Reviewer's report

Title: The influence of Streptococcus pneumoniae nasopharyngeal colonization on the clinical outcome of the respiratory tract infections in preschool children

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Reviewer: Izabela Korona-Glowniak

Reviewer's report:

The article is an interesting piece of epidemiological study since authors attempt to determine if nasopharyngeal colonization of Streptococcus pneumoniae, one of the major bacterial pathogens colonizing nasopharynx, mainly asymptomatically, has an influence on the clinical outcome of the respiratory tract infections in children. However, the analyses and results were depicted illegibly and unclearly.

Major Compulsory Revisions

Methods
Page 5, line 91 - Identification of pneumococci based on colony morphology and optochin susceptibility may only provide researchers with some unreliable data because some species of oral alfa-haemolytic streptococci are susceptible to optochin. A confirmatory test is necessary (bile solubility, latex agglutination).
Page 5, line 100 - What does "additional tests" term mean. Further details on the issue of question should be provided with as there are problems with understanding of statistic analyses made for associations of studied variables with particular serotypes/serogroups.

Results

Even though the results indicate no statistical significance it is important to show these data. Tables are a more readable form of presentation. I suggest using a sample table as below instead of Table 2 (in attachment).

Page 6, line 130 and Figure 1 - As authors stated, recovery duration of disease was divided into 3 groups (1-2 weeks, 3-4 weeks, > 4 weeks). Thus, the question is why authors did not show these groups in Figure 1. Moreover, the information which statistic tests they used to obtain the significant differences is missing. Was a referred group chosen?

Page 8, line 163 and Figure 2 - While statistic analysis between two or more groups their quantities or means are compared. Why did authors depict only one group of compared variables in Figure 2? Again, I am curious which statistic tests they used to obtain the significant differences. What variables were compared with each other? Was a referred group chosen?

Minor Essential Revisions
Page 7, line 139 - Authors should be careful when they use terms serotype or serogroup. There is no serotype 23 or 15, these are serogroups.

Page 7, line 140 - The term "Serotype G+" should be explained.

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

Quality of written English: Needs some language corrections before being published

Statistical review: Yes, and I have assessed the statistics in my report.

Declaration of competing interests:

I declare that I have no competing interests