






# Burnout in physicians: a survey of the Danish society for palliative medicine

Tina Boegelund Kristensen <sup>1</sup>, Mette Kelstrup Hallas <sup>2</sup>,  
Rikke Høgsted,<sup>3</sup> Mogens Groenvold <sup>4,5</sup>, Per Sjøgren <sup>6</sup>,  
Kristoffer Marsaa <sup>7</sup>

<sup>1</sup>Department of Oncology, Herlev Hospital, Herlev, Denmark

<sup>2</sup>Department of Oncology, Odense University Hospital, University of Southern Denmark, Odense, Denmark

<sup>3</sup>Institute of Mental High Risk Psychology, Copenhagen, Denmark

<sup>4</sup>Department of Public Health, University of Copenhagen, Copenhagen, Denmark

<sup>5</sup>Department of Geriatric and Palliative Medicine, Palliative Care Research Unit, Bispebjerg and Frederiksberg Hospital, Copenhagen, Denmark

<sup>6</sup>Section of Palliative Medicine, Department of Oncology, Centre for Cancer and Organ Diseases, Rigshospitalet - Copenhagen University Hospital, Copenhagen, Denmark

<sup>7</sup>The Danish Knowledge Centre for Rehabilitation and Palliative Care (REHPA), University of Southern Denmark, Nyborg, Denmark

## Correspondence to

Tina Boegelund Kristensen, Department of Oncology, Herlev Hospital, Herlev, Denmark; [tina.boegelund@gmail.com](mailto:tina.boegelund@gmail.com)

Received 15 June 2021

Accepted 16 June 2021

Published Online First

29 June 2021



Check for updates

© Author(s) (or their employer(s)) 2024. No commercial re-use. See rights and permissions. Published by BMJ.

**To cite:** Boegelund Kristensen T, Kelstrup Hallas M, Høgsted R, et al. *BMJ Supportive & Palliative Care* 2024;**14**:52–55.

## ABSTRACT

**Objectives** Burnout, which is a state of prolonged physical and psychological exhaustion, seems to be a prevalent and serious problem among healthcare workers. Our aim was to investigate the prevalence of burnout symptoms among members of Danish Society of Palliative Medicine (DSPaM).

**Methods** All 160 physician members of DSPaM were invited to a questionnaire survey. The Copenhagen Burnout Inventory (CBI) was used to evaluate and differentiate between personal, work-related and client-related burnout.

**Results** 76 members responded (47.5%). 51% regularly received supervision. Scores on personal burnout demonstrated that 25% had no symptoms and 55% had symptoms that required attention; however, no respondents needed immediate intervention. Regarding work-related burnout: 40% had no symptoms, 20% had symptoms that needed attention and 3% needed immediate help. Regarding client-related burnout: 65% had no symptoms, 32% had symptoms that needed attention and none needed immediate intervention.

**Conclusions** This survey demonstrated a relatively low rate of burnout symptoms among members of the DSPaM. In particular, the client-related burnout score was low, while higher scores were observed in personal and work-related burnout. Despite the relatively low overall levels of burnout, it is notable that about half of the physicians reported personal burnout, which needs to be addressed.

## INTRODUCTION

Burnout seems to be a prevalent and serious problem among physicians.<sup>1</sup> A US report 'A crisis in Health care: a call to action on physician burnout' concluded among others that 'If left unaddressed, the worsening crisis threatens to undermine the provision of care, as well as

## Key messages

### What was already known?

⇒ Burnout is a serious problem among healthcare workers.

### What are the new findings?

⇒ Members of Danish Society of Palliative Medicine express a relative low rate of burnout.

