Distress among healthcare professionals during the first two years of COVID-19 pandemic in Portugal

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Objectives

1) Characterize healthcare professionals (HCPs) mental health (MH) outcomes, estimating the percentage of symptoms of anxiety, depression, post-traumatic stress disorder (PTSD) and burnout,
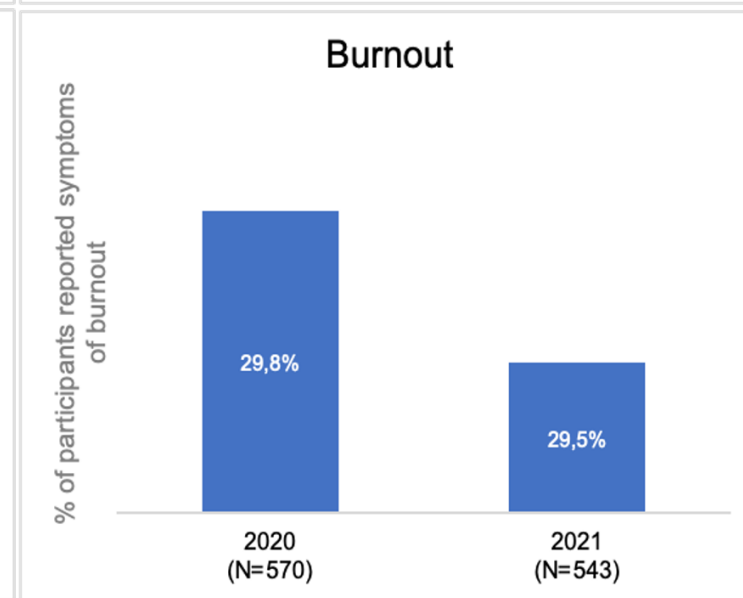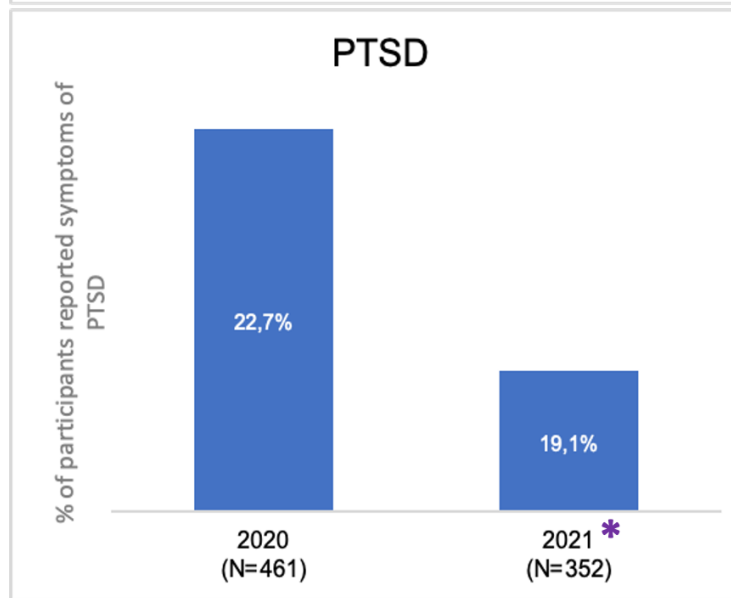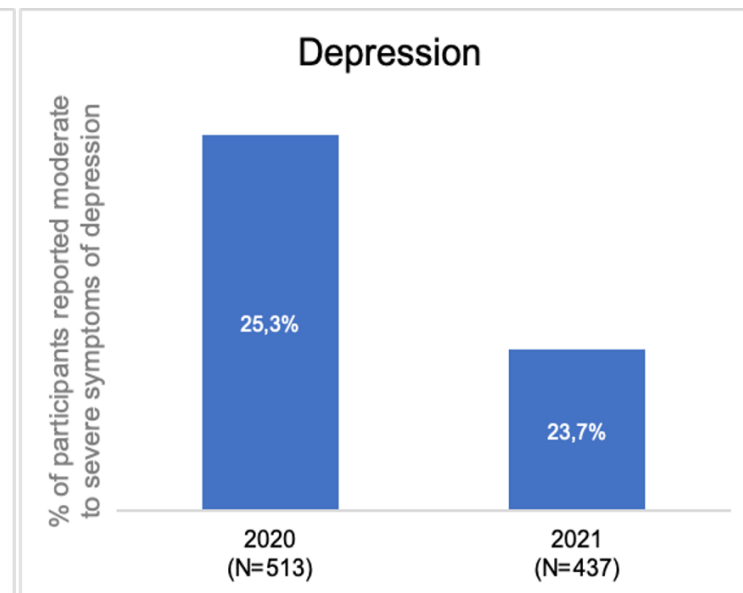
2) Identify risk and protective factors.

