An Audit of Paediatric Anaesthesia undertaken at the Colonial War Memorial Hospital in Suva, Fiji for 2011-2012

Background:
The Colonial War Memorial Hospital (CWMH) is the largest teaching hospital in Fiji. The department of Anaesthesia at CWMH is led by a specialist anaesthetist with overseas paediatric training. Registrars from all over the Pacific join the anaesthesia training scheme, which has been running since 1995. Fiji has a total population of 837,271 in which 20% are below the age of 10. CWMH caters for the 41% (342,386) who live in the urban and peri-urban areas in central Suva that may require surgery in addition to referrals from her outer lying islands and the Pacific.

Aims:
1. To review the number of neonatal and paediatric cases that required anaesthesia in 2011-2012.
2. This audit will serve as a measure of the demand for specialist paediatric anaesthesia services.

Methods:
- Retrospective data was extracted from post-anaesthesia unit (PARU) log books from 20/12/10 to 11/03/12.
- Patients were categorized into neonates (birth to 1month), infants (1mth-2yr) and children (2yrs to 12yrs).
- All were identified and classified according to their respective age groups, gender, the type of anaesthetic and surgeries that were performed.

Results:
A total of 4,568 patients underwent anaesthesia of which 16.1% (736) were paediatric patients and 3.9% were neonates.

Fig1: Paediatric anaesthetic cases by age group
- 68% 0-1mth
- 28% 2mth-2yrs
- 4% 2-12yrs

Fig2: Distribution of paediatric cases by the type of surgery performed.
- 53% General
- 24.7% Ortho
- 12.1% Plastic
- 3.7% ENT
- 2.6% Eye
- 2.0% Uro
- 1.9% Neuro
- 1.0% Dental

Limitations:
- Poor record keeping:
  - Incomplete data
  - Non specific data entry regarding the anaesthetists level of experience
- No record of incidents: perioperative morbidity and mortality
- No record of ASA score recorded
- No previous audits on the demands of paediatric surgery in the Pacific Islands for comparison.

Recommendations:
- The Audit will be used to educate staff on the benefits of record keeping for quality assurance purposes.
- We hope that this audit will help to address shortages in staffing and education and be used to implement such change.
- To set a baseline for comparison with future audits within CWMH, Fiji and other Pacific Islands.
- Address public health issues, such as demand from sepsis and trauma.

References:
2. Anaesthesia services in developing countries: defining the problems. SC. Hodges. Anaesth 2007, 62, p4-11
3. Guidance on Paediatric Anaesthesia Services. The Royal College of Anaesthetists-Paeds Services Ch 7