

Post-acute Sequelae of COVID-19 Among Healthcare Workers: Findings From a National Registry

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Rationale: The impact of post-acute sequelae of COVID-19 (PASC) is not well-defined. Given that healthcare workers (HCW) may be disproportionately affected by COVID-19 and its sequelae, it is important to understand the nature and impact of PASC in this population. We described PASC symptoms and health status in the Healthcare Worker Exposure Response and Outcomes (HERO) registry. **Methods:** Randomly selected HERO registry participants with COVID-19 (cases) and without COVID-19 infection (controls) completed the PASC survey between February-March 2022 regarding their experiences between April 2020-February 2021. Baseline characteristics were compared between cases and controls. Health status and symptoms in cases and controls were compared using propensity score-weighted logistic regression models adjusting for age, sex, region, comorbidities, and calendar time. We estimated standardized differences (SD) before and after weighting with SD<0.10 indicating good comparability between groups. **Results:** Respondents included 74 COVID-19 cases and 958 controls. Overall, mean age was 44.7 years with 75.6% female, 85.3% White, 24.8% physicians, 28.4% nurses, and 67.1% hospital employees. Cases were older, more frequently White, nurses, and from the Northeast, and less frequently from the South and had higher prevalence of hypertension, diabetes, immunosuppression, and localized cancer. In adjusted analyses, cases were more likely to report worse health status (44.4% vs 22.9%, SD 0.53) and any symptoms (68.8 vs 53.0%, SD 0.31) than controls. Cough (13.9 vs 2.0%, SD 0.45), dyspnea (18.3 vs 7.8%, SD 0.31), sleeping difficulties (30.8 vs 3.1%, SD 0.79), headache (14.3 vs 4.8%, SD 0.33), confusion (11.0% vs 2.1%, SD 0.37), anosmia/ageusia (22.2 vs 11.9%, SD 0.28), arthralgias (27.9 vs 12.1%, SD 0.41), myalgias (27.2 vs 1.9%, SD 0.77), fatigue (13.1 vs 3.2%, SD 0.37), and diarrhea (23.1 vs 4.6%, SD 0.56) were more common and depression (18.3 vs 32.1%, SD 0.32) was less prevalent in cases compared to controls. Symptomatic cases were more likely to be unable to perform normal daily activities (52.0% vs 26.2%, SD 0.55), miss work (25.1% vs 17.5%, SD 0.19), and seek medical attention (53.8 vs 38.6%, SD 0.31). Cases reported persistent symptoms more frequently than controls (69.7 vs 58.8%, SD 0.27). **Conclusions:** Healthcare workers with COVID-19 infection have increased risk for worse health status and more frequent and ongoing PASC symptoms with adverse impact on daily function and work compared to uninfected HCW. These findings indicate the need for further research and increased resources to mitigate the deleterious effects of PASC among healthcare workers.

Figure 1: Weighted symptom prevalence for cases (n=74) and controls (n=958)