### What is their significance?

⇒ This may indicate that the work frame in specialised palliation prevents burnout despite the encounter with patients in severe suffering. This survey can constitute a baseline for monitoring in the future.

eroding the mental health of physicians'.<sup>2</sup> A study found that Danish midwives and homecare workers had high levels on both work-related and client-related burnout.<sup>3</sup>

A recent review has shown a prevalence of burnout ranging from 3% to 66% in healthcare professionals working in palliative care; however, no major differences in prevalence were found between nurses and physicians.<sup>1</sup>

Burnout can be characterised as a long-term stress reaction marked by emotional exhaustion and depletion of one's emotional and physical resources. Affected physicians may feel drained and 'used-up', sensing a lack of personal accomplishment. It may involve negative, cynical, hostile attitudes and detached feelings towards patients and their relatives, known as depersonalisation.<sup>4</sup> The latter may be worsened as most Western countries have implemented organisational changes in healthcare, that may increase 'efficiency' but may undermine the alignment between caregivers' values and the reconfigured healthcare system.<sup>5</sup> In clinical medicine, three pillars

supporting professionals' motivation and psychological well-being have been proposed: autonomy, competence and relatedness.<sup>6</sup> All three may be threatened by the restructuring of the healthcare system.<sup>7</sup> Within specialised palliative care (SPC) in Denmark, there is a tradition for group supervision with either mono-disciplinary or interdisciplinary discussions of work-related issues. Often external supervisors are involved; however, the individual department is responsible for the framework of supervision.

The Danish Society of Palliative Medicine (DSPaM) is a society for physicians with an engagement in palliative medicine. In Denmark, palliative medicine is not yet an established medical specialty and the members of DSPaM have accordingly other medical specialties as background and have typically entered the field of palliative medicine rather late in their medical career. DSPaM decided to carry out a questionnaire survey of burnout among its members. Due to the nature of the work and the unformalised and unstructured education, the hypothesis was to find a high burden of burnout symptoms in the members of DSPaM.

Therefore, the aim of the present study was to investigate the prevalence of burnout symptoms among members of DSPaM.

## METHODS

### Study design

The study was performed as a cross-sectional questionnaire survey. Data were collected using an electronic questionnaire developed specifically for the purpose. All 160 registered members of DSPaM were invited to participate. The invitation to participate in the survey was sent out by mail on 1 October 2019, a reminder was sent on 25 October and data collection ended on 1 November 2019.

### Assessment

The first part of the questionnaire posed questions concerning the physicians' current employment, background, age and years of clinical experience. The second part was the Copenhagen Burnout Inventory (CBI). CBI is a tool for assessment of nature and intensity of burnout symptoms. The CBI was developed and validated as a part of Danish longitudinal study PUMA (Danish acronym for Project on Burnout, Motivation and Job Satisfaction).<sup>3,8</sup> CBI has been validated and translated into a number of languages including English, Japanese, Mandarin, Cantonese, Swedish, Finnish, French, Slovenian and Spanish.<sup>8–11</sup>

The CBI characterises burnout as a state of prolonged physical and psychological exhaustion. Thus, the questionnaire includes 19 questions focusing on three areas of burnout: (1) personal burnout, (2) work-related burnout and (3) client-related burnout.<sup>3</sup> Each category comprises 6–7 questions, and the sum of the score addresses the intensity of burnout symptoms. Ranging from symptoms of burnout that require no attention to

symptoms that require response and ultimately require professional help immediately.

The sum score of each of the three domains differs with regard to intensity level for which type of intervention should be considered.<sup>8</sup>

### Analysis

All analyses were performed using SPSS statistical software (V.25). Results were reported as descriptive statistics.

## RESULTS

Seventy-six physicians of the 160 members of DSPaM, who were invited to take part in the survey, filled in the questionnaire resulting in an overall response rate of 47.5%. Data on age were grouped in intervals of 5 years. The median age interval was 51–55 years (range 31–75). The median period since medical graduation was 24 years (range: 7–59 years) and the median employment period in SPC was 4 years (range: 0–32 years).

Seventy-eight per cent of respondents were mainly employed in SPC such as hospices or hospital-based palliative care units. Twenty per cent respondents were not employed in SPC and 2% responded 'no relevance'. Fifty one per cent reported to receive regular supervision as part of their employment.

### Workload in SPC

Median hours of planned work per week were 37 (range: 0–45 years). Median hours of patient contact per week were 24.5 (range: 0–40.5 hours).

