

Healthcare professionals' psychological distress, risk and protective mental health factors after two years of COVID-19 pandemic in Portugal

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Introduction

- Evidence from previous epidemic outbreaks pointed to psychological distress (anxiety, depression, post-traumatic stress and burnout), with both short-term and long-term effects [1-2].
- Research on the impact of COVID-19 on mental health (MH) points in the same direction [3-5].
- Healthcare professionals (HCPs) are one of the most vulnerable groups [4].
- Within this group, some subgroups may be at higher risk of distress [5].
- Distress is multifactorial, with some factors acting as protective, with a buffer effect, or as risk, increasing the odds of distress.
- The situation produced by COVID-19 has aggravated and multiplied the presence of pre-existing psychosocial risk factors for HCPs wellbeing

Objectives: 1) to characterize Portuguese HCPs MH outcomes, estimating the percentage of symptoms of anxiety, depression, post-traumatic stress disorder (PTSD) and burnout, and 2) to identify risk and protective factors.

Material and Methods

- A cross-sectional online survey was conducted in 2020 (T0) and repeated in 2021 (T1).
- Sociodemographic and occupational variables, protection behaviours and pandemic-context data were collected from a non-probabilistic sample of HCP in Portugal.
- MH outcomes were assessed using instruments with sound psychometric properties
 - Anxiety: Generalized Anxiety Disorder Scale - **GAD-7** [6]
 - Depression: Patient Health Questionnaire - **PHQ-9** [7]
 - Post-Traumatic Stress Disorder - **PCL-5 Short Form** [8]
 - Burnout: Shirom-Melamed Burnout Measure - **SMBM** [9]
 - Resilience: Connor-Davidson Resilience Scale - **CD-RISC** [10]
- Risk and protective factors were assessed through simple and multiple logistic regression models.

Discussion and conclusion

- A significant proportion reported high percentages of moderate to severe symptoms of anxiety, depression, PTSD and burnout, in both years.
- Moderate to severe symptoms decreased from 2020 to 2021. The decrease for anxiety and PTSD symptoms was found significant ($p < 0.01$).
- However, our results show a higher percentage of psychological distress symptoms among HCPs when comparing with previous data for the Portuguese population [11].
- A set of fixed sociodemographic and occupational factors, as well as a set of controllable common factors were found significantly associated with HCPs mental health outcomes.
- Being a woman, working as a frontline HCP and perceived work-life imbalance increased the risk of distress in 2020 and 2021.
- Perceived a good social/family support, higher resilience level and the capacity to maintain hobbies and lifestyle were significantly associated with lower symptoms of all the MH outcomes, in both years.
- These findings support further monitoring on the HCPs mental health. Psychological screening and surveillance is of paramount importance in peri- and post-pandemic period.

