Reviewer's report

Title: Preschool children in out-of-hours primary care - a questionnaire-based cross-sectional study of factors related to the medical relevance of health problems

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Reviewer: Jing Sun

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This study collected cross-sectional data about utilization of out-of-office hours by parents of preschool children, which were generated through questionnaire of registered parents and GP assessment records of medically relevance.

The paper firstly described the characteristics between respondents and non-respondents; then the GP assessment results of medically relevance; the paper also compared the distribution of parent-assessed severity and GP-assessed relevance; finally, for contacts considered as non-severe by parents, the paper used generalised linear model to identify factors associated with medically irrelevance.

The aim of this paper is to explore factors that were associated with being assessed as medically irrelevance.

Firstly, the authors used different expressions of "medically irrelevance" throughout the paper, which might lead confusions by readers who are not familiar with the Danish health care delivery system, suggest to uniform the term with common understandable expression.

Secondly, beyond the descriptions of the characteristics of the respondents and the non-respondents, and further the GP and patient assessment details, the core analysis of the associated factors towards medically irrelevance is the generalized liner regression model. Appropriate variables included into the model is critical for drawing correct conclusions, which requires inclusion of all relevant information about both the children and the parents. These need
systematic review of relevant literatures. However, the paper lacks such review of existing literatures, the authors only considered the characteristics of the children (age, duration of symposium, geographic location, time of calling which were included in the regression model), neglected the characteristics of parents (such as, age, education, income, race, etc.). The later characteristics may have potential impacts on the medically irrelevant decision made by the parents.

Thirdly, the author claimed that they only estimated the associated factors with medically irrelevance of those contacts assessed by parents as not-severe. I do not see the rationale of seperating such contacts from other contacts. The parent assessment could be included as an additional variable of the regression model, and different catagories of parents assessment may lead to different medical relevance.

**Are the methods appropriate and well described?**
If not, please specify what is required in your comments to the authors.
Yes

**Does the work include the necessary controls?**
If not, please specify which controls are required in your comments to the authors.
No

**Are the conclusions drawn adequately supported by the data shown?**
If not, please explain in your comments to the authors.
Yes

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