whole compound had high internal consistency. Table 2 presents Cronbach's alpha for each dimension, the full compound and respective cut-off values accordingly.^{24 25 28} The cut-off values for the BAT scale follow a traffic-light system where the red cut-off, applied in this study (table 2 shows all cut-off scores). For the full compound scale, a value above the red cut-off (≥ 3.02) signifies severe burnout complaints, and individuals scoring above this value would probably be diagnosed with clinical burnout if clinically assessed.²⁴

Table 2 Cronbach's alpha and cut-off values for exposure measurements

| | Cronbach's alpha | Cut-off values |
|--------------------------------|------------------|----------------|
| Burnout complaints (23 items) | 0.95 | ≥ 3.02 |
| Exhaustion (8 items) | 0.92 | ≥ 3.31 |
| Mental distance (5 items) | 0.84 | ≥ 3.30 |
| Emotional impairment (5 items) | 0.90 | ≥ 2.90 |
| Cognitive impairment (5 items) | 0.85 | ≥ 3.10 |
| Depressive symptoms (6 items) | 0.91 | ≥ 17 |

Depressive symptoms were assessed using the symptom checklist six core depression (SCL-6CD).^{29 30} It consists of six items, each representing a depressive symptom during the last week, and was rated on a five-point Likert scale ranging from 'Not at all' (0) to 'very much' (4). A sum score was calculated ranging from 0 to 24, with a higher score representing more severe depressive symptoms. Following the study of Magnusson Hanson *et al*,²⁹ we set the cut-off at ≥ 17 , where a value above the cut-off indicates depressive symptoms.

Covariates

Differences in mental health between individuals according to gender, hierarchical position and place of work during the pandemic have been identified in previous studies¹ and are included as covariates.

Models were adjusted for baseline gender (men or women), working hours, healthcare facility (primary and secondary healthcare facility) and hierarchical position (physicians in training, specialists and consultants). Sex and age in 2021 were added to LOHHCS data by Statistics Sweden and derived from the Longitudinal Database on Education, Income, and Occupation held by Statistics Sweden.

We adjusted for self-reported adverse life events (eg, divorce, sickness or death in the family, exposure to crime) during the follow-up period, that is, the physicians responded in 2022 if any adverse life event had occurred during the last year. We also adjusted for frontline work during the COVID-19 pandemic 2021 by asking the respondents if they worked with COVID-19 patients most of the time, at some periods or at no time.

Analytical strategy

Descriptive statistics show mean values and prevalences for severe burnout complaints, symptom dimensions of burnout and depressive symptoms in 2021 across all covariates.

Next, to estimate if severe burnout complaints, each symptom dimension of burnout (exhaustion, mental distance, emotional impairment and cognitive impairment) and depressive symptoms in 2021 predicted the prevalence of ALMCSA the following year, we used logistic regression analysis. First, univariate analyses investigated each variable's association with the outcome

**Table 3** Sample description and mean values of burnout complaints, exhaustion, mental distance, emotional impairment, cognitive impairment and depressive symptoms across confounders at baseline