### CBI scores in personal, work-related and client-related burnout

Table 1 describes the presence of burnout symptoms for every category of burnout according to CBI. The last column reports the median score in each category. Additional comments to the questionnaire enlightened that the physicians experiencing burnout symptoms claimed poor leadership and reduced resources to be the major burden rather than client-related contact.

Given that the survey was sent to all members of DSPaM, the analysis included members working outside SPC. If only the 59, who worked mainly in SPC were included in the analysis, the findings were largely unchanged: the median personal burnout was 8.0 (8.0 median for all 76 participants), work-related burnout 7.0 (7.0 median for all participants) and client-related burnout 4.0 (3.5 median for all participants).

## DISCUSSION

The present study demonstrated a relatively low burden of burnout symptoms among physicians in DSPaM. However, about 50% showed symptoms of personal burnout that may deserve attention. The major burden of burnout symptoms was related to personal-related and work-related burnout. Comments

**Table 1** Personal, work-related and client-related burnout

	No symptoms of burnout	Symptoms of burnout that deserve attention	Symptoms of burnout that require response	Symptoms that require professional help immediately	Min. score	Max. score	Median score
Personal burnout*	19 (25.0%)	42 (55.3%)	15 (19.7%)	0 (0.0%)	0	16	8.00
Work-related burnout†	30 (39.5%)	29 (38.2%)	15 (19.7%)	2 (2.6%)	0	19	7.00
Client-related burnout‡	49 (64.5%)	24 (31.6%)	3 (3.9%)	0 (0.0%)	0	13	3.50

Brackets demonstrate percentages.

\*Personal burnout: 0–5 point: no signs of burnout, 6–11 point: signs of burnout that deserve attention, 12–17 point: symptoms of burnout that require response, 18+: symptoms that require professional help immediately.

†Work-related burnout: 0–6 point: no signs of burnout, 7–13 point: signs of burnout that deserve attention, 14–20 point: symptoms of burnout that require response, 21+: symptoms that require professional help immediately.

‡Client-related burnout: 0–5 point: no signs of burnout, 6–11 point: signs of burnout that deserve attention, 12–17 point: symptoms of burnout that require response, 18+: symptoms that require professional help immediately.

to the questionnaire described poor leadership and reduced resources to be a larger burden rather than client-related contact.

A recent systematic review found a lower burnout rate among healthcare professionals providing palliative care in specialised settings compared with those providing palliative care in general settings.<sup>1</sup> There can be many reasons for this difference. A mutual understanding within health professionals in SPC of the emotional strain working in palliative medicine could be an explanation.<sup>12</sup> Supervision and the ability to provide understanding of the burdens and the benefits within the specific clinical situations could be another together with organisational insight resulting in good planning offering more favourable working conditions.<sup>13</sup>

About 78% of the responses in our survey came from physicians working in SPC. This could indicate that the organisation and working conditions in SPC generally support that healthcare professionals can work with patients who experience pronounced suffering. However, frontline healthcare providers like those working in SPC may often identify inefficiencies related to organisational structures and workflows, and poor policies and procedures for the delivery of optimal patient care due to the rigid silo structure of healthcare systems in most high-income countries.<sup>14</sup>

Some weaknesses of the present survey were the low response rate and the cross-sectional design, which precludes to draw conclusions about causality. However, the data presented here can hopefully be used in comparisons between different specialties or to show a development over time within SPC. Such comparative studies may be carried out in the future to provide ideas about causality regarding the development of burnout symptoms in physicians and what changes in the healthcare system and/or add-on interventions which might be helpful to diminish burnout symptoms among physicians and other healthcare workers.

## CONCLUSION

This survey demonstrated a relatively low rate of burnout symptoms among physicians, who were members of the DSPaM. In particular, the client-related burnout score was low, while higher scores were observed in personal and work-related burnout. Despite the overall relatively low burden of burnout, it is notable that about half of the physicians reported a level of personal burnout that should be noted. Finally, we anticipate that this survey can constitute a baseline for monitoring the future development in prevalence of burnout.

**Contributors** MH, MG and KM developed the hypothesis and the questionnaire. DSPaM send out the questionnaires. TB and MG performed all statistical analysis. TB, MH, RH, PS, MG and KM wrote and critically reviewed and approved the manuscript.

