

Burnout in Healthcare Workers During the COVID-19 Pandemic

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Background: Burnout is a psychological syndrome characterized by depersonalization, a sense of reduced accomplishment in day-to-day work and emotional exhaustion.¹ Physician burnout and fatigue has a negative impact not only on one's well-being but also on patient care, treatment outcomes, and the healthcare system as a whole. Additionally, burnout is associated with low job satisfaction, decreased work productivity, increased medical errors, increased risk of malpractice, reduced patient satisfaction, poor quality of patient care, early retirement and healthcare system failure.^{2,3,4,5} The current global pandemic is causing fear and concern among many and impacting the mental health of over 40% of individuals.⁶ The lives of infected individuals, family and friends, and the society are at stake due to the perpetuated potential effects of the coronavirus disease 2019 (COVID-19). The outbreak started in China turned into a pandemic and infected more than 23.311.719 people around the world by August 24, 2020.⁷ In this article we investigated burnout in healthcare workers during Covid-19 pandemic.

Methods: A cross-sectional study was conducted from April 28 to May 18, 2020 in Turkey and the USA where authors were able to access healthcare workers easier. An online survey eliciting sociodemographic conditions, potential risk factors of burnout syndrome identified by literature review^{8,9}, and the Pines Burnout Measure¹⁰, short version, was prepared and published online using Survey Monkey¹¹. Descriptive statistics were mean, standard deviation, frequency and percent. The Pearson's Chi-square test was used to assess the relationship between categorical variables. The continuous variables were tested by Kolmogorov-Smirnov test. The non-parametric Mann-Whitney U test was utilized to assess sample distribution. Univariate and multivariate logistic regression analysis was performed to identify the risk factors independently associated with severe burnout in at least one subscale. P-values lower than 0,25 were indicated in the multivariate logistic regression tables. A p-value <0.05 was considered to be significant. **Results:** 785 of 1237(63%) invited participants completed the survey. All cases in the sample were valid to be analyzed. 104 participants were working in the U.S.A. and 681 participants were working in Turkey. Overall burnout rate in the U.S.A. was 46.2% while in Turkey the rate was 62.6%. (χ^2 : 10.145, $p = 0.001$) Healthcare workers from Turkey are 2.4 times likely to burnout than healthcare workers from U.S.A (Adjusted Odds Ratio(OR):2.4, 95% Confidence Interval(CI) 1.5 to 3.9) Younger healthcare workers are more likely to burnout. (For age under 35 group OR: 1.9, 95%CI, 1.6 to 5.0; for 35-54 age group OR: 2.1, 95%CI 1.2 to 3.5) Female participants are more likely to burnout than males. (Adjusted OR: 2.014, 95% CI 1.4 to 2.7) Burnout rate was 70.6% in "without partner and child" group, 65.2% in "without partner, with child" group and 57.9% in "with a partner" group. (χ^2 : 7.55, $p: 0.023$) We didn't find a significant correlation between different occupational groups. Burnout rate in physicians was 59.8% and 63.0% in other healthcare workers. ($p: 0.471$) And we didn't find any significant difference in between groups of: having a chronic condition ($p: 0.245$), having anyone diagnosed with (p:0,439)/died from(p:0.791) COVID-19 around, diagnosed with COVID-19 herself/himself(p:0.972), change in living condition during pandemic ($p: 0.688$) and working hours in a week(p:0.459) Participants who are directly engaged to COVID-19 care, who believe proper precautions were not taken and who use tobacco products are more likely to burnout.(OR: 1.6, %95 CI 1.1 to 2.1; OR:3.1, %95 CI 2.3 to 4.2; OR: 1.7, %95 CI 1.1 to 2.6, respectively) **Conclusions:** The responses indicate that variables related to the COVID-19 epidemic do play a role in burnout risk. No interventions have been attempted in relation to COVID-19-related burnout. Our study indicates COVID-19-related widespread burnout in healthcare workers in two different countries, in many different settings and age groups. Adequate resources and support are needed to optimize outcomes for everyone.

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