

Supplementary Table 1 Generalized Variance Inflation Factor

	Outcome: Fatigue				Outcome: MEQSA			
	Full model		Selected model		Full model		Selected model	
	GVIF	GVIF ^{^(1/(2*Df))}	GVIF	GVIF ^{^(1/(2*Df))}	GVIF	GVIF ^{^(1/(2*Df))}	GVIF	GVIF ^{^(1/(2*Df))}
Group	1.708	1.143	1.358	1.080	1.619	1.128	1.290	1.066
Sex	1.327	1.152			1.311	1.145		
Age	2.210	1.487	1.358	1.165	2.057	1.434	1.566	1.251
Working hours	2.889	1.700			2.865	1.693	1.273	1.128
Employment	4.131	1.426			4.045	1.418		

Supplementary Table 2 Pairwise comparisons with p values adjusted with Holm's method

All patients	Adjusted <i>P</i> values with Holm method				
	CBP <i>vs</i> CSP	CBP <i>vs</i> HC	CSP <i>vs</i> HC	Kruskal-Wallis	ANOVA
Age	0.0000053	0.663	0.0000194	0.00000284	
BMI	0.0312	0.0306	0.740	0.0119	
Working days/week	0.0922	0.433	0.0255	0.0299	
Working hours/week	0.0875	0.561	0.0385	0.0405	
MEQ-SA	0.0162	0.499	0.0510	0.0185	
	0.00615	0.459	0.0245		0.007

Pairwise comparisons performed only for variables resulted statistically significant at Kruskal-Wallis or ANOVA test.

MEQ-SA resulted normally distributed at Shapiro-Wilk test, however either Kruskal-Wallis and ANOVA were done.

Supplementary Table 3 Pairwise comparisons with *P* values adjusted with Holm's method

Worker's subset	Adjusted <i>P</i> values with Holm method			
	CBP <i>vs</i> CSP	CBP <i>vs</i> HC	CSP <i>vs</i> HC	Kruskal-Wallis
Age	0.000836	0.932	0.0009	0.0004
BMI	0.0570	0.0832	0.721	0.0377
Sleep duration	0.299	0.439	0.0914	0.0879
Number of awakenings	0.944	0.0629	0.0711	0.0294

Pairwise comparisons performed only for variables resulted statistically significant at Kruskal-Wallis or ANOVA test in the workers subset.

Supplementary Table 4 Pairwise comparisons with *P* values adjusted with Holm's method

Female subset	Adjusted <i>P</i> values with Holm method			
	CBP <i>vs</i> CSP	CBP <i>vs</i> HC	CSP <i>vs</i> HC	Kruskal-Wallis
Age	0.0123	0.600	0.0220	0.0151
BMI	0.0718	0.0683	0.348	0.0258

Pairwise comparisons performed only for variables resulted statistically significant at Kruskal-Wallis or ANOVA test in the female subset.

Supplementary Table 5 PBC and HC comparison

		Overall	PBC	HC	<i>P</i> value
		122	61	61	
Age years		63.00 (57.00-71.75)	63.00 (57.00-73.00)	62.00 (57.00-71.00)	0.659
BMI, kg/m ²		23.88 (20.98-26.61)	24.58 (22.39-27.34)	23.18 (20.48-25.30)	0.012
Sleep duration, hours		6.50 (6.00-7.00)	6.50 (5.50-7.00)	6.50 (6.00-7.00)	0.880
Number of awakenings		1.50 (1.50-1.50)	1.50 (1.50-1.50)	1.50 (1.50-1.50)	0.277
Working days/week		5.00 (0.00-5.00)	5.00 (0.00-5.00)	5.00 (0.00-5.00)	0.459
Working hours/day		4.00 (0.00-8.00)	5.00 (0.00-8.00)	4.00 (0.00-8.00)	0.590
Sex (%)	Female	108 (88.5)	54 (88.5)	54 (88.5)	1.000
	Male	14 (11.5)	7 (11.5)	7 (11.5)	
Nocturnal light exposure, %	0	111 (91.0)	55 (90.2)	56 (91.8)	1.000
	1	11 (9.0)	6 (9.8)	5 (8.2)	
Employment, %	Employed	66 (54.1)	29 (47.5)	37 (60.7)	0.359
	Retired	50 (41.0)	28 (45.9)	22 (36.1)	
	Unemployed	6 (4.9)	4 (6.6)	2 (3.3)	

