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LETTER

A Response to: Letter to the Editor regarding "COVID-19-Related Burden and Risk Perception in Individuals with Chronic Inflammatory Demyelinating Polyneuropathy and Multifocal Motor Neuropathy: A Cross-Sectional Study"

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Dear Editor,

We appreciate the interest from our colleague in our article entitled "COVID-19-Related Burden and Risk Perception in Individuals with Chronic Inflammatory Demyelinating Polyneuropathy and Multifocal Motor Neuropathy: A Cross-Sectional Study" and are grateful for the opportunity to respond to the comments.

The study assessed the mental health burden of patients with chronic inflammatory demyelinating polyradiculoneuropathy (CIDP) and multifocal motor neuropathy (MMN)—the most common forms of chronic immune-mediated neuropathies—in comparison to propensity score-matched healthy controls during the COVID-19 pandemic [1].

Despite their personal experience of unchanged or even reduced frequency of infection since the initiation of immune medication, this cohort of patients with CIDP or MMN reported a perceived increased risk of COVID infection compared to healthy controls. They expected a higher probability of symptoms, severe course, and death from COVID-19 as well as increased depressive symptoms, generalized anxiety, and COVID-19-related fear in comparison to healthy controls.

According to our colleague, the main shortcoming of the study was the online design. Indeed, we agree that an online survey introduces a selection bias, as mentioned in the manuscript. However, during the ongoing, global pandemic with social restrictions still in place when the study was conducted, an online survey was the only feasible and safe option to collect data. Furthermore, some of the challenges mentioned are actually not exclusive to online data collection. The problem of objectification applies to self-report measures in general and verifying a participant's identity can be

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difficult in any anonymous study. Both issues can also apply to on-site surveys. We would like to emphasize that conducting online studies during the times of COVID-19 somewhat became state-of-the-art and not an exception [2].

Some of the issues raised by our colleague may have arisen due to a misconception of our paper's focus. The request to homogenize study groups in terms of diagnosis, treatment, and comorbidities, to assess the "the impact of diagnosis and treatment on attitudes toward COVID-19" would be interesting in a future study, but this was not the objective of our current study. We aimed to evaluate the mental health burden of a patient cohort versus a matched healthy control cohort. We selected a patient cohort of CIDP and MMN patients due to the fact that these patients often receive polyvalent immunoglobulins (76% in our cohort). Immunoglobulins do not increase (and in some cases may even decrease) infection rates [3], which is in line with the findings of our study. It is important to note that the reasons for any change in infection rate were not relevant to the study objectives but rather the self-reported fact that it changed at all. Therefore, no patients were excluded based on comorbidities.

Interestingly, 56% of patients reported no difference in frequency of infection and one may speculate why 40% stated a decreased infection rate since initiation of treatment (in 76% of the cases with immunoglobulin). This may be related to treatment, but no causal conclusion can be drawn. It is a misconception that we concluded that "immunosuppressive drugs were responsible for the reduced rate of infection", since this aspect was not an objective of the study and would be irrelevant for the conclusion of the manuscript. If any homogenization of the cohort had been pertinent, it would have been to exclude patients with a self-reported increased infection rate since treatment initiation. Since just 4% of the participants reported an increase, we chose not to exclude them in order to present a real-world, representative cohort of CIDP and MMN patients. We are thankful to our colleague for drawing our attention to missing information about the distribution of the samples: Of the 59 patients included, 55 were diagnosed with CIDP and four with MMN.

To estimate the effect of the variable of interest, propensity score matching (PSM) was performed. Matching was based on demographic characteristics (gender, age, education, relationship status, and community size).

We hope these clarifications may assist our colleague. We are thankful for the valuable academic discussion highlighting the need for evidence-driven strategies to protect the mental health of this vulnerable patient group and to improve medical education among patients.

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Compliance with Ethics Guidelines. This article is based on previously conducted studies and does not contain any new studies with human participants or animals performed by any of the authors.

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