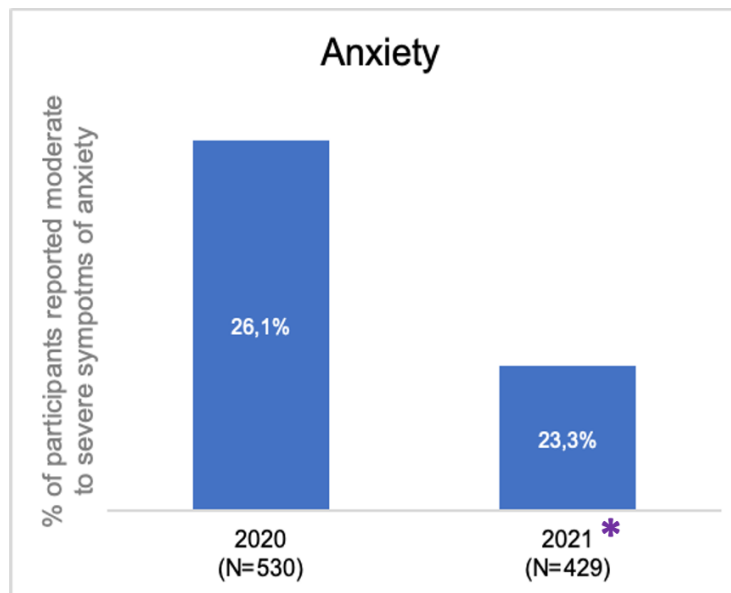## Material & Methods

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

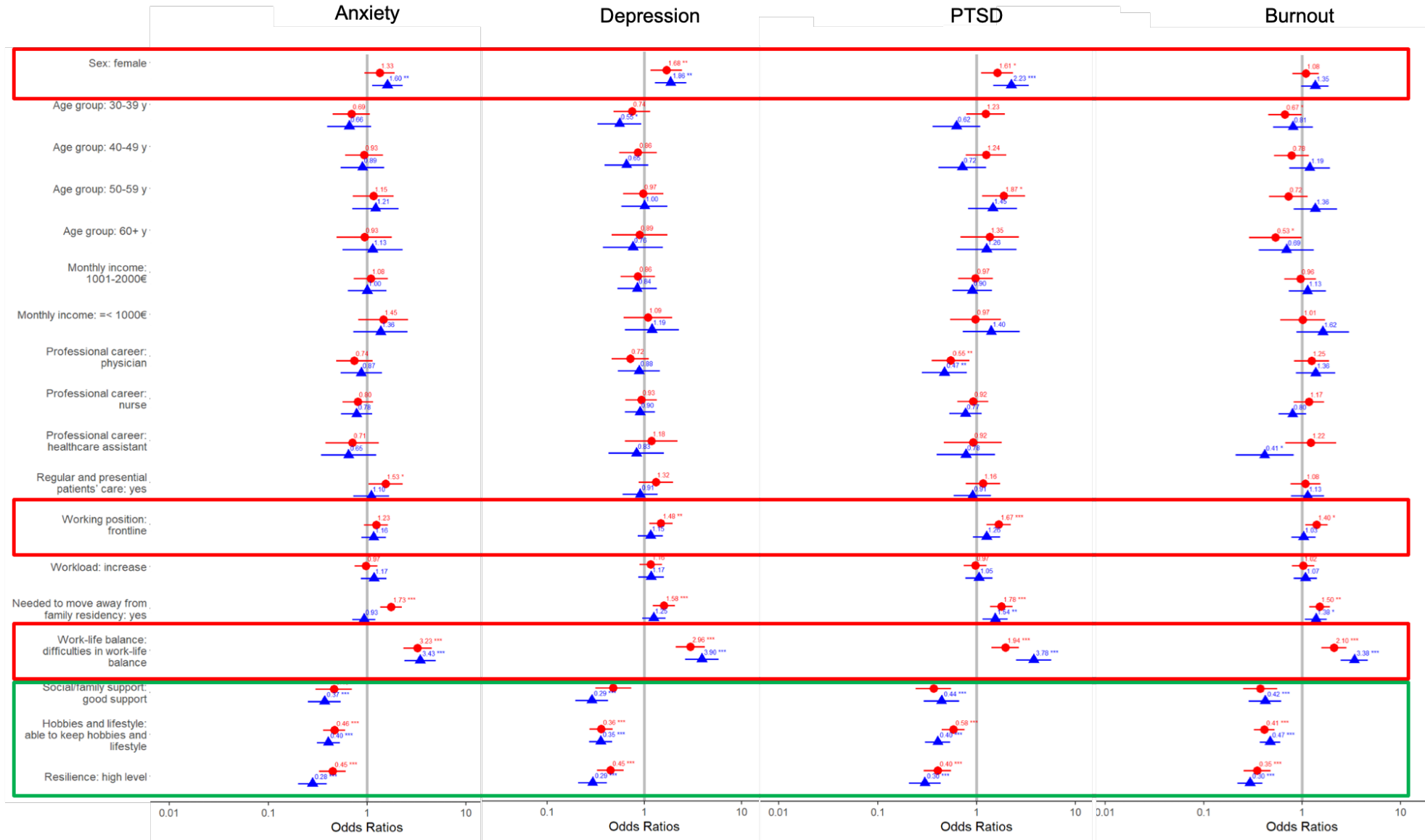# Results | Symptoms of anxiety, depression, PTSD and burnout

	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%)
18-29	224 (11.1%)	125 (6.8%)
Occupational		
30-39	578 (28.5%)	506 (27.5%)
Professional career		
Physician	525 (26.0%)	415 (22.5%)
40-49	580 (28.6%)	595 (32.3%)
Nurse	796 (39.4%)	753 (40.9%)
50-59	490 (22.5%)	433 (20.6%)
Healthcare Assistant	116 (5.7%)	106 (5.6%)
Other	585 (28.9%)	568 (30.8%)
Region (NUTS II)		
North	718 (35.4%)	715 (38.8%)
Facing patient		
Center	462 (22.8%)	384 (20.8%)
No	290 (16.2%)	255 (14.6%)
Lisbon Metropolitan Area	668 (33.0%)	479 (26.0%)
Yes	1498 (83.8%)	1492 (85.4%)
Alentejo		
Working position		
Azores		
Non-frentline	1273 (70.7%)	1125 (65.0%)
Madeira		
Frontline	527 (29.3%)	606 (35.0%)

* Statically significant decrease ($p < 0.01$)

Results | Risk and protective factors

Forest plot comparing odds ratios for Anxiety, Depression, PTSD, and Burnout across risk and protective factors, with 2020 (red circles) and 2021 (blue triangles) data points.

Conclusions

‣ A **significant HCPs proportion** reported **high percentages of distress**, in **both years**.

‣ **Percentages of psychological distress** symptoms among HCPs were **higher** when comparing with **previous data** for the Portuguese population.

‣ 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 **MH protective factors**, in both years.

‣ **Psychological screening and surveillance** are of paramount importance in peri- and post-pandemic period.