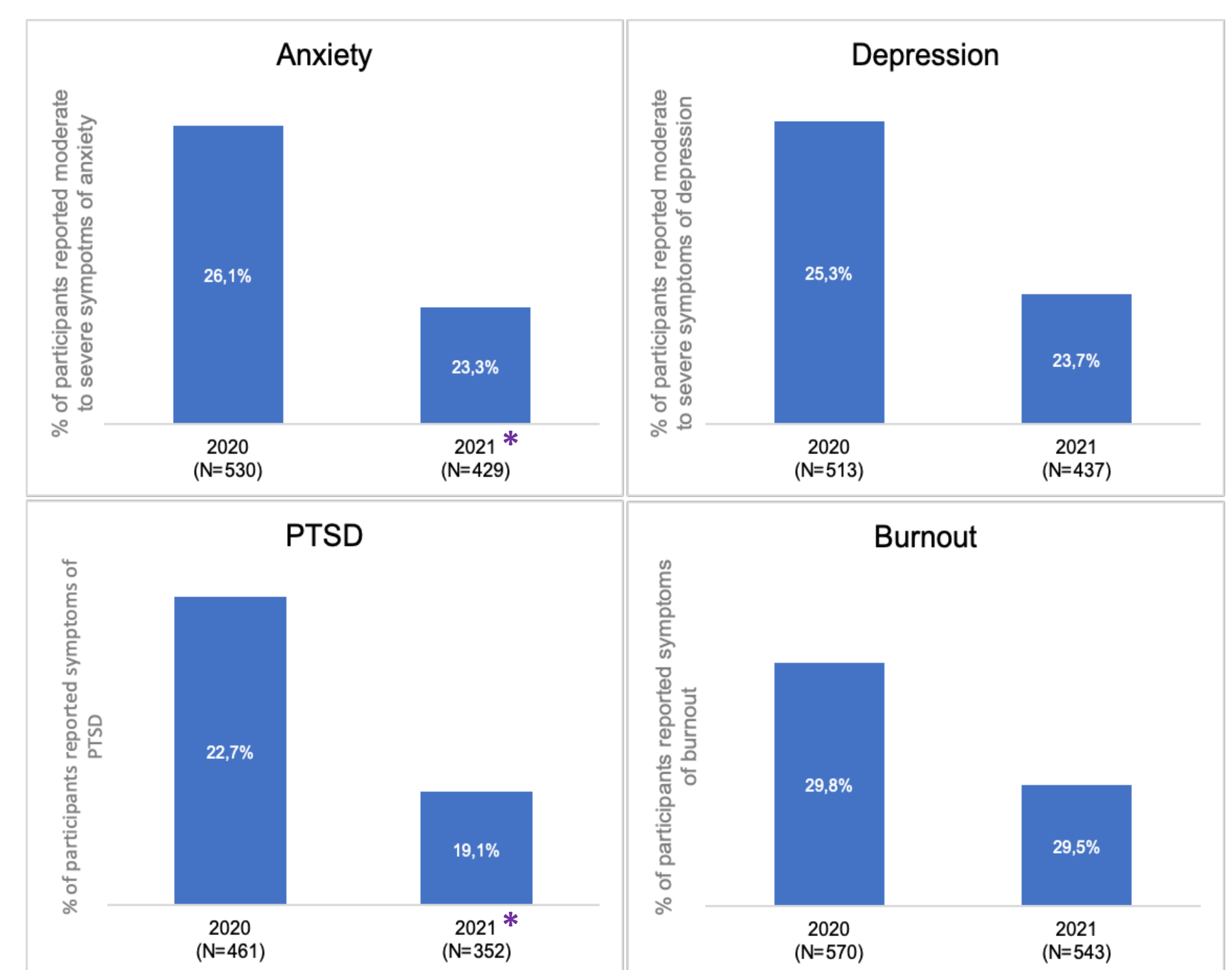
Results

HCPs sample characterization (2020 and 2021)

	2020 n (%)	2021 n (%)
Overall	2027 (100%)	1843 (100%)
Sociodemographic		
Sex		
Male	336 (16.6%)	322 (17.5%)
Female	1691 (83.4%)	1521 (82.5%)
Age group (yrs)		
18-29	224 (11.1%)	125 (6.8%)
30-39	578 (28.5%)	506 (27.5%)
40-49	580 (28.6%)	595 (32.3%)
50-59	456 (22.5%)	433 (23.5%)
+60	189 (9.3%)	184 (10.0%)
Region (NUTS II)		
North	718 (35.4%)	715 (38.8%)
Center	462 (22.8%)	384 (20.8%)
Lisbon Metropolitan Area	668 (33.0%)	479 (26.0%)
Alentejo	90 (4.4%)	50 (2.7%)
Algarve	45 (2.2%)	43 (2.3%)
Azores	38 (1.9%)	28 (1.5%)
Madeira	6 (0.3%)	144 (7.8%)

	2020 n (%)	2021 n (%)
Overall	2027 (100%)	1843 (100%)
Occupational		
Professional career		
Physician	525 (26.0%)	415 (22.5%)
Nurse	796 (39.4%)	753 (40.9%)
Healthcare Assistant	116 (5.7%)	106 (5.8%)
Other	585 (28.9%)	568 (30.8%)
Facing-patient		
No	290 (16.2%)	255 (14.6%)
Yes	1498 (83.8%)	1492 (85.4%)
Working position		
Non-frontline	1273 (70.7%)	1125 (65.0%)
Frontline	527 (29.3%)	606 (35.0%)

Symptoms of anxiety, depression, PTSD and burnout (2020 and 2021)



* Statically significant decrease ($p < 0.01$)

Risk and protective factors (2020 and 2021)

