Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

119819

Race and sex differences in COVID-19 vaccination hesitancy amongst patients with neurological disorders in Hawaii

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Background and aims

This quality improvement (QI) project was conducted in order to better understand how demographic factors may influence the likelihood of COVID-19 vaccination hesitation and declination in patients with neurological disorders in Hawaii.

Methods

Adult patients who had visited Hawaii Pacific Neuroscience (HPN) between January 1, 2019 to January 1, 2021 were contacted through a telephone QI survey to assess COVID-19 vaccination hesitancy in relation to patient race and sex. Over 30 different sociodemographic variables and medical comorbidities were examined. Statistical analysis utilized univariate and multivariable logistic regression to determine variables associated with vaccine acceptance.

Results

Amongst all sex and race strata, odds of COVID-19 vaccine acceptance were significantly lower for those perceiving the vaccine as unsafe. After multivariable logistic modeling, the strongest predictors of vaccine hesitancy were identified. For females, predictors included concerns of vaccine safety ($p = 0.0094$) and the self-perception of a pre-existing medical condition contraindicating vaccination ($p = 0.00050$). Amongst males, predictors included not receiving the flu vaccine within the past year ($p = 0.037$), perception that COVID-19 is not a severe illness ($p = 0.037$), and being politically conservative ($p = 0.034$). For Whites, predictors included concerns of vaccine safety ($p = 0.044$) and a high school education only ($p = 0.037$). Amongst Asians, predictors included concerns of vaccine safety ($p = 0.0066$) and the self-perception of a pre-existing medical condition contraindicating vaccination ($p = 0.014$). For Native Hawaiians/Pacific Islanders, the only predictor was a positive depression screening ($p = 0.040$).

Conclusions

Patients with neurological disorders exhibit different predictors for vaccine hesitancy, dependent upon race and sex. Hence, tailoring vaccine education per race and sex may increase outreach effectiveness.

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119820

Post COVID-19 neurological syndrome: A prospective study at 3600 m above sea level in La Paz Bolivia

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Background and aims background

COVID-19 is the newest, most publicized, widely read, best known and controversial infectious disease. There are few publications on post-covid neurological complications in patients who attend neurological outpatient consultation. We present a case report of the population of La Paz, Bolivia, elevation 3600 meters above sea level.

Methods

A prospective study was conducted from March 2020 to March 2021. Medical records of 5070 patients who attended outpatient neurological consultation were analyzed. We describe the new-onset neurological manifestations of 237 consecutive patients with laboratory-confirmed SARS-CoV-2 infection and submit a review of their medical histories by a neurologist.

Results

Of these 5070 neurological patients, 3280 were women (64.7%) and 1790 were men (35.3%); 237 of these patients presented post-covid neurological manifestations (4.67%). 151 were women (2.97%), 86 were men (1.69%). 41% had CNS involvement (headache, vertigo, seizure, memory disorders, tremor), 57% had PNS involvement (paresthesia, weakness, painful polyneuropathy, trigeminal neuralgia), 45% musculoskeletal involvement (myalgia, polyarthralgia) and 35 % neuropsychiatric compromise (anxiety, depression, insomnia). The majority (78%) presented 2 to 4 symptoms.

Conclusions

The "post-covid neurological syndrome" represents a diagnostic challenge for the clinical neurologist due to the multiple manifestations: central and peripheral nervous system, musculoskeletal and neuropsychiatric symptoms, without structuring a classic semiology, intense and constant headache, insomnia, anxiety and unexplained depression in patients without prior history. The response to classic treatment is variable, since the symptoms can be varied and wide-ranging (resembling a moth bite). We are just beginning to learn about this complex, novel and highly infectious disease.

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Exacerbation of syringomyelia/syringobulbia symptoms after COVID-19: Case report

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Background and aims

In syringomyelia there is a known Substance P (SP) overexpression, predominantly in the external laminae of the dorsal horn. It has been hypothesized that several infections, particularly COVID-19, may increase the expression of the TRPV1 gene in lung, producing an increment of SP and IL-6, which would involve an alteration of the spinal trigeminal nuclei responsible for its secretion. The aim is to report the first case of exacerbation of syringomyelia/syringobulbia symptoms after a COVID-19 infection.

Methods

A 42-year-old Hispanic female patient with history of syringomyelia/syringobulbia with Chiari malformation treated with decompressive surgery in 2019, presented to clinic in June 2020 complaining of close to 8 months of pain in the left upper limb, after suffering COVID-19 infection in August. One month later, the pain