| | N | % | Burnout complaints | Exhaustion | Mental distance | Emotional impairment | Cognitive impairment | Depressive symptoms |
|--------------------------------|------|------|--------------------|------------|-----------------|----------------------|----------------------|---------------------|
| Total share (%) | | | 4.7 | 12.0 | 3.0 | 2.9 | 3.4 | 3.7 |
| Women | 883 | 56.1 | 1.96 | 2.43 | 1.69 | 1.60 | 1.84 | 5.66 |
| Men | 692 | 43.9 | 1.79 | 2.15 | 1.69 | 1.50 | 1.66 | 4.38 |
| Working with COVID-19 patients | | | | | | | | |
| All the time | 867 | 55.3 | 1.92 | 2.35 | 1.74 | 1.55 | 1.77 | 5.16 |
| Part of the time | 350 | 22.3 | 1.89 | 2.31 | 1.69 | 1.53 | 1.78 | 5.29 |
| At no time | 352 | 22.4 | 1.80 | 2.19 | 1.56 | 1.49 | 1.71 | 4.77 |
| Adverse life events | 297 | 18.9 | 1.95 | 2.40 | 1.72 | 1.58 | 1.86 | 6.00 |
| No adverse life events | 1274 | 81.1 | 1.87 | 2.29 | 1.68 | 1.52 | 1.74 | 4.90 |
| Working hours | | | | | | | | |
| Less than 36 hours | 271 | 17.2 | 1.84 | 2.20 | 1.67 | 1.51 | 1.72 | 4.64 |
| 36–45 hours | 837 | 53.2 | 1.86 | 2.25 | 1.68 | 1.52 | 1.77 | 4.90 |
| More than 45 hours | 465 | 29.6 | 1.95 | 2.46 | 1.73 | 1.57 | 1.78 | 5.75 |
| Healthcare facility | | | | | | | | |
| Primary care | 654 | 41.6 | 1.90 | 2.34 | 1.73 | 1.51 | 1.78 | 4.84 |
| Hospital care | 837 | 53.2 | 1.89 | 2.30 | 1.67 | 1.56 | 1.76 | 5.40 |
| Other | 81 | 5.2 | 1.72 | 2.07 | 1.55 | 1.46 | 1.60 | 4.26 |
| Hierarchical position | | | | | | | | |
| Physicians in training | 477 | 30.8 | 1.95 | 2.37 | 1.77 | 1.54 | 1.86 | 5.79 |
| Specialists | 620 | 40.1 | 1.90 | 2.33 | 1.70 | 1.54 | 1.77 | 5.08 |
| Consultants | 451 | 29.1 | 1.82 | 2.23 | 1.62 | 1.54 | 1.67 | 4.59 |

variable. After that, in Model A, baseline severe burnout complaints and depressive symptoms were entered simultaneously and adjusted for the abovementioned covariates. In Model B, severe burnout complaints was exchanged with the four symptom dimension variables (exhaustion, mental distance, emotional impairment and cognitive impairment) and entered into the model along with depressive symptoms and covariates.

All analyses were conducted in SPSS version 28.

RESULTS

The study sample consists of 1575 Swedish physicians. Descriptives show that the sample has more women (56.1%) than men (43.9%) and that female physicians experience significantly higher levels of mental ill-health, except for mental distance. More than half of the physicians in the sample (55.3%) worked with COVID-19 patients. Those who reported frontline work reported higher mean levels of burnout, exhaustion and mental distance than those who did not work at the frontline.

In the total sample, 4.7% had severe burnout complaints, and 3.7% had depressive symptoms (table 3). Across the symptom dimensions, the prevalence ranged from 12% for exhaustion to 2.9% for emotional impairment. 9.3% of the physicians had ACMCSA between baseline and follow-up.

One-fifth (18.9%) of the sample had an adverse life event (table 3) and reported higher mean values of burnout, exhaustion, emotional impairment and depressive symptoms. 53.2% estimated working between 36 and 45 hours per week. Most physicians worked in hospitals (53.2%) or primary care (41.6%). Few worked in other facilities, and they also reported the lowest mean level of mental health. The share of physicians-in-training was 30%, specialists 40.1% and consultants 29.1%. Physicians-in-training reported higher levels of mental ill-health, except for emotional impairment.

In table 4 (full table can be found in online supplemental table S2), associations between severe burnout complaints, symptom dimensions of burnout and depressive symptoms in 2021 and ACMCSA the following year are shown. Univariate analysis showed that all exposure variables, except mental distance, were associated with ACMCSA the following year. Univariate results showed a higher likelihood of ACMCSA among those who had experienced an adverse life event and female physicians. Those who had worked with COVID-19 patients (frontline workers) throughout the first phase of the pandemic had a reduced likelihood of ACMCSA the following year (OR=0.60, 95% CI=0.40 to 0.91).

In the adjusted models (Models A and B), depressive symptoms were no longer statistically significant.

