Psychic disorders in diabetic patients during COVID-19 pandemic

Dear editor,

Initially, we appreciate your reading on the article "Factors associated with psychic symptomatology in diabetic patients during COVID-19 pandemic",[1] as well as on the comments in which were extremely relevant.

The prevalence of signs and symptoms of stress, anxiety, and depression in diabetic patients, is higher than in the general population, and has a multifactorial cause. Diabetic and psychiatric disorders share the same challenge: living with and over coming the disease, imply a vicious cycle of emotional overload, psychic symptoms, less adherence for treatment, and poorer glycemic control.[2,3] Moreover, the peripheral metabolic deregulation of glucose influences brain function, which may contribute to the manifestation of depression.[4] Another pathophysiological mechanism that may explain the co-existence of these comorbidities is the low levels in diabetic patients of insulin-like growth factor (IGF) in the brain[5,6] and the ghrelin hormone,[2,7] which in normal levels produce na anti-depressant effect. It should also be noted that the pandemic period in which the study was conducted, characterized by a stressful environment and psychological distress, exacerbates both diabetic and mental disorders.[8]

In relation to the limitations of our study, we would like to emphaize that this study was not designed to identify whether the pandemic or preventive measures, such associal withdrawal, are risk factors for signs and/or symptomsof stress, anxiety, and depression, be cause all patients involved were immersed in this scenario. However, it is recognized that social withdrawal is na important triggering factor for mental disorders,[9] and this was also observed during the COVID-19 pandemic.[10] We believe that both moments of the pandemic and the measures contained are important risk factors due to fear of the disease and lack of social interaction, respectively.

When asked about the importance of having a group of diabetic patients before the pandemic period, a comparison could have been made, the authors agreed on this, but the study was performed seizing the current moment. We understand that a cohort study could have been conducted, following the patients before, during, and after the pandemic. However, due to the methodological difficulties that cohort studies demand, we opted for a transversal studyc omparing with the literature.[11,12] Moreover, a control group of patients without diabetes was not included, considering the main aim of our study, which was to determine the factors associated with the psychic signs and/or symptoms in the diabetic group.

Finally, we appreciate the considerations and agree that the study serves as analert on mental health impact in diabetic patients, and that screening for these psychopathologies and preventive measures should always been couraged, not only in pandemic times, as COVID-19. As a way of trying to reduce these rates, were inforce the importance of re-educating lif habits, through the practice of physical exercises and leisure activities, as well as the need for an adequate treatment of the underlying disease, accompanied and stimulated by health teams. We also highlight the importance of further studies on the subject, focusing on the development of intervention strategies by preventing and treating this disease.

Authors' contribution

All authors fully participated in the construction of the content and approved the release of the final version.

The authors declare no conflict of interest.

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