Peer Review File

Reviewer Comments

This manuscript is interesting and scientifically meaningful for considering COVID-19 treatment protocol at nursing facilities. Regarding the contents, the following revision should be considered.

Comment 1: The title is vague. What is a specific outcome? It should be clearly described.

Reply: The title has been changed.

Changes in the text: "Low mortality from COVID-19 at a nursing facility in France following a combined preventive and active treatment protocol"

Comment 2: In the abstract, the method section should contain the concrete method of this research. The present one describes general issues like backgrounds. Then, the concrete methods should be described.

Reply: The methods section in the abstract has been updated.

Changes in the text: "A database was created on 21 March 2020 to store all information related to residents, including co-morbidities, as well as COVID-19 symptoms, incidence, and mortality. Residents received a COVID-19 protocol, consisting of preventive (administering vitamins and zinc, social distancing, and temperature checks) and active (antibiotics, anticoagulants, and corticosteroids) measures. RT-PCR and serology testing were performed on residents. A new coefficient, named the Zemgor coefficient, was calculated as the haemoglobin-to-albumin ratio at 2 time points 15 days apart, to monitor hypoxemia."

Comment 3: In the introduction, the first paragraph should describe the theme of this research of protocol of specific COVID-19 treatment, not just COVID-19 conditions to attract potential readers.

Reply: The first paragraph has been modified.

Changes in the text: "Nursing facilities have been disproportionately affected by COVID-19 both in terms of disease transmission and mortality (3). There are a number of factors that may contribute to heightened levels of transmission in the nursing facility setting, including the high number of physical interactions between residents, staff and visitors, potentially exacerbated by the configuration of the nursing facility, staff shortages, low levels of staff training, and resident ambulation (4). In addition, residents at nursing facilities are a high-risk group due to their advanced age and numerous co-morbidities (5, 6). Therefore, implementation of a COVID-19- protocol can be an effective measure to reduce transmission, as well as to decrease mortality."

Comment 4: In the introduction, the first and second paragraphs should be started by the topic sentence for readability.

Reply: The first and second paragraphs have been modified, and topic sentences added.

Changes in the text: "Nursing facilities have been disproportionately affected by COVID-19 both in terms of disease transmission and mortality (3)." And "The protocols implemented across different nursing facilities world-wide to prevent and treat COVID-19, and their effect on the evolution of symptoms, infections, and mortality, have seldom been described (7,8)."

Comment 5: The introduction does not describe the theoretical framework for this research topic. This is a critical point for reading forward this research.

Reply: This information has been added.

Changes in the text: "The efficacy of this protocol at limiting infections and mortality remains unclear, and a detailed assessment could help prepare nursing homes in case of respiratory virus epidemics."

Comment 6: The introduction should clearly include the research question and rationale of this study, including the advantage of this study.

Reply: This has been added.

Changes in the text: "The authors of this study implemented a protocol for prevention and treatment of COVID-19 at their nursing facility, which consisted of both preventive (administering vitamins and zinc, social distancing, and temperature checks) and active (antibiotics, anticoagulants, and corticosteroids) measures. The efficacy of this protocol at limiting infections and mortality remains unclear, and a detailed assessment could help prepare nursing homes in case of respiratory virus epidemics."

Comment 7: The method section should be divided into subsections for readability. This is critical for scientific papers and readability based on the instruction of the journal.

Reply: Subsections have been added to the methods section.

Changes in the text: "*Pre-existing patient co-morbidities and medical treatments*", "*Day-to-day protocol at the nursing facility*"…

Comment 8: In the method section, the authors should describe the primary outcome. This point should be explained clearly.

Reply: This has been added.

Changes in the text: "The primary outcomes of this study were COVID-19 incidence over the study period of 5.5 months (24 January – 3 July) based on the presence of one or more COVID-19 symptoms, based on positive RT-PCR, and based on positive serology, as well as COVID-19 mortality rate."

Comment 9: In the sample section of the method, there are no descriptions regarding

sample calculation. Therefore, the authors should descript the sample size calculation.

Reply: A comment on this topic has been included

Changes in the text: "Due to the unprecedented nature and lack of prognosis of COVID-19 it was not possible to perform an a priori power analysis."

Comment 10: In the discussion, the first paragraph should contain a summary of the results.

Reply: The first paragraph of the discussion has been updated.

Changes in the text: "The aim of this study was to retrospectively describe the evolution of symptoms, infections, and mortality at a nursing facility in Val d'Oise (France) that had implemented a protocol for the prevention and treatment of COVID-19. Between 24 January and 3 July 2020, the nursing facility recorded a COVID-19 incidence of 51% based on the presence of one or more COVID-19 symptoms, 35% based on positive RT-PCR (amongst residents tested for RT-PCR) and 41% based on positive serology (amongst residents tested for serology), with a COVID-19 mortality rate of 8%, with incidence due to testing at the lower end of the range reported in the literature for nursing facilities (7,8,17-34) (Table 5). The most commonly reported COVID-19 symptoms were fever (36%), cough (21%), dyspnea (21%) and asthenia (19%). Therefore, our null-hypothesis that the COVID-19 protocol used would result in a comparable mortality rate to other nursing facilities was confirmed. Furthermore, the total mortality rate at the nursing facility in the first semester of 2020 (14%) was only 50% higher than in the first semester of 2019 (9%)."

Comment 11: The discussion should describe the limitation of sampling bias and the results' applicability to other settings, and the future investigation in the limitation part.

Reply: This limitation has been added.

Changes in the text: "Sixth, this study is limited by sampling bias, since most of the residents at this particular nursing home had dementia. This population is not representative of the general public, thus further studies are necessary before generalising the implementation of such protocol for the prevention and treatment of epidemic respiratory viruses."