Supplementary Table 6 PBC and PSC comparison

		Overall	PBC	PSC	<i>P</i> value
		91	61	30	
Age years		60.00 (52.00-68.00)	63.00 (57.00-73.00)	50.50 (30.00-57.75)	< 0.001
BMI, kg/m ²		24.14 (21.72-26.89)	24.58 (22.39-27.34)	22.56 (20.45-24.87)	0.012
Sleep duration, hours		7.00 (6.00-7.50)	6.50 (5.50-7.00)	7.00 (6.50-7.50)	0.079
Number of awakenings		1.50 (1.00-1.50)	1.50 (1.50-1.50)	1.50 (0.00-2.25)	0.978
Working days/week		5.00 (0.00-6.00)	5.00 (0.00-5.00)	5.00 (5.00-6.00)	0.057
Working hours/day		6.00 (0.00-8.00)	5.00 (0.00-8.00)	7.00 (4.00-8.00)	0.055
Disease duration, years		10.00 (4.00-16.00)	10.50 (4.00-16.00)	10.00 (4.00-16.00)	0.914
Sex (%)	Female	67 (73.6)	54 (88.5)	13 (43.3)	< 0.001
	Male	24 (26.4)	7 (11.5)	17 (56.7)	
Nocturnal light exposure, %	0	84 (92.3)	55 (90.2)	29 (96.7)	0.419
	1	7 (7.7)	6 (9.8)	1 (3.3)	
Employment, %	Employed	48 (52.7)	29 (47.5)	19 (63.3)	0.010
	Retired	33 (36.3)	28 (45.9)	5 (16.7)	
	Unemployed	10 (11.0)	4 (6.6)	6 (20.0)	
Fibroscan, %	1	68 (75.6)	45 (73.8)	23 (79.3)	0.362
	2	16 (17.8)	13 (21.3)	3 (10.3)	
	3	6 (6.7)	3 (4.9)	3 (10.3)	

Supplementary Table 7 Workers subset analysis

		Overall	PBC	PSC	HC	P value
		85	29	19	37	
Age years		56.00 (50.00-62.00)	57.00 (52.00-65.00)	49.00 (38.00-54.50)	60.00 (54.00-62.00)	< 0.001
BMI, kg/m ²		23.44 (20.76-26.03)	24.75 (22.39-28.40)	22.67 (20.09-24.45)	23.23 (20.48-24.56)	0.038
Sleep duration, hours		7.00 (6.00-7.50)	7.00 (6.00-7.50)	7.00 (6.50-8.00)	6.50 (5.50-7.00)	0.088
Number of awakenings		1.50 (1.50-1.50)	1.50 (1.00-1.50)	1.50 (0.00-1.50)	1.50 (1.50-2.50)	0.029
Working days/week		5.00 (5.00-6.00)	5.00 (5.00-6.00)	5.00 (5.00-5.00)	5.00 (5.00-6.00)	0.737
Working hours/day		8.00 (6.00-8.00)	8.00 (6.00-8.00)	8.00 (6.50-9.00)	8.00 (6.00-8.00)	0.246
Chronotype (MEQ-SA)		58.00 (53.00-62.00)	58.00 (54.00-63.00)	57.00 (50.50-58.50)	58.00 (53.00-65.00)	0.147
Daytime sleepiness (ESS)		6.00 (4.00-9.00)	6.00 (5.00-10.00)	5.00 (4.00-9.50)	5.00 (3.00-8.00)	0.185
Global fatigue (FIS)		29.00 (15.00-53.00)	27.00 (15.00-88.00)	17.00 (3.00-49.50)	37.00 (21.00-53.00)	0.146
Sex, %	Female	70 (82.4)	26 (89.7)	10 (52.6)	34 (91.9)	0.001
	Male	15 (17.6)	3 (10.3)	9 (47.4)	3 (8.1)	
Nocturnal light exposure, %	No	78 (91.8)	27 (93.1)	18 (94.7)	33 (89.2)	0.781
	Yes	7 (8.2)	2 (6.9)	1 (5.3)	4 (10.8)	
Type of fatigue (%)	Mental	42 (49.4)	12 (41.4)	8 (42.1)	22 (59.5)	0.284
	Muscular	43 (50.6)	17 (58.6)	11 (57.9)	15 (40.5)	

