Author’s response to reviews

Title: Prescribing errors in electronic prescriptions for outpatients intercepted by pharmacists and the impact of prescribing workload on error rate in a Chinese Tertiary-care Women and Children's Hospital

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Author’s response to reviews:

Response to reviewer 1

Dear Reviewer:

Thank you for your comments concerning our manuscript entitled “Prescribing errors in electronic prescriptions for outpatients intercepted by pharmacists and the impact of prescribing workload on error rate in a Chinese Tertiary-care Women and Children's Hospital (BHSR-D-19-01477)”. Main revisions in the paper and the responds to the reviewer’s comments are listed as follows:

Comment 1:
I think there is room for improvement in the writing style so that all information is clear. For example, from the text (p 6 L22-39), it is not obvious to the reader that the prescribing workload per time slot is actually the average of the total number of prescription in a time slot/total number of physicians in time slot over a 91 days period. If possible, it would be worth having a professional academic editor help with the manuscript.
Response:
Thank you for your advice. We have revised the section of the manuscript you pointed. (P6 23-32 lines)

Comment 2:
My last remaining concern is with the ‘time series analysis’. While I agree that the authors have time-series data, I'm not certain the spearman rho adequately captures the complexities (correlations) of the time series data and there was no statistical test to demonstrate whether the error rate (or workload) varied by time. Please confirm whether a time-series analysis was done
and if so, please provide reference(s) to help justify the authors' strategy for analyzing time-series data.

Response:
Thank you for your comments. We deleted the spearman correlation analysis according to your concern. In the former version, we just presented the time-series plot. We had added the time-series analysis with ARIMA (Autoregressive Integrated Moving Average) model (p=0, d=2, p=1) in the latest version of manuscript. We set the workload as independent variable and error rate as dependent variable in the model, and calculated the coefficient (β) and determined whether its value was significant (p value). The β indicate the error rate change when workload change one unit within one time interval (15 minutes). The result showed that stationary R squared value of 0.889 and Ljung-Box test (P > 0.05) indicated the acceptable goodness of fit of the model. The β value of independent variable (workload) was \(-3.20 \times 10^{-4}\) (P > 0.05), indicating there was no correlation between workload and error rate. (P6 12-18 lines, P7 30-34 lines)

Related reference:

The following study also performed a time-series analysis to explore the relationship between antibacterial usage and bacterial resistance.