

Conflicts of interest.—The authors certify that there is no conflict of interest with any financial organization regarding the material discussed in the manuscript.

Authors' contributions.—All authors read and approved the final version of the manuscript.

History.—Article first published online: December 17, 2020. - Manuscript accepted: October 26, 2020. - Manuscript received: September 19, 2020.

(Cite this article as: Zanin A, Garcia-Salido A, Gonzalez-Dambrauskas S, Camporesi A. There is no SARS-WAR. *Minerva Anesthesiol* 2021;87:488-9. DOI: 10.23736/S0375-9393.20.15214-3)

© 2020 EDIZIONI MINERVA MEDICA

Online version at <http://www.minervamedica.it>

Minerva Anesthesiologica 2021 April;87(4):489-90

DOI: 10.23736/S0375-9393.20.15148-4

SARS-CoV-2 pandemic impact on traumatic brain injury epidemiology: an overview of the Veneto region

Italy identified its first case of SARS-CoV-2 in a 38-year-old man on February 20 with the first death registered on February 21.¹ The Italian government created a “red zone,” quarantining the Vò (Padua) village residents on February 23 and all Italians on March 8.¹

During the SARS-CoV-2 quarantine inhabitants could leave their home only for health-related mandatory reasons determining profound life-style changes.

Traumatic brain injury (TBI) is the leading cause of death and disability among all trauma injuries² and a diminished number of TBI caused by the public lockdown has been recently advocated but no data has been provided.³ We therefore reasoned that the current pandemic could have substantially modified the epidemiology of TBI. We performed a retrospective review of electronic medical records from March 8 to May 4 of five consecutive years (2016-2020) on patients suffering from severe TBI admitted to neuro Intensive Care Unit of five hub hospitals in Veneto region (Padua, Mestre, Treviso, Verona, Vicenza) in order to obtain demographic, TBI mechanism and associated injuries (pulmonary, abdominal, spine injuries and bone fractures).

Normal distribution was analyzed using the Shapiro-Wilk test. Continuous variables were expressed as mean (standard deviation) or median (interquartile range) as appropriate. Group differences were assessed using

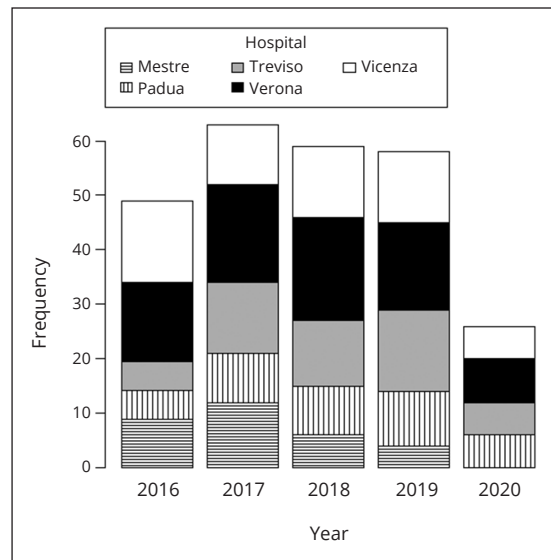


Figure 1.—Histogram of TBI over the 2016-2019 period.

one-way ANOVA or Kruskal Wallis followed by *post-hoc* Bonferroni correction as appropriate. Percentages were compared with the χ^2 test, followed by standardized residual analysis and Bonferroni correction. Analysis was performed using R version 3.4.0 (2017-04-21) (Bell Laboratories, Murray Hill, NJ, USA); P values <0.05 were considered significant.

A total of 255 TBI patients were included in the present study. Mechanism leading to TBI was distributed in the following way: 95 road accidents, 90 falls and four injuries from violence; however, two centers were not able to retrieve information regarding the TBI mechanism (Supplementary Digital Material 1: Supplementary Table 1). TBI were under-represented in the 2020 group with a 49.01% reduction in the expected frequency ($P=0.001$) (Figure 1). *Post-hoc* analysis of patient's ages revealed a statistically significant difference between the 2020 and 2017 group ($P=0.004$), but there were no statistically significant differences among the other groups.

The χ^2 residuals for mechanisms leading to TBI revealed that statistical significance was caused by a higher rate of road accidents in 2019 but no differences among the quarantine period in 2020 and other groups was observed (standardized residuals: fall 1.186, road accident -1.19, violence 0.687).

Our work shows epidemiologic modifications in incidence (49.01% reduction of expected TBI) but not in both mechanisms leading to TBI and associated lesions.

Our study had some limitations. First, we investigated TBI etiology in five hub hospitals in the Veneto region, but it may be not representative of other settings. Second, the short time interval of the quarantine may be a bias. Our paper showed as a quarantine period may modify the incidence but not the etiology of TBI.

Knowledge of such modifications are important to an accurate healthcare planning and prompt allocation of resources.

