

# Correspondence: risk factors of acute respiratory infection in under-fives in a rural hospital of Central India

Anirban Mandal<sup>1</sup>, Puneet Kaur Sahi<sup>2</sup>

<sup>1</sup>Department of Pediatrics, Sitaram Bhartia Institute of Science and Research, New Delhi, Delhi, India

<sup>2</sup>Department of Pediatrics, Kalawati Saran Children's Hospital, New Delhi, Delhi, India

*This correspondence refers to the following article:*

*Taksande AM, Yeole M. Risk factors of Acute Respiratory Infection (ARI) in under-fives in a rural hospital of Central India. J Pediatr Neonat Individual Med. 2016;5(1):e050105. doi: 10.7363/050105.*

*Authors' reply can be found in the following article:*

*Taksande A, Yeole M. Correspondence: risk factors of acute respiratory infection in under-fives in a rural hospital of Central India – Authors' reply. J Pediatr Neonat Individual Med. 2016;5(2):e050208. doi: 10.7363/050208.*

## Keywords

Respiratory infection, children, risk factors, rural.

## Corresponding author

Anirban Mandal, Department of Pediatrics, Sitaram Bhartia Institute of Science and Research, New Delhi, Delhi, India; email: anirban.nrs@gmail.com.

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**Dear Editor,**

We read with great interest the article by Taksande et al. [1] published in the latest issue of your journal. First, we would like to commend the authors for their endeavor. We have the following comments regarding the methodological issues which require further clarification by the authors for the benefit of the readers of JPNIM:

1. The authors mention that the controls were “selected from neighborhood and were matched for age, sex and religion”. Firstly, the need for the controls to be matched for religion is not clear. Second, it is not mentioned whether the controls were ‘healthy’ and were recruited from the community by community visits, or whether they had visited the healthcare facility for any other reason (e.g. other health concerns, immunization, etc.). One would be especially interested in their past history of Acute Respiratory tract Infection (ARI). Third, it is not clear whether the age and sex matching was appropriate, e.g. statistical non-significance of the means of age or number of children in each age group. The case-control nature of the study further emphasizes the need for such details.
2. The authors do not mention whether the children in the case group had any underlying illness which would otherwise predispose them for ARI, e.g. congenital heart disease, airway (upper or lower) abnormalities, cystic fibrosis, etc. Children with these underlying conditions would constitute a special population and it would not be fair to extrapolate data derived from them onto general population.
3. The authors state that the history of recurrent respiratory tract infection was obtained from the subjects but it is not mentioned whether any of them actually had the same. As again the risk factors in these children would be anticipated to be different from those with simple community acquired ARI [2].
4. The purpose of dividing children with ARI into groups of Upper Respiratory Tract Infection (URTI) and Lower Respiratory Tract Infection (LRTI) is again not clear, as the analyses of risk factors were not done for these 2 groups separately. Actually, such an analysis would have been really helpful in better understanding their individual epidemiology.

5. The definition/criteria used for the following terminologies/categories used are not mentioned: illiterate, lack of breast feeding, overcrowding, and inadequate ventilation.
6. Enquiry of the immunization status with pneumococcal and *H. influenzae* vaccine would have been really helpful in assessing their protective role in the studied population.
7. The authors state that the anthropometry included weight, length/height, and head circumference and assessment was done as per the standardized methods. But one would be really interested in knowing the exact variables (weight for age, height/length for age, weight for height) and the growth chart (WHO, NCHS/CDC, IAP) used as reference to ascertain the nutritional status of these children. This is of importance while comparing data across regions/country [3] and especially when nutritional status was found to be a significant risk factor for ARI. Furthermore, malnutrition could have been classified in mild/moderate and severe, to have an additional insight into its correlation with ARI.
8. The purpose of obtaining history of similar illness in the siblings is not very clear and, apparently, it also did not figure in any of the analyses.
9. As the researchers were involved in admitting all the children enrolled in the study, they had an invaluable opportunity to study the outcome measures (e.g. duration of hospitalization, need for assisted ventilation, mortality, etc.) in light of the proposed risk factors.

**Declaration of interest**

The Authors declare that there is no conflict of interest.

**References**

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3. Ujunwa F, Ezeonu C. Risk Factors for Acute Respiratory Tract Infections in Under-five Children in Enugu Southeast Nigeria. *Ann Med Health Sci Res.* 2014;4(1):95-9.