Title: Measles transmission from an anthroposophic community to the general population, Germany 2008 - Effect of early intervention on size and duration of measles clusters in school and kindergarten settings

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Author’s response to reviews: see over
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Dear Dr. Norton,

please find our comments to the Editorial Board below.

We hope the revised version of the manuscript finds your approval!

With kind regards,
on behalf of the authors,

Dr. Maria Wadl
Editorial comments:

- Your manuscript has now been assessed by our Editors and has suggested some minor corrections:

"The authors adequately took into account the remarks of reviewers. They provide a new table 4 that we can accept. There is still a problem before final acceptance: the sentence beginning by: Average attack rate ratios (bottom p 12) is not clear and the confidence interval of the rate ratio (p12) includes 1, so it is not possible to say (discussion p 16) that A was more effective than B on this basis. The sentence should be clarified and the discussion should be modified accordingly."

We would be grateful if you could address the comments in a revised manuscript and provide a cover letter giving a point-by-point response to the concerns.

The authors agree that the conclusion regarding the effects of interventions A and B on the average attack rate ratios needs attenuation. It is important to call the readers attention to the fact, that the calculated attack rates and the average attack rate rations should be interpreted with caution.

The manuscript reads now as follows:

Results (Page 13, last Paragraph; Page 14, first Paragraph):
"Both, the attack rates as well as the average attack rate ratios were calculated but should be interpreted with caution since the population at risk (number of susceptible contacts per school or kindergarten) was not available: The mean attack rate in institutions was 2.7%. Stratification by intervention led to a mean attack rate of 1.9% (range: 1-16%) if intervention A was used and 3.3% (range: 1-21%) if intervention B was applied. Average attack rate ratios in institutions where intervention A was implemented were 1.6 times lower (95% CI: 0.4-6.1) than those of institutions where intervention B was applied."

Discussion (Page xx, xx Paragraph):
"The mean number of cases and duration per cluster indicated that exclusion of susceptible persons from schools and kindergartens starting with the first incident measles case (intervention A) might be more effective than exclusion of susceptible persons after the second case (intervention B). However, only the comparison of the median number of cases per cluster showed borderline statistically significant results, if accepting an alpha-error-level of 0.05. We did not use the calculated attack rates and mean attack rate ratios as basis to assess the effectiveness of the respective interventions, since the population at risk (number of susceptible contacts per school or kindergarten) was not sufficiently available."

Conclusions (Page 17, last Paragraph):
"Furthermore, early isolation of non-immune persons might limit the size and duration of clusters in schools and kindergartens effectively."

- Journal style: the authors ensured that the manuscript conform to the journal style of BMC Public Health.