Supplementary Table 8 Female subset analysis

		Overall	PBC	PSC	HC	P value
		121	54	13	54	
Age years		62.00 (55.00-70.00)	63.00 (56.25-72.75)	54.00 (50.00-58.00)	62.00 (55.50-68.00)	0.015
BMI, kg/m ²		23.61 (20.70-26.03)	24.35 (22.09-27.22)	22.38 (19.95-23.73)	23.15 (20.29-25.26)	0.026
Sleep duration, hours		6.50 (5.50-7.00)	6.50 (5.50-7.00)	7.00 (6.00-8.00)	6.50 (6.00-7.00)	0.403
Number of awakenings		1.50 (1.50-1.50)	1.50 (1.12-1.50)	1.50 (1.50-2.50)	1.50 (1.50-1.50)	0.201
Working days/week		5.00 (0.00-5.00)	5.00 (0.00-5.00)	5.00 (5.00-6.00)	5.00 (0.00-5.00)	0.202
Working hours/day		5.00 (0.00-8.00)	5.00 (0.00-8.00)	7.00 (5.00-8.00)	4.00 (0.00-8.00)	0.221
Chronotype (MEQ-SA)		58.00 (53.00-64.00)	60.00 (55.25-63.00)	58.00 (52.00-60.00)	57.50 (52.25-65.00)	0.389
Daytime sleepiness (ESS)		6.00 (4.00-8.00)	6.00 (4.00-9.75)	7.00 (5.00-10.00)	5.50 (3.00-8.00)	0.442
Global fatigue (FIS)		38.00 (17.00-76.00)	37.50 (17.25-107.50)	20.00 (15.00-76.00)	38.00 (21.00-56.75)	0.497
Nocturnal light exposure, %	0	111 (91.7)	49 (90.7)	13 (100.0)	49 (90.7)	0.794
	1	10 (8.3)	5 (9.3)	0 (0.0)	5 (9.3)	
Employment, %	Employed	70 (57.9)	26 (48.1)	10 (76.9)	34 (63.0)	0.186
	Retired	45 (37.2)	25 (46.3)	2 (15.4)	18 (33.3)	
	Unemployed	6 (5.0)	3 (5.6)	1 (7.7)	2 (3.7)	
Type of fatigue (%)	Mental	55 (45.5)	19 (35.2)	4 (30.8)	32 (59.3)	0.025
	Muscular	66 (54.5)	35 (64.8)	9 (69.2)	22 (40.7)	

Supplementary Table 9 PSC and HC comparison

		Overall	PSC	HC	P value
		91	30	61	
Age (median (IQR)), years		60.00 (51.00-67.00)	50.50 (30.00-57.75)	62.00 (57.00-71.00)	< 0.001
Age years		22.67 (20.40-25.22)	22.56 (20.45-24.87)	23.18 (20.48-25.30)	0.807
BMI, kg/m ²		7.00 (6.00-7.25)	7.00 (6.50-7.50)	6.50 (6.00-7.00)	0.054
Number of awakenings		1.50 (1.50-1.50)	1.50 (0.00-2.25)	1.50 (1.50-1.50)	0.527
Working days/week		5.00 (0.00-5.00)	5.00 (5.00-6.00)	5.00 (0.00-5.00)	0.007
Working hours/day		6.00 (0.00-8.00)	7.00 (4.00-8.00)	4.00 (0.00-8.00)	0.011
Chronotype (MEQ-SA)		57.00 (52.00-64.00)	54.50 (46.75-59.00)	58.00 (53.00-65.00)	0.048
Daytime sleepiness (ESS)		5.00 (4.00-8.00)	6.00 (4.00-9.00)	5.00 (3.00-8.00)	0.138
Global fatigue (FIS)		35.00 (16.00-57.50)	24.00 (6.50-61.25)	37.00 (21.00-56.00)	0.196
Sex, %	Female	67 (73.6)	13 (43.3)	54 (88.5)	< 0.001
	Male	24 (26.4)	17 (56.7)	7 (11.5)	
Nocturnal light exposure, %	0	85 (93.4)	29 (96.7)	56 (91.8)	0.659
	1	6 (6.6)	1 (3.3)	5 (8.2)	
Employment, %	Employed	56 (61.5)	19 (63.3)	37 (60.7)	0.014
	Retired	27 (29.7)	5 (16.7)	22 (36.1)	
	Unemployed	8 (8.8)	6 (20.0)	2 (3.3)	
Type of fatigue (%)	Mental	49 (53.8)	12 (40.0)	37 (60.7)	0.076

Muscular

42 (46.2)

18 (60.0)

24 (39.3)