Marina MUNARI ¹, Alessandro DE CASSAI ¹*,
Marilena CASARTELLI LIVIERO ²,
Paolo ZANATTA ², Marina A. MARTIN ³,
Alessandra SORAGNI ⁴, Giorgio MAIORELLI ⁴,
Claudio BENETTON ⁵, Guido DALL'ACQUA ⁵,
Franco CHIOFFI ⁶, Paolo NAVALES ^{1,7}

¹Anesthesia and Intensive Care Unit, University Hospital of Padua, Padua, Italy; ²Unit of Anesthesia and Intensive Care, University City Hospital of Verona, Verona, Italy; ³Department of Anesthesia and Intensive Care, San Bortolo Hospital, Vicenza, Italy; ⁴Anesthesia and Intensive Care Unit, L'Angelo Hospital, Mestre, Italy; ⁵Anesthesia and Intensive Care, Ca' Foncello Hospital, Treviso, Italy; ⁶Department of Neurosurgery, University Hospital of Padua, Padua, Italy; ⁷Department of Medicine (DIMED), University of Padua, Padua, Italy

*Corresponding author: Alessandro De Cassai, Anesthesia and Intensive Care Unit, University Hospital of Padua, Via Gallucci 13, 35121 Padua, Italy.
E-mail: alessandro.decassai@gmail.com

References

1. Italian Ministry of Health. Nuovo Coronavirus; 2020 [Internet]. Available from: <http://www.salute.gov.it/nuovocoronavirus> [cited 2021, Mar 3].
2. Rubiano AM, Carney N, Chesnut R, Puyana JC. Global neurotrauma research challenges and opportunities. *Nature* 2015;527:S193-7.
3. Zoia C, Bongetta D, Veiceschi P, Cenzato M, Di Meco F, Locatelli D, et al. Neurosurgery during the COVID-19 pandemic: update from Lombardy, northern Italy. *Acta Neurochir (Wien)* 2020;162:1221-2.

Conflicts of interest.—The authors certify that there is no conflict of interest with any financial organization regarding the material discussed in the manuscript.

Authors' contributions.—Marina Munari has given substantial contributions to study design and to manuscript draft and editing; Alessandro De Cassai, Marilena Casartelli Liviero, Paolo Zanatta, Marina A. Martin, Alessandra Soragni, Giorgio Maiorelli, Guido Dall'Acqua and Franco Chioffi contributed to manuscript draft and editing; Paolo Navales gave contributions to study supervision. All authors read and approved the final version of the manuscript.

History.—Article first published online: December 4, 2020. - Manuscript accepted: October 8, 2020. - Manuscript received: August 25, 2020.

Supplementary data.—For supplementary materials, please see the HTML version of this article at www.minervamedica.it

(Cite this article as: Munari M, De Cassai A, Casartelli Liviero M, Zanatta P, Martin MA, Soragni A, et al. SARS-CoV-2 pandemic impact on traumatic brain injury epidemiology: an overview of the Veneto region. *Minerva Anestesiologica* 2021;87:489-90. DOI: 10.23736/S0375-9393.20.15148-4)

© 2020 EDIZIONI MINERVA MEDICA

Online version at <http://www.minervamedica.it>
Minerva Anestesiologica 2021 April;87(4):490-1
DOI: 10.23736/S0375-9393.20.15161-7

The use of the ICU diary during the COVID-19 pandemic as a tool to enhance critically ill patient recovery

It has been reported that critical illness and advanced medical treatment in ICU environments have been associated with symptoms of anxiety, depression, and post-traumatic stress disorder that impact negatively on the health-related quality of life.¹ Therefore, care beyond hospital stays and follow-up after discharge have been considered vital for the quality of the critically ill patient management.²

Hence, a diary written during the ICU stay by the staff and the relatives has been suggested as a means for improving mental health outcomes after critical illness (examples available from: <http://www.icu-diary.org/>). It has become a regular part of the follow-up initiatives in several European ICUs.

Clinical trials seem to suggest that ICU diaries may reduce the negative effects of intensive care treatment on the patient's quality of life.^{1,3,4}

Therefore, we proposed the use of the ICU diary in our COVID ICU during the COVID-19 pandemic as a tool to enhance the physical, psychological and mental recovery of our patients.

Being easy and cost effective to set up, we thought the ICU diary could be perfectly suitable in this exceptional situation where it was impossible for relatives to visit their next of kin and to prove their support and affection.

The diary was written by all the ICU staff involved in the patient care. A brief summary of events was written at the moment of admission and the use of an informal and simple language was encouraged. All staff members were invited to participate in the project on a regular daily basis. Bearing in mind the exceptionality of this pandemic with no physical contact and a different doctor-patient relationship, the diary served as a channel of communication to express the human dimension of the work made from all the ICU staff.

We wrote the diary for four ICU patients and the diary was delivered to two patients after discharge, the other two patients did not survive.

The two patients who received the diary were extremely grateful and they said that reading the diary helped them to reconnect with their own memories and to understand what actually happened. One patient released an interview on a local newspaper about his experience in ICU and he publicly thanked all the ICU staff for the project. He described how the diary helped