Reviewer's report

Title: Hospitalizations for varicella in children and adolescents in a referral hospital in Hong Kong, 2004 to 2008: A time series study.

Version: 2 Date: 20 March 2011

Reviewer: Samer El-Kamary

Reviewer's report:

Major Compulsory revisions:

1. The authors did not satisfactorily address my concern about their use of GEE to model the monthly varicella incidence. Instead, the authors disagreed with my concern and cited several articles utilizing GEE. Whereas the articles they cited used GEE appropriately, that is not the case in this manuscript. In the cited articles there was a clear clustering variable (such as repeated measures on the same individuals, or clustering within multiple institutions or even multiple cities or regions). As I mentioned before, in this particular manuscript there is only one hospital in one location and no repeated measures in the same individuals. Varicella is a one-time disease and individuals do not acquire this same disease multiple times, and hence there are no repeated occurrences of the disease in the same individuals across time. Perhaps it would be easier if the authors described what is the "clustering variable" they used in their analysis since it is not clear from their Methods section or from their response. Perhaps then it will become clear what is the common characteristic on which they have clustered, and then they can clearly mention it in their Methods section too.

2. The authors did not address my comment regarding the data in Tables 1, 2 as coefficients which is more difficult to interpret. I suggested that they should exponentiate the coefficients to relative risks in their Poisson model which would be easier to interpret. However, the authors did not modify their tables and did not include or address my comment in their response.

Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:

I declare I have no competing interests