

Supplementary material

Box S1: Kopenhagener Burnout Inventar—Copenhagen Burnout Inventory (German version)

Die nächsten Aussagen betreffen mögliche Erschöpfung und Belastungen durch Ihre Arbeit. Bitte lesen Sie jede Aussage genau durch und wählen die Antwort aus, die Ihre Sichtweise am besten ausdrückt. Unter „Klientinnen“ sind die Frauen und Eltern zu verstehen, für die Sie Ihren Beruf ausüben. *Bitte wählen Sie die zutreffende Antwort für jeden Punkt aus (In sehr hohem Maße / In hohem Maße / Etwas / In geringem Maße / In sehr geringem Maße):*

1. Ist Ihre Arbeit emotional erschöpfend?
2. Frustriert Sie Ihre Arbeit?
3. Fühlen Sie sich aufgrund Ihrer Arbeit ausgebrannt?
4. Empfinden Sie die Arbeit mit Klientinnen als mühsam?
5. Zehrt die Arbeit mit Klientinnen an Ihren Kräften?
6. Empfinden Sie die Arbeit mit Klientinnen als frustrierend?
7. Haben Sie das Gefühl, bei Ihrer Arbeit mit Klientinnen mehr zu geben als zurück zu bekommen?

Die nächsten Aussagen betreffen weitere Bereiche möglicher Erschöpfung und Belastungen durch Ihre Arbeit. Bitte lesen Sie jede Aussage genau durch und wählen die Antwort aus, die Ihre Sichtweise am besten ausdrückt. *Bitte wählen Sie die zutreffende Antwort für jeden Punkt aus (Immer / Häufig / Manchmal / Selten / Nie oder fast nie):*

8. Wie oft fühlen Sie sich müde?
9. Wie oft sind Sie körperlich erschöpft?
10. Wie oft sind Sie emotional erschöpft?
11. Wie oft denken Sie: „Ich schaffe das nicht mehr“?
12. Wie oft fühlen Sie sich verbraucht?
13. Wie oft fühlen Sie sich schwach und anfällig dafür, krank zu werden?
14. Fühlen Sie sich am Ende Ihres Arbeitstages verbraucht?
15. Entkräftet Sie der morgendliche Gedanke an einen weiteren Arbeitstag?
16. Haben Sie das Gefühl, dass jede Stunde bei der Arbeit ermüdend für Sie ist?
17. Haben Sie in der Freizeit genug Energie für Familie und Freunde?
18. Sind sie es leid, mit Klientinnen zu arbeiten?
19. Fragen Sie sich manchmal, wie lange Sie noch in der Lage sein werden, weiter mit Klientinnen zu arbeiten?

This translation of the Copenhagen Burnout Inventory (CBI) has not been validated. CBI questions relating to personal burnout were extracted from a German version of the Copenhagen Psychosocial Questionnaire (www.COPSOQ.de). CBI questions relating to work-related burnout and client-related burnout were translated from English to German by Stefan Kohler and Marcus Limprecht-Heusner.

Table S1: Levels of burnout among midwives in a survey of midwives in Baden-Württemberg, Germany, 2017 (N = 602)

Copenhagen Burnout Inventory dimension (burnout level [score])	Number of midwives (n [%])	Number of midwives (lowest/low versus moderate/high, n [%])
Personal burnout (lowest [0–24])	53 (8.8%)	311 (51.7%)
Low [25–49]	258 (42.9%)	
Moderate [50–74]	248 (41.2%)	
High [75–99]	43 (7.1%)	291 (48.3%)
Work-related burnout (lowest [0–24])	64 (10.6%)	372 (61.8%)
Low [25–49]	308 (51.2%)	
Moderate [50–74]	212 (35.2%)	
High [75–99]	18 (3.0%)	230 (38.2%)
Client-related burnout (lowest [0–24])	177 (29.4%)	462 (76.7%)
Low [25–49]	285 (47.3%)	
Moderate [50–74]	123 (20.4%)	
High [75–99]	17 (2.8%)	140 (23.3%)

Table S2: Copenhagen Burnout Inventory response frequencies and scores among midwives in a survey of midwives in Baden-Württemberg, Germany, 2017 (N = 579–602)

