Comparison with urban data (VAVANY Study)

- Prior to the current study, the same principal investigator performed a similar study in N=1093 children from an urban area in the capital of Madagascar. In this VAVANY-Study, a high prevalence of wheeze and an association of poverty with low lung function was observed. 1,2
- Prevalence of wheeze ever was higher in rural areas of the current study (36.0%) than in urban (24.9%, p<0.001) areas.
- Similarly, lung function (FEV1/FVC) was significantly lower in rural (89.6 ± 9.8) than in urban (94.4 ± 6.3, p<0.001) areas.

Conclusions

- The prevalence of children’s asthma in rural Madagascar was high. Surprisingly, the prevalence was even higher in than in urban living children (Metro Antananarivo; VAVANY-Study).
- The atopic asthma phenotype was predominant.
- In contrast to the biodiversity hypothesis, lifestyle of the rural living and poor population had no relevant effect.
- Asthma is not only an issue in industrialized countries, but also in non-affluent regions.
- It seems that the relevance of asthma in contrast to pneumonia is underestimated in developing countries.