**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** KM reports personal fees from Astellas Pharma, personal fees from GlaxoSmithKline, personal fees from AstraZeneca, personal fees from Novartis, personal fees from Boehringer Ingelheim, personal fees from Kyowa Kirin, personal fees from Norgine, outside the submitted work.

**Patient consent for publication** Not required.

**Provenance and peer review** Not commissioned; internally peer reviewed.

## ORCID iDs

Tina Boegelund Kristensen <http://orcid.org/0000-0002-1337-2714>

Mette Kelstrup Hallas <http://orcid.org/0000-0002-4029-5072>

Mogens Groenvold <http://orcid.org/0000-0002-3153-780X>

Per Sjøgren <http://orcid.org/0000-0002-3822-2958>

Kristoffer Marsaa <http://orcid.org/0000-0001-7366-7533>

## REFERENCES

- 1 Dijkhoorn A-FQ, Brom L, van der Linden YM, *et al.* Prevalence of burnout in healthcare professionals providing palliative care and the effect of interventions to reduce symptoms: a systematic literature review. *Palliat Med* 2021;35:6–26.
- 2 Jha A, Iliff A, Chaoui A. *A Crisis in Health Care : a Call to Action On Partnership with the Massachusetts Medical Society, Massachusetts Health and Hospital Association, Harvard T.H.*

- Chan School of Public Health, and Harvard Global Health Institute, 2019.
- 3 Borritz M, Rugulies R, Bjorner JB, *et al.* Burnout among employees in human service work: design and baseline findings of the PUMA study. *Scand J Public Health* 2006;34:49–58.
  - 4 Patel R, Bachu R, Adikey A, *et al.* Factors related to physician burnout and its consequences: a review. *Behav Sci* 2018;8:98.
  - 5 Hartzband P, Groopman J. Physician burnout, interrupted. *N Engl J Med* 2020;382:2485–7.
  - 6 Panagioti M, Panagopoulou E, Bower P, *et al.* Controlled interventions to reduce burnout in physicians: a systematic review and meta-analysis. *JAMA Intern Med* 2017;177:195–205.
  - 7 Friedberg MW, Chen PG, Van Busum KR, *et al.* Factors affecting physician professional satisfaction and their implications for patient care, health systems, and health policy. *Rand Health Q* 2014;3:1
  - 8 Kristensen TS, Borritz M, Villadsen E, *et al.* The Copenhagen burnout inventory: a new tool for the assessment of burnout. *Work Stress* 2005;19:192–207.
  - 9 Basart Gómez-Quintero H, Moncada Lluís S, Moncada Lluís S, *et al.* [Validation of the Copenhagen Burnout Inventory to assess professional burnout in Spain]. *Rev Esp Salud Publica* 2013;87:165–79.
  - 10 Shoman Y, Marca SC, Bianchi R, *et al.* Psychometric properties of burnout measures: a systematic review. *Epidemiol Psychiatr Sci* 2021;30:e8.
  - 11 pp. Fiorilli C, De Stasio S, Benevene P. Copenhagen Burnout Inventory (CBI): A validation study in an Italian teacher group.,” *TPM-Testing, Psychometrics, Methodology in Applied Psychology*, vol. 22, no. 4. Cises, Srl, Benevene, Paula: Department of Human Sciences, Lumsa University of Roma, Piazza delle Vaschette 101, Roma, Italy, 00193, benevene@lumsa.it 2015:537–51.
  - 12 Portoghese I, Galletta M, Larkin P, *et al.* Compassion fatigue, watching patients suffering and emotional display rules among hospice professionals: a daily diary study. *BMC Palliat Care* 2020;19:1–7.
  - 13 Marsaa K, Mendahl J, Heilman H, *et al.* Pride and uncertainty: a qualitative study of Danish nursing staff in temporary COVID-19 wards. *J Hosp Palliat Nurs* 2021;23:140–4.
  - 14 Kaasa S, Loge JH, Aapro M, *et al.* Integration of oncology and palliative care: a Lancet oncology Commission. *Lancet Oncol* 2018;19:e588–653.