Letters to the Editor

Psychomorbidity, Resilience, and Exacerbating and Protective Factors During the Sars-Cov-2 Pandemic—a Systematic Literature Review and Results From the German COSMO Panel

by Dr. phil. Dipl.-Psych. Donya Gilan, Nikolaus Röthke, Manpreet Blessin, M.Sc., Dipl.-Psych. Angela Kunzler, Dipl.-Psych. Jutta Stoffers-Winterling, Markus Müssig, M.Sc., Kenneth S. L. Yuen, Ph.D, Prof. Dr. med. Oliver Tüscher, Dr. phil. Johannes Thrul, Prof. Dr. rer. soc. Dipl.-Soz. Frauke Kreuter, Philipp Sprengholz, M.Sc., Prof. Dr. phil. Cornelia Betsch, Prof. Dr. em. rer. nat. Dipl.-Psych. Rolf Dieter Stieglitz, and Prof. Dr. med. Klaus Lieb in issue 38/2020

Complementary Study

We wish to draw attention to a study we conducted of mental stress in the German population during the COVID-19 pandemic, which was published recently (1). The study compared from 24 April 2020 to 23 May 2020 the mental stress in a representative sample of the population of Mannheim (1000 women, 1000 men, response rate 36.9%) during lockdown in April 2020 with that in 2018. Both surveys were realized with an identical study design. This enabled a direct comparison of the mental stress on the basis of quantitative symptom scales and allows conclusions about the proportion of relevant psychological impairments. No statistically significant differences were seen between 2018 and 2020 as regards mental wellbeing, which was measured with the WHO-5 wellbeing index. When we evaluated the patient health questionnaire (PHQ), with which signs of depression and anxiety as well as eating disorders and alcohol misuse, we did not find any increase during lockdown that reached significance either. Of note, older persons and people with a higher educational level, as well as people who felt well informed about the COVID-19 pandemic, were found to have better mental wellbeing. Personal protective factors, such as emotional stability, optimism, internal loci of control, and a low tendency to ruminate/brood were independently associated with better mental wellbeing.

The results of our study support the assumption of Gilan et al (2) that individual risk and resilience factors are of major importance for mental wellbeing during the crisis.

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References

1. Kuehner C, Schultz K, Gass P, Meyer-Lindenberg A, Dreßing H: [Mental Health Status in the Community During the COVID-19-Pandemic]. Psychiatr Prax 2020; 47: 361–9.
2. Gilan D, Röthke N, Blessin M, et al.: Psychomorbidity, resilience, and exacerbating and protective factors during the SARS-CoV-2-pandemic—a systematic literature review and results from the German COSMO-PANEL. Dtsch Arztebl Int 2020; 117: 625–32.

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In Reply:

We read the correspondence as well as the study by Dreßing et al with great interest (1). Both studies (1, 2) implied that a certain amount of individual resilience and risk factors affect mental stress during the COVID-19 pandemic. Differences emerged in the comparison of mental stress in the general population before and during the pandemic.

Our results were based on the COVID-19-Snapshot-Monitoring (COSMO) panel and found a slight increase in mental stress (anxiety, low mood, loneliness, and hopelessness) in the population during the COIVID-19 pandemic compared with (prepandemic) standard data, whereas the results by Kuehner and colleagues descriptively showed slightly increased mental stress in a Mannheim sample of 721 persons, which, however, did not differ significantly from comparison data from Mannheim from 2018 (N=444).

Our data came from three cross sectional samples representative for Germany with N>1000 participants each, and we compared the values with validation samples (N>1000) from the respective questionnaires. One reason for the differences may be the sample sizes; the slightly increased means in the study by Kuehner et al may potentially have reached significance if the sample had been bigger.

Ultimately, both studies showed favorable results: mental stress in the general population has increased only very slightly since the start of the COVID-19 pandemic—which contrasts with popular opinion. At the same time, the study by Kuehner et al showed even more clearly the differential role of factors such as age, sex, individual personal characteristics, and resilience in dealing with mental stress during the COVID-19 pandemic, which underlines the importance of studying the effects of the pandemic on risk groups to a greater degree.

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Conflict of interest statement
The authors of both contributions declare that no conflict of interest exists.

CLINICAL SNAPSHOT

Status Epilepticus After Drinking Reverse Osmosis-Treated Water

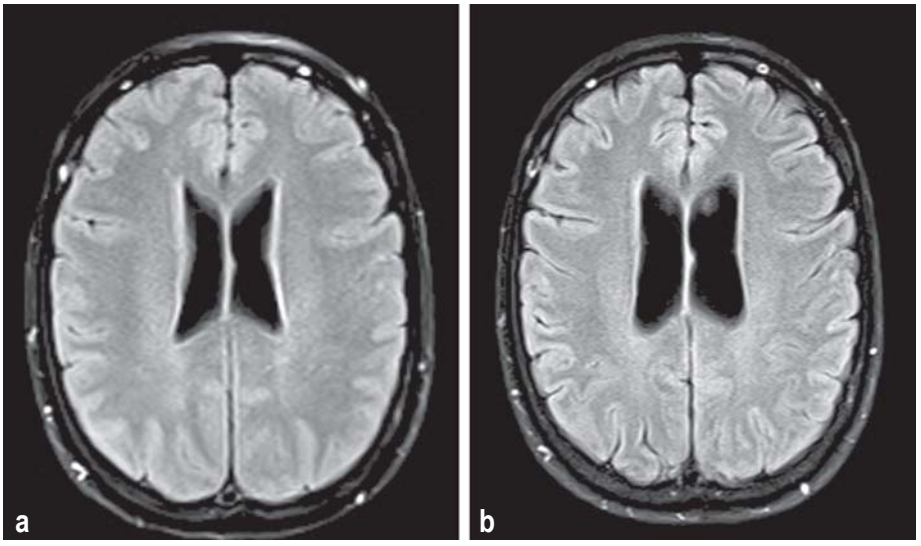

Figure:
Axial T2 FLAIR sequence on imaging:

a) marked cerebral edema with narrowing of the frontoparietal sulci accompanied by cortical signal enhancement;

b) 7 days following admission: reduced cerebral edema and normalization of the cortical signal.

A 50-year-old female patient complained of malaise while preparing for a colonoscopy, shortly after which she suffered a status epilepticus (tonic-clonic, unrhythmic, chorea-like arm movements, conjugate eye deviation in a caudal direction). Cranial magnetic resonance imaging revealed extensive, partially cortical signal enhancement on T2 FLAIR images with marked cerebral edema, as in hypoxia, for example. Laboratory tests revealed severe hyponatremia (116 mmol/L). EEG initially indicated synchronous bilateral theta rhythm consistent with increased cerebral excitability, whereupon treatment with valproate (1800 mg/day) was undertaken. More details of the patient history emerged in the further course: The fluid intake recommended alongside intestinal cleansing had been performed with several liters of reverse osmosis-treated water, which, as a result of filtering processes and passing through an osmotic membrane during production, has a particularly low mineral content and is used, among other things, in "detoxification" diets. Drinking this type of water is contrary to the specialist and patient information leaflet for this laxative product, which advises against drinking only clear or demineralized water. Following prompt correction of hyponatremia, the EEG and clinical picture normalized, such that a full recovery of (also cognitive) performance to previous levels was achieved.

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