Dimensions and questions	Always ^a or To a very high degree ^b (scoring 100) (%)	Often ^a or To a high degree ^b (scoring 75) (%)	Sometimes ^a or Somewhat ^b (scoring 50) (%)	Seldom ^a or To a low degree ^b (scoring 25) (%)	Never/almost never ^a or To a very low degree ^b (scoring 0) (%)	Missing answers (n)	Score (mean [SD])
Personal burnout ($\alpha = 0.86$, N = 579)							
How often do you feel tired? ^a (N = 598)	6.5%	45.7%	36.3%	10.2%	1.3%	4	61.5 (20.4)
How often are you physically exhausted? ^a (N = 597)	2.7%	32.7%	43.4%	18.6%	2.7%	5	53.5 (21)
How often are you emotionally exhausted? ^a (N = 599)	0.5%	23.0%	42.2%	28.0%	6.2%	3	45.9 (21.7)
How often do you think: "I can't take it anymore"? ^a (N = 600)	0.7%	16.3%	28.0%	31.5%	23.5%	2	34.8 (25.9)
How often do you feel worn out? ^a (N = 596)	2.2%	25.0%	39.3%	24.5%	9.1%	6	46.7 (24.1)
How often do you feel weak and susceptible to illness? ^a (N = 599)	1.0%	12.2%	32.6%	38.2%	16.0%	3	36 (23.3)
Average score (N = 602)						[23]	46.4 (17.6)
Work-related burnout ($\alpha = 0.85$, N = 592)							
Do you feel worn out at the end of the working day? ^a (N = 602)	6.1%	37.2%	38.0%	14.8%	3.8%	0	56.8 (23)
Are you exhausted in the morning at the thought of another day at work? ^a (N = 601)	1.5%	9.5%	38.3%	30.1%	20.6%	1	35.3 (24.2)
Do you feel that every working hour is tiring for you? ^a (N = 596)	0.7%	7.4%	30.4%	36.7%	24.8%	6	30.6 (23.2)
Do you have enough energy for family and friends during leisure time? ^a (inverse scoring) (N = 602)	4.8%	38.0%	37.4%	16.9%	2.8%	0	56.3 (22.3)
Is your work emotionally exhausting? ^b (N = 600)	8.3%	30.7%	32.0%	17.5%	11.5%	2	51.7 (28.2)
Does your work frustrate you? ^b (N = 601)	2.5%	9.2%	30.0%	26.1%	32.3%	1	30.9 (26.9)
Do you feel burnt out because of your work? ^b (N = 602)	4.7%	15.1%	34.9%	24.8%	20.6%	0	39.6 (27.8)
Average score (N = 602)						[10]	43 (15.6)
Client-related burnout ($\alpha = 0.84$, N = 593)							
Do you find it hard to work with clients? ^b (N = 601)	1.1%	0.9%	38.5%	34.7%	24.9%	1	33.4 (24)
Does it drain your energy to work with clients? ^b (N = 602)	4.5%	22.8%	38.4%	21.9%	12.5%	0	46.2 (26.3)
Do you find it frustrating to work with clients? ^b (N = 601)	0.8%	2.8%	19.3%	34.9%	42.1%	1	21.3 (22.1)
Do you feel that you give more than you get back when you work with clients? ^b (N = 600)	4.0%	20.3%	29.2%	26.0%	20.5%	2	40.3 (28.5)
Are you tired of working with clients? ^a (N = 601)	0.2%	2.8%	23.0%	35.8%	38.3%	1	22.7 (21.4)
Do you sometimes wonder how long you will be able to continue working with clients? ^a (N = 597)	3.1%	24.0%	35.7%	33.9%	3.3%	5	38.7 (27.6)
Average score (N = 602)						[10]	33.8 (18.7)
Average score across burnout dimensions							41.1 (15.6)

α = Cronbach's alpha. [] = Missing answers were replaced by respondents' mean Copenhagen Burnout Inventory scores in the burnout dimension. Cronbach's alphas and percentages exclude missing data. The possible score range for all questions is 0–100. ^{a,b} Response categories for items denoted with ^{a,b}.

Table S3: Relationship of Copenhagen Burnout Inventory score and burnout level with midwife characteristics and work practices in a survey among midwives in Baden-Württemberg, Germany, 2017 (N = 602)

