

Short Report

Paediatric workload in a multidisciplinary tertiary care intensive care unit in Sri Lanka

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Background

Paediatric intensive care is an emerging speciality in developing countries. In the developed world, paediatric intensive care units (PICUs) concentrate on providing sophisticated technologies and trained personnel to provide special care for this particular age group. PICUs built for such purposes are known to improve the outlook for critically ill children.

In Sri Lanka, there are four PICUs comprising 8% of the total number of state sector ICUs in the Island¹. Therefore, most paediatric patients who need intensive care are admitted to multidisciplinary adult ICUs. Data assessing the actual paediatric workload in adult ICU's are scarce.

Objectives

To assess the paediatric work load and outcomes in terms of mortality and length of ICU stay for critically ill children in a multidisciplinary ICU in a regional hospital.

Method

This is a retrospective study conducted in the 10 bedded tertiary care ICU in the Teaching Hospital, Peradeniya. Data was extracted from the ICU admission register and death register over a period of 19 months from January 2006 to July 2007. Age below 16 years was considered to be the paediatric group. Data was analyzed using SPSS 10 statistical software.

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Results

There were 1107 total admissions to the ICU during the study period, which included 115 (10.4%) paediatric admissions. Their mean age was 5.38years (SD 5.06). Of the paediatric admissions, 72.17% originated from different wards and units of the same hospital and 27.83% were transferred from elsewhere direct to the ICU. The indications for ICU admission among the paediatric age groups were 43.5% for post operative observation, 15.6% for respiratory diseases and 17.4% for neurological diseases. Of the 115 admissions, 19.13 % were admitted due to sepsis.

The mean duration of ICU stay was 6.65 days (SE 1.64). Of all paediatric admissions, there were 15 deaths (13 %).

Conclusion

In a multidisciplinary ICU, 1/10th of the workload relates to the paediatric age group. Their mortality rates appears to be lower (10-15%) compared to adults (15-25%). Of the total ICU beds available in a typical Sri Lankan hospital, 1:10 appear to be a rational proportion of paediatric ICU beds needed.

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References

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