Table 4 Logistic regression analyses testing the association between baseline severe burnout complaints, exhaustion, mental distance, emotional impairment, cognitive impairment and depressive symptoms and any all-cause medically certified sickness absence exceeding 14 days the following year

| | Univariate | | | Model A | | | Model B | | |
|---------------------------|------------|--------------|---------|---------|--------------|---------|---------|--------------|---------|
| | OR | 95% CI | P value | OR | 95% CI | P value | OR | 95% CI | P value |
| N | | | | 1465 | | | 1477 | | |
| Severe burnout complaints | 2.13 | 1.74 to 5.63 | <0.001 | 2.57 | 1.27 to 5.23 | 0.009 | | | |
| Exhaustion | 2.48 | 1.62 to 3.79 | <0.001 | | | | 1.80 | 1.03 to 3.15 | 0.040 |
| Mental distance | 0.92 | 0.33 to 2.61 | 0.382 | | | | 0.40 | 0.12 to 1.35 | 0.141 |
| Emotional impairment | 3.72 | 1.88 to 7.36 | <0.001 | | | | 2.13 | 0.89 to 5.08 | 0.090 |
| Cognitive impairment | 4.69 | 2.54 to 8.67 | <0.001 | | | | 2.52 | 1.12 to 5.50 | 0.025 |
| Depressive symptoms | 2.45 | 1.24 to 4.84 | 0.010 | 1.62 | 0.70 to 3.73 | 0.262 | 1.13 | 0.47 to 2.73 | 0.790 |
| Nagelkerke R | | | | 0.084 | | | 0.099 | | |
| Log LL | | | | 838.746 | | | 835.092 | | |

Model A: Severe burnout complaints and depressive symptoms adjusted for working with COVID-19 patients, adverse life events, work hours, healthcare facility, hierarchical position, sex and age.
 Model B: Symptom dimensions of burnout and depressive symptoms adjusted for working with COVID-19 patients, adverse life events, work hours, healthcare facility, hierarchical position, sex and age.

Sensitivity analyses, running only depressive symptoms adjusting for the covariance and without severe burnout complaints, show statistically significant results (OR=2.46; 95% CI=1.21 to 4.98). This suggests that it is foremost the severe burnout complaints or symptom dimensions of burnout that predict ACMCSA the following year rather than depressive symptoms. Severe burnout complaints was associated with a two-and-a-half-time higher likelihood of having an ACMCSA the following year (OR=2.57; 95% CI=1.27 to 5.23).

Among the symptom dimensions of burnout (Model B), emotional impairment and cognitive impairment predicted ACMCSA the following year, while exhaustion and mental distance did not. Those physicians who, in 2021, reported high levels of emotional impairment had almost two times the odds of ACMCSA the following year (OR=1.80; 95% CI=1.03 to 3.15), while those reporting high levels of cognitive impairment had two and a half times higher odds (OR=2.52; 95% CI=1.12 to 5.50). In the sensitivity analyses, each symptom dimension of burnout was tested separately, and all dimensions but the mental distance were statistically significantly associated with subsequent ACMCSA (see online supplemental table S3 and S4). Further sensitivity analysis, including logistic regressions with continuous measures of burnout and depressive symptoms, showed similar significance levels (burnout $p=0.002$ and depressive symptoms $p=0.945$).

Similar to Model A, having had an adverse life event in the last year, frontline work and being a woman remained statistically significant in relation to ACMCSA. The same holds for age, where a 1 year increment increased the odds for ACMCSA by 4%.

DISCUSSION

In this 1 year follow-up study, during the COVID-19 pandemic, we aimed to explore whether severe burnout complaints, symptom dimensions of burnout (exhaustion, mental distance, emotional impairment and cognitive impairment) and depressive symptoms predicted subsequent ACMCSA among a sample of physicians working in Sweden. We made several noteworthy discoveries that contribute to current knowledge. Results show that severe burnout complaints, exhaustion and cognitive impairment in 2021 predicted subsequent ACMCSA the following year. Depressive symptoms had no predictive value for ACMCSA the following year when we adjusted for severe burnout complaints and symptom dimensions of burnout, respectively.

This study has methodologically both strengths and weaknesses. A significant strength is using a longitudinal data set with about 1575 participants. However, we must also consider attrition over time, which may impact generalisability. Also, more measure points may provide additional insight in the future. In this study, we had no data on ACMCSA before the study period to adjust the models. On the other hand, having repeated ACMCSA may be indicative of poor rehabilitation and return to work. Burnout complaints and cognitive impairment, whether for the first time or after returning to work, need targeted interventions.

