

and 18.8% of physicians had recollected having COVID-19 related dreams. 33% doctors' last thought before sleep and first thought after waking up were about COVID-19. 36% doctors looked for information about COVID-19 on media immediately before going to sleep and immediately after waking up. More than 60% doctors started meditation, exercise, yoga or relaxation techniques for getting better sleep.

Conclusion: A further decline in duration and quality of sleep due to the COVID-19 pandemic amongst already sleep-deprived doctors may be detrimental not only to their own health but for patient-care also.

Support (if any):

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COMPARISON OF TELEMEDICINE AND IN-PERSON PSYCHOTHERAPY FOR CPAP ADHERENCE IN A POPULATION OF VETERANS

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Introduction: Obstructive sleep apnea (OSA) is the second most common sleep disorder among Veterans and carries risk of serious health complications when untreated. The gold standard for OSA treatment is Positive Airway Pressure (PAP). However, adherence to PAP therapy is chronically low. Interventions to enhance adherence include education, practical support, and psychotherapy. Cognitive behavioral therapy and motivational interviewing have been shown to improve CPAP usage by approximately 1 hour per night. Telemedicine-delivered CPAP education and telemonitoring-with-feedback has demonstrated improved adherence in patients with OSA. Our study evaluated the effectiveness of a telemedicine group psychotherapy intervention for Veterans diagnosed with OSA and found to be nonadherent to CPAP therapy. The intervention is delivered in four weekly 60-minute sessions.

Methods: We identified a cohort of 29 patients who participated in the intervention via telemedicine from April 2020 - September 2020 (Telemedicine Psychotherapy cohort). The cohort was compared to a historical control of 35 patients who participated in the in-person group psychotherapy from April 2019 - September 2019 (In-Person Psychotherapy cohort). Through retrospective chart review, we analyzed baseline and post-intervention data from both cohorts. Demographics collected included age, sex, BMI, ethnicity, zip code, as well as medical and mental health comorbidities. Data collected from the medical record included: OSA severity, pre- and post-psychotherapy 90-day average nightly CPAP usage (in minutes), number of psychotherapy classes attended (out of 4) and number of sleep clinic visits at 90-days post-psychotherapy. We used descriptive statistics to provide summary data of this sample and t-test to evaluate Veteran's average CPAP usage per night and number of sleep clinic visits at 90-days post-psychotherapy between cohorts.

Results: Compared to a cohort of in-person group psychotherapy to improve CPAP adherence, a telemedicine-based cohort demonstrated improvement in 90-day average nightly CPAP usage by an average of 76 minutes per night. ($p=0.08$) Additionally, patient engagement with the sleep clinic at 90 days following completion of telemedicine psychotherapy was significantly higher compared to in-person psychotherapy ($p<0.001$).

Conclusion: In a haphazardly-collected convenient sample of veterans during the COVID-19 pandemic, telemedicine psychotherapy led to improved CPAP usage. Veterans who underwent telemedicine intervention also significantly increased engagement with the sleep clinic.

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CONTRIBUTION OF PULMONARY DISEASES TO COVID-19 MORTALITY IN A DIVERSE COMMUNITY OF NEW YORK CITY

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Introduction: New York City has been one of the largest epicenters of the COVID-19 pandemic. This provided a wealth of data to examine the characteristics of COVID-19 patients in this multi-ethnic city, while assessing the contributions of cardio-metabolic burden and pulmonary conditions as potential "at-risk" conditions for COVID-19. We assessed the relative contribution of common upper and lower airway pulmonary diseases in determining the likelihood of COVID-19-related mortality independent of other medical conditions, health risks, and sociodemographic factors.

Methods: We analyzed data from one of the largest US-based case series of patients with COVID-19, captured from an academic health network in NYC. A total of 11,512 hospitalized patients (March 2-May 24, 2020) were tested with 4,446 (38.62%) receiving a positive diagnosis for COVID-19. EHR queries yielded age at time of testing, sex, race/ethnicity aggregated as non-Hispanic black, Asian and Hispanic referenced to non-Hispanic white; cardio-metabolic conditions (hypertension, hyperlipidemia, diabetes, obesity, peripheral artery disease, and coronary artery disease); pulmonary disease (e.g., COPD, sleep apnea, or asthma); autoimmune disease; and cancer. Mortality was based on the patient state (alive or deceased) at the moment of discharge. We included only patients who had been discharged alive or had expired. Anaconda Python 3.7 was used to perform all analyses.

Results: Among patients testing positive, 959 (21.57%) died of COVID-19-related complications at the hospital. Multivariate-adjusted Cox proportional hazards modeling showed mortality risks were strongly associated with greater age (HR=1.05; 95%CI:1.04–1.05), ethnic minority (HR=1.26; 95%CI:1.10–1.44), low household income (HR=1.29; 95%CI:1.11, 1.49), and male sex (HR=0.85; 95%CI:0.74, 0.97). Higher mortality risks were also associated with a history of COPD (HR=1.27; 95%CI:1.02–1.58), obesity (HR=1.19; 95%CI:1.04–1.37) and peripheral artery disease (HR=1.33; 95%CI:1.05–1.69). We observed a significantly higher rate of COVID-19 cases (43.8% vs 39.6%, $p<0.05$) among patients with sleep apnea (7.72%). However, they did not have a significantly higher mortality rate (13.0% vs 11.8%, NS), although they experienced a longer hospital stay (7.1 ± 7.7 vs 6.1 ± 7.5 , $p<0.01$).

Conclusion: Patients with COPD had the highest odds of COVID-19 mortality. Sociodemographic factors including increased age, male sex, low household income, ethnic minority status were also independently associated with greater mortality risks.

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SLEEP LATENCY, PRE AND PERI-COVID-19 EXPERIENCES AND PTSD SYMPTOMS: RESULTS FROM THE NYU COVID-19 MENTAL HEALTH STUDY

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