Covariate (reference)	Average CBI score (0–100)		Any moderate or high burnout level (no [†] /yes [‡])	
	Univariable regression (coefficient [95% CI])	Multivariable regression (coefficient [95% CI]) [#]	Univariable regression (OR [95% CI])	Multivariable regression (OR [95% CI]) [#]
Age (24 years or younger)	0	0	1	1
25–34 years	0.11 (–0.12 to 0.34)	0.26 (0.03 to 0.49) [*]	1.58 (0.61 to 4.1)	3.58 (1.2 to 10) [*]
35–44 years	–0.02 (–0.25 to 0.21)	0.16 (–0.08 to 0.39)	0.93 (0.36 to 2.3)	2.19 (0.77 to 6.2)
45–55 years	–0.05 (–0.28 to 0.18)	0.12 (–0.11 to 0.35)	0.83 (0.33 to 2.1)	1.84 (0.65 to 5.2)
55 years or older	–0.02 (–0.26 to 0.22)	0.15 (–0.1 to 0.39)	0.91 (0.35 to 2.4)	2.07 (0.69 to 6.2)
Formal education (9–10 years)	0	0	1	1
12–13 years	–0.04 (–0.13 to 0.05)	–0.05 (–0.14 to 0.04)	0.85 (0.59 to 1.2)	0.81 (0.54 to 1.2)
Midwifery studies	0.12 (–0.1 to 0.34)	0.09 (–0.12 to 0.3)	1.69 (0.66 to 4.3)	1.66 (0.59 to 4.7)
Other studies	–0.09 (–0.28 to 0.1)	–0.02 (–0.21 to 0.16)	0.70 (0.33 to 1.5)	0.90 (0.4 to 2)
Midwifery association member (no)	0	0	1	1
Yes	–0.22 (–0.39 to –0.06) ^{**}	–0.10 (–0.27 to 0.08)	0.37 (0.17 to 0.8) [*]	0.57 (0.24 to 1.4)
Focus of practice (rural area)	0	0	1	1
Small city (<50 K population)	0.04 (–0.07 to 0.14)	–0.01 (–0.12 to 0.1)	1.16 (0.75 to 1.8)	0.95 (0.59 to 1.5)
Medium-size city (50–100 K population)	0.08 (–0.04 to 0.19)	–0.02 (–0.13 to 0.1)	1.37 (0.86 to 2.2)	0.93 (0.56 to 1.6)
Large city (>100 K population)	0.01 (–0.1 to 0.12)	–0.07 (–0.18 to 0.04)	1.04 (0.68 to 1.6)	0.74 (0.46 to 1.2)
Work model (freelance)	0	0	1	1
Freelance & hospital affiliated	0.10 (–0.06 to 0.26)	–0.02 (–0.24 to 0.2)	1.49 (0.78 to 2.8)	0.91 (0.35 to 2.4)
Employed	0.22 (0.12 to 0.31) ^{***}	0.03 (–0.15 to 0.22)	2.45 (1.6 to 3.7) ^{***}	1.11 (0.49 to 2.5)
Freelance & employed	0.23 (0.13 to 0.34) ^{***}	0.17 (–0.01 to 0.35)	2.62 (1.7 to 4.1) ^{***}	2.08 (0.94 to 4.6)
Work setting (community based)	0	0	1	1
Hospital	0.30 (0.19 to 0.41) ^{***}	0.31 (0.09 to 0.52) ^{**}	3.65 (2.2 to 6) ^{***}	4.34 (1.6 to 11) ^{**}
Community based & hospital	0.16 (0.07 to 0.25) ^{***}	0.05 (–0.13 to 0.23)	1.91 (1.3 to 2.7) ^{***}	1.26 (0.57 to 2.8)
Attending births (no)	0	0	1	1
Yes	0.06 (–0.02 to 0.15)	–0.08 (–0.18 to 0.01)	1.30 (0.94 to 1.8)	0.68 (0.44 to 1)
Weekly work hours (≤24 hours)	0	0	1	1
25–34 hours	0.18 (0.07 to 0.3) ^{**}	0.19 (0.07 to 0.3) ^{**}	2.09 (1.3 to 3.4) ^{**}	2.31 (1.4 to 3.9) ^{**}
35–44 hours	0.19 (0.08 to 0.3) ^{***}	0.19 (0.08 to 0.31) ^{***}	2.17 (1.4 to 3.5) ^{**}	2.42 (1.4 to 4.1) ^{***}
45–54 hours	0.23 (0.11 to 0.36) ^{***}	0.24 (0.11 to 0.37) ^{***}	2.60 (1.5 to 4.4) ^{***}	3.03 (1.7 to 5.4) ^{***}
55 hours or more	0.36 (0.18 to 0.53) ^{***}	0.38 (0.21 to 0.56) ^{***}	4.54 (2.1 to 9.9) ^{***}	5.94 (2.6 to 14) ^{***}
Constant	Yes	0.26 (0.03 to 0.49) [*]	Yes	3.58 (1.2 to 10) [*]

OR = Odds ratio. CI = Confidence interval. [#] All covariates included in the multivariable regression are listed in the table. [†] Copenhagen Burnout Inventory (CBI) score <50 for personal, work-related, and client-related burnout. [‡] CBI score ≥50 for personal, work-related, and/or client-related burnout. ^{*} $P < 0.1$, ^{**} $P < 0.05$, ^{***} $P < 0.01$.

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