This study does not neglect that an overlap of symptoms exists.^{15 17 19 20} Also, a recent meta-analysis supports that various symptom dimensions of burnout correlate differently to depressive symptoms and that instruments used to measure burnout and depressive symptoms play a role in the overlap detected.¹⁹ Meanwhile, in this 1 year follow-up, we show that the predictive value of depressive



symptoms in relation to ACMCSA disappears when introduced together with severe burnout complaints and the symptom dimensions of burnout. Our results are supported by a recent meta-analysis showing that overlap between burnout and depressive symptoms tends to be more present in cross-sectional studies compared with longitudinal.¹⁹ For future research, more longitudinal studies exploring mediation and accumulation effects between depressive symptoms and symptom dimensions of burnout are recommended.

A significant strength of this study is that we provide evidence that severe burnout complaints indicated by a validated scale with an assessed global score and the individual exhaustion and cognitive impairment subcomponents of burnout can predict ACMCSA the following year. Our results align with the past findings by Peterson *et al*,³¹ using medically certified sickness absence (>90 days) as the outcome. Previous knowledge of the association between mental health and sick leave mostly rests on self-rated data. In this study, we used outcome data from the Swedish compulsory sickness insurance registers. Our study, therefore, makes an essential contribution to current knowledge. Also, it provides valuable knowledge on the predictive validity of the BAT on future sick leave.

Cognitive impairment, that is, memory problems, attention and concentration deficits, and poor cognitive performance, were found to predict subsequent ACMCSA when investigated in conjunction with all the symptom dimensions of burnout. This dimension of burnout was introduced in the conceptual framework developed by Schaufeli and Taris (21) and is not present in the definition of the ICD-11 by the WHO.³² A recent book²⁷ highlights the need for salient cognitive impairment in patients diagnosed with exhaustion disorders (the clinical diagnosis of burnout in Sweden, F43.8). It proposes that differences in the profile of cognitive impairment may serve as one of several factors in differentiating depressive symptoms and burnout complaints. This study thus contributes to the empirical foundation that cognitive impairment is an essential dimension of burnout, and that the ICD-11 may need to review its definition.

Mental health problems in working physicians are serious problems that may cause reduced work ability^{11 12} and negatively impact patient safety and quality of care.^{33 34} Research shows that burnout and depressive symptoms are associated with an increased risk of several severe health and health-related outcomes, such as cardiovascular disease, musculoskeletal problems, psychotropic and antidepressant treatment, job dissatisfaction, absenteeism, and adverse work-related effects on job performance and productivity.³⁵ It may also lead to turnover and, as we show in this study, sickness absence, resulting in staff shortages. This illuminates the need for immediate actions to prevent symptom development of burnout and promote worker well-being.

This study was conducted during the COVID-19 pandemic and indicated an increase in mental health problems over time, even after adjusting for frontline

work. Interestingly, those at the frontline in 2021 were less likely to have an ACMCSA in the following years. There are many reasons for this, that is, it was those with poorer health who did not work at the frontline or those who could not work as usual, for example, surgeons who might have been stressed about not being able to operate. Another reason could be that the follow-up was too short, the pandemic was still ongoing, and longer follow-ups are needed. Lessons from previous pandemics with a lesser impact on healthcare have demonstrated a long-term effect on the mental health of healthcare workers.³⁶ The extremely high workload, in combination with other work environment challenges during the COVID-19 pandemic,^{3 7 37} is likely to contribute to an increase in shorter spells (less than 14 days) of sickness absences and may further be associated with a long-term escalation of ACMCSA.³⁸ It is, therefore, essential to continue valid assessment and following the development of mental ill-health of physicians over time.

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Drafting and critical revision of the manuscript: all authors. Critical revision of the manuscript: all authors. Final approval: all authors. Guarantor: EB. We have used Grammarly for language editing.

Funding The authors have not declared a specific grant for this research from any funding agency in the public, commercial or not-for-profit sectors.

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 The Swedish Ethical Review Authority reviewed and approved this study (Dnr: 2020-06613; 2021-05574-02; 2022-03105-01). 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. We are restricted from sharing data due to ethical regulation. Aggregated data may be made available on request.

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