

Author Response 1

Reviewer: 1

Comments to the Author

Comments to work on:

- In the introduction section, please explain and emphasize the importance and the novelty of the study.

I have added a paragraph in introduction about the importance of study.

- in the methods section, please provide more details about:

How did you identify the RTIs in the medical records?

Added in methods section

How did you define improvement in the RTIs?

Added in methods section

Please explain that improvement in the RTI is the intended outcome of interest, since many outcomes are related to RTIs. In the regression models (both simple and multiple), please indicate whether you are investigating predictors of improvement or predictors of Unimproved RTIs, this is not clear and a bit confusing in interpreting the results.

Added in results section

Also regarding the independent variables, I would prefer to use the null groups as the reference groups; for example: using non-alcoholics group as the reference group rather than alcoholics....this seems to be more appealing in presenting the results.

Basically, we are comparing both groups in terms of improvement in treatment outcomes.

Comments to the Author

Reviewer: 2

Since the rapidly growing the aging society in many developed countries, lower respiratory tract infections (LRTIs) in older people are major problems of respiratory medicine in the clinical settings. The current study examining the prevalence, medication regimen complexity and factors associated with the treatment outcomes of different RTIs among patients aged 65 years and older. Although the study was performed on the single center in Malaysia, the results are acceptable. The most prevalent respiratory tract infections was community acquired pneumonia (65.6%) followed by chronic obstructive pulmonary disease (20.7%), bronchitis (8.2%) and hospital acquired pneumonia (5.5%). Smoking, alcohol consumption, polypharmacy and presence of other co-morbidities are statistically significant factors associated with treatment outcomes of respiratory tract infections among geriatrics. However, the data in their aged patients are not different from the other Asian countries. No new information is available in the text.

Yes there are some studies related to prevalence of RTIs in Asian countries but the current study investigates the prevalence as well as medication regimen complexity and factors associated with the treatment outcomes among elderly population suffering from RTIs in Malaysian scenario which to my knowledge there is no study like this in Malaysia.

As authors stated, polypharmacy may be a critical factor for the prognosis of LRTIs in elderly patients. A serious problem arises in pharmacotherapy of elderly population is the consumption of several medications simultaneously which leads to polypharmacy. Polypharmacy is defined as concurrent consumption of five or more medications regardless of duration of consumption and dosage form. In older individuals, polypharmacy leads to many significant problems which includes: drug-drug interactions, adverse effects, decreased quality of life and other medical problems.²The results of the clinical significance of polypharmacy influence on the outcome of patients with LRTIs are very important. The authors should more discuss about this important information. In their conclusion, the presence of polypharmacy and other co-morbidities may be seriously considered for the outcomes of LRTIs in elderly in addition to common risk factors.

I have highlighted the paragraph in discussion section that explains the importance of polypharmacy in current scenario.