

Article details: 2020-0244	
Title	Hospitalized patients with COVID-19 in Montréal, Quebec from March-June 2020: a deadly disease among individuals living in residential care facilities, a case series
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Reviewer 1	Jennifer Watts
Institution	St. Michael's Hospital, Toronto, Ont.
General comments (author response in bold)	<p>1. The term 'elderly' is not preferred. Please consider using a term such as 'older adult'.</p> <p>Response: The term older adult has been used throughout the manuscript rather than the term elderly.</p> <p>Define all abbreviations at first use (e.g. ICU in the abstract).</p> <p>Response: We have made sure to define all abbreviations at first use.</p> <p>2. Please provide references for your definitions of acute kidney injury, lymphopenia, and hypoxemia. Ensure all definitions (e.g. tachypnea) are included in the methods section and not the results section.</p> <p>Response: All of the definitions mentioned have been referenced in the methods section (first paragraph pg 6)</p> <p>3. How did you account for persons in your models with missing data points? Were they excluded?</p> <p>Response: There was no missing data for any co-variables except for one patient that was missing co-morbidities. Three patients were excluded from the Cox Proportional Hazards model because they were admitted to the hospital prior the study period and were nosocomial COVID-19 infections. The data of follow time began with the data of presentation to the hospital. This is clarified in the footnote of table 4.</p> <p>4. Did you verify the proportional hazards assumption for the Cox regression models? In looking at figure 2, I wonder if the hazard rate varies over time</p> <p>Response: The Proportional Hazards assumption was tested with by log-log survival curves and estimating Schoenfeld residuals for age groups, sex, number of medical co-morbidities and residence in an RCF. A sentence describing this is added to top of page 7 in the Statistical section.</p> <p>5. Do you mean to describe patient sex, gender, or both? You use both sex and gender terms in the manuscript.</p> <p>Response: We have changed all instances of gender to sex throughout the manuscript.</p> <p>6. The 95% confidence interval for being a LTCF resident includes 1; therefore, there was no increased risk of death. Although the crude mortality rate was high</p>

	<p>among persons from LTCF (as in Table 4), this risk was attenuated when other variables were included in the overall multivariable model (i.e. age, sex, comorbidities). Importantly, these results suggest that older age, male sex, and greater number of comorbidities are significant predictors of death in this patient population, which suggests we need to protect the people who live in LTCF because of these factors and not because of the LTCF itself. Consider revising your interpretation to reflect this.</p> <p>Response: We reviewed the place of residents of all participants in the study to address the reviewer's comments. A few patients were re-classified as RCF and others as non-RCF. In the final reassignment there were 303 RCF patients and 353 non-RCF patients. The model in table 4 the adjusted hazard for death among RCF patients is 1.62 (1.09-2.39). We therefore feel that this is a significant finding.</p> <p>7. If I understand correctly, you present a series of univariate hazard rates testing the association between each of (a) male sex, (b) older age, and (c) comorbidities and mortality within patients from LTCF and separately for patients who were not from non-LTCF. Please make it clear to readers that these are not estimates from a multivariable model and they do not account for all other potentially important predictors.</p> <p>Response: In table 4 we present both crude and adjusted estimates. This is clarified in the table.</p> <p>8. In addition to discussing confounders such as frailty, which were not included in your analyses, consider discussing how you were not able to account for the different medical treatments that patients received in hospital either and the influence that these treatments may have had on patient outcomes (e.g. steroids).</p> <p>Response: We acknowledge that unmeasured confounding may have influenced our results.</p>
Reviewer 2	Patrick Quail
Institution	Integrated, Facilitated, Supportive Living, Alberta Health Services
General comments (author response in bold)	<p>1. Page 6 line 3. The description of LTCF as 'assisted living' would be problematic as this term specifically refers to a health sector that is funded quite differently and in general has a less frail population. LTC is not Assisted Living.</p> <p>Response: We have reviewed the place of residents of all participants in the study and few patients were classified as RCF and others as non-RCF. We also classified patients as coming from a CHSLD, RI or RPA and have added definitions for each of these institutions in the methods section. We have also run Cox Proportional Hazards models to determine the difference in mortality between residents of these different settings. These results are presented in table 2 in the appendix and the implications of them are discussed in the interpretation section in the second paragraph on page 11.</p> <p>2. page 11 line 18. The discussion on frailty is valid but there is no routine universal assessment for frailty in Canadian nursing homes. It is generally accepted that the majority of patients reside in a LTCF by virtue of their frailty. Without specific measurements of frailty the discussion does not really add to the substance of the study</p> <p>Response : We agree that there is no routine universal assessment for frailty</p>

in Canadian Nursing homes. Although this was not measured, this is clinically important characteristics that may contribute to mortality. Apart from comorbidities and advancing age, it is generally regarded in the medical community that frailty in and of itself is a predictor of mortality among those with COVID-19 (see reference #33 Hewitt Lancet Public Health 2020). We have therefore decided to kept this point in the Interpretation section.

3. page 13 line 6 . The conclusions drawn are unrelated to the preceding text. This statement especially 'proper implementation of infection prevention and control policies'. Did this study examine IPC policies and their implementation? The same could be said of building structures/design and adequacy of staffing. While very true these conclusions do not relate to the case series under discussion. More should be made of the risk factors for residents of LTCF that were actually studied.

Response : The final sentence has been edited accordingly