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Correspondence

Letter to the editor regarding “The impact of COVID-19 on neurosurgical head trauma referrals and admission at a tertiary neurosurgical centre”


Dear Editor,

We read with great interest the article published recently by Korkmaz et al. [1] “The impact of COVID-19 on neurosurgical head trauma referrals and admission at a tertiary neurosurgical centre”, where the authors estimated the incidence of head trauma in a specialized neurosurgical center at the beginning of the pandemic, observing a 57.5% reduction in admission and 48.3% reduction in referral of patients with this pathology, with respect to four previous years [1]. We thank the authors for providing us with such valuable evidence, however, we would like to make a few comments.

On March 11, 2020, COVID-19 was declared a pandemic [2], with strict restrictions being observed in the following weeks around the world, the quarantine being the most obvious. The time window evaluated by the authors on head trauma was between March 23 and April 22, 2021, a period in which a large part of the sample evaluated was expected to be under strict confinement, where clearly mobility on the streets was null, and consequently, the accident rate would also be considerably reduced. These results are compatible with studies that evaluated patients on similar dates [3,4]. When analyzing the time window of the study by Prawiroharjo et al [5], who followed up until June, they observed an increase in the incidence of traumatic brain injury (157/752 (20.9%) vs 106/766 (13.8%), $p < 0.001$), with respect to the previous year [5]. Additionally, they found a higher hospitalization rate with respect to the comparison period (81/157 (51.2%) vs. 37/106 (34.9%) $p = 0.008$) [5], probably due to an increase in informal transportation jobs that demand more time and workload that generates physical and emotional overload on workers, due to the economic deficit in certain regions of the world, mainly in low- and middle-income countries.

A worrying situation in Latin America today, where motorcycle transportation is one of the most frequent informal jobs, is that due to the fear of contagion and the design and implementation of public policies, motorcyclists and passengers refuse to wear helmets, substantially increasing the risk of suffering a severe traumatic brain injury [6,7]. It is necessary to explicitly state the limitations of follow-up times in this type of studies, as well as the conditioning factors of the results obtained, so as not to generate bias when interpreting the results on neurotrauma. In high-income countries, where the quality of life and socio-labor conditions are more favorable, a much lower incidence rate of traumatic brain injury is evidently expected, as there is no need to resort to informal motorcycle transport as a survival job, regardless of

whether it is evaluated in pre-pandemic, pandemic and post-pandemic time. Neglect and corruption on the part of governments precipitate the marginalized and remote populations of rural areas (although this is not an exception) to resort to jobs that put the physical and emotional integrity of these workers at risk [8]. This is why 45% of road accident fatalities in the Americas are caused by motorcyclists, and why this figure has increased by 5% between 2015 and 2020 [9].

Neurotrauma, as well as other types of diseases, entail high costs to health systems due to morbidity and rehabilitation, and are also conditioned by social, economic and cultural factors, which are difficult to control in the short or medium term. Based on the above, it is to be expected that in the coming months or years, as the natural history of the disease unfolds and the process of mass vaccination and immune adaptation takes place, there will be an abrupt increase in the incidence and therefore in the burden of neurotrauma disease in general, due to mortality, years of life lost due to disability and years of life lost due to quality of life. It is necessary to analyze this situation meticulously and design evidence-based strategies to control this potentially chaotic phenomenon.

Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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