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Letter to Editor

Paediatrics Section

Ventilator-Associated Pneumonia in Paediatric Intensive Care Unit

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Dear Editor,

We read with great interest the original article by Galal YS, et al, in the June, 2016 issue of your journal [1]. At first, we would like to commend the authors for their endeavour but at the same time we feel that few clarification are required and also would like to make the following comments which would benefit the general readers of JCDR:

1. The authors have mentioned the bacterial organisms isolated from Ventilator-Associated Pneumonia (VAP) cases along with their relative frequencies but antibiotic susceptibility is not provided. It is of special interest as the antibiotic susceptibility pattern is invaluable in formation of antibiotic policy.

2. The methodology mentions that "pneumonia as admission diagnosis or detected within the first 48 hours were excluded while results show that 28.1% (120) patients having respiratory pathology at admission. As pneumonia is one of the most common indications for Paediatric Intensive Care Unit (PICU), admission in the studied age group (1 month to 12 years) in developing countries [2], one would be really interested to know the primary diagnosis in these patients requiring Mechanical Ventilation (MV).

3. The authors state that "Cases were kept on broad spectrum antibiotic therapy before MV e.g., Tinam, Vancomycin, etc. So did all the patients subsequently diagnosed as VAP received antibiotics before diagnosis?

4. The authors mention that "VAP was established with a positive quantitative culture". But most of the earlier studies from developing countries used CDC (Centre for Disease Control) definition for defining VAP [3] and microbiological confirmation has not been the major criteria [4]. Therefore, diagnosing VAP only in culture confirmed cases can lead to underestimation of its incidence and also make the study non-comparable with these studies.

5. With such a high incidence of VAP (30.9%), one would be really interested to know more details about the ICU staff (doctor: patient and nurse: patient ratio), disinfection routines (particularly of the ventilator circuits) and whether any of the bundles for prevention of VAP are being used in the index ICU. Moreover, as the study included 2 PICUs within the same hospital with one of them being in the emergency department, it would have been interesting to compare the data between the two PICUs in terms of the incidence of VAP, causative organisms, risk factors and mortality rate. And in case of differential outcomes the same could have been looked into the light of the quality parameters mentioned above.

6. Various risk factors were studied and few were found to be significant (e.g., multiorgan failure, coma, etc.) in this study. It would have been helpful if the authors also studied other 'easy to measure' risk factors which were found to be significant in previous studies e.g. use of neuromuscular blockers, H2 antagonist, tracheostomy etc., [4].

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