

# **Paediatric Cardiac Surgical Mission Fiji**

CWM Hospital, Suva 16-27 September 2015

## Background:

This mission was made possible with logistic support of Friends of Fiji Heart Foundation (FOFHF) and financial support from Hearts4Kids Trust. It followed the adult cardiac surgical mission funded by FOFHF. Our aim was to treat children with congenital heart defects, who would otherwise not have access to restorative surgery due either to being too unwell to travel to an overseas facility or without the resources to send them. This was the second year the paediatric cardiac team had visited Fiji and followed the successful mission last year in Lautoka which had been funded by FOFHF.

## Pre-mission Cardiology Assessment 17-21 August 2015:

Dr John Wright visited Lautoka, Labasa and Suva to assess patients for the surgical mission. 57 patients were reviewed. On 21 August, a short list meeting involving the Fiji paediatricians and Mrs. Kirsten Finucane was held at CWM Hospital. 18 patients were selected as suitable for operation in Suva.

## Pre-surgical assessment 16-17 September 2015:

Patients selected for surgery were reviewed in clinics held on 16 and 17 September. In addition, other patients were seen at the local teams' request. Following these clinics, the final short list of 15 patients was drawn up of patients to be operated over the 5 days of allocated theatre time.

At that clinic, a newly referred two month old baby was considered suitable for surgery in Auckland. The patient was duly funded by ROMAC and escorted back to Starship Hospital at the end of the mission where she had successful corrective surgery. An in-patient was reviewed who had a mycotic aneurysm following cardiac surgery 3 months previously by Operation Open Heart International. Unfortunately that child died from rupture of the aneurysm before treatment could be arranged in Australia by the team who operated on him.

Set up: Others members of the team used these days to set up the theatre and intensive care environments with equipment and supplies brought from NZ.

## Paediatric Team

Designation	Numbers
Paediatric cardiac Surgeon	1
Paediatric Cardiologist	1
Surgical Assistant (RNFSA)	1
Cardiology Registrar/Nurse Practitioner	2
Anaesthetist /Intensivist	3
Perfusionist	2
Anaesthetic Technician	2
Theatre Nurses	2
ICU Nurses	7
Ward Nurses	6
Others*	3
<b>Total</b>	<b>30</b>

\*Others in the table refers to Medical company reps and Students/volunteers who devote their time helping during the mission in any way possible

## Patients Operated 18 – 22 September 2015:

15 patients were operated upon – 14 bypass heart procedures and one non-bypass case. See list below.

## Summary of Paediatric Procedures done

Types of cases operated:	Number
Tetralogy of Fallot (2x monocusps & 1x conduit)	5
VSD	3
Sub-Aortic Stenosis	1
PDA	1
ASD	2
Mitral Valve Repair	2
RVOT Aneurysm repair (Redo)	1
<b>Totals</b>	<b>15</b>

## List of Paediatric Patients

Day	Age	Gender	Weight	Domicile	Bypass/Non-Bypass	Operation
Day 1	13 years	Male	32 kg	Lautoka	Bypass	Tetralogy of Fallot
Day 1	5 months	Male	5.2 kg	Lautoka	Bypass	VSD
Day 1	7 months	Female	5.15 kg	Suva	Bypass	VSD
Day 2	7 months	Female	9.35 kg	Suva	Bypass	Tetralogy of Fallot (monocusp)
Day 2	6 years	Male	21.5 kg	Lautoka	Bypass	Tetralogy of Fallot & PA Plasty (21mm Conduit)
Day 2	10 months	Male	6.1 kg	Suva	Bypass	VSD & TV Repair (T21)
Day 3	4 years	Male	15 kg	Lautoka	Bypass	MV Repair
Day 3	9 months	Male	7.1 kg	Labasa	Bypass	Tetralogy of Fallot (monocusp)
Day 3	4 years	Female	15 kg	Lautoka	Bypass	ASD
Day 4	21/2 years	Female	15 kg	Suva	Bypass	Resection false aneurysm. Repair RVOT (redo DORV)
Day 4	11 years	Male	31 kg	Lautoka	Bypass	Mitral Valve repair
Day 4	3 years	Female	17 kg	Suva	Non-Bypass	PDA
Day 5	11 years	Female	29 kg	Suva	Bypass	Tetralogy of Fallot
Day 5	4 years	Male	15 kg	Lautoka	Bypass	Sub aortic stenosis
Day 5	13 years	Male	31 kg	Suva	Bypass	ASD & Mitral & Tricuspid annuploplaties

### Post-Surgical Clinics:

Dr John Wright undertook post-operative review clinics at Lautoka (24 September) and Suva (23 and 25 September). Patients who had been operated upon in 2014 were reviewed on 23 and 24 September. All were doing very well. Patients who had had surgery this visit were also brought back for review at CWM Hospital 25 September. In addition, a newborn infant was assessed and found to have a non-correctable heart defect.

### Outcomes:

All 15 patients are alive and well and no reoperations were required. 2 post-operative complications were experienced, with 1 child requiring 5 days assisted ventilation in intensive care and another developed bronchiolitis requiring a longer hospital stay. These children are now progressing well. The other 13 patients were discharged from hospital 3-5 days post-operatively, and were followed up in Suva at 7-10 days with good wound healing and excellent cardiac echo findings.

### Teaching:

The local Fijian teams were allocated to work alongside the NZ teams, in theatre PICU and cardiac ward, on a daily basis with an excellent level of involvement in patient care at every level.

The Fijian nurses in PICU all had cardiac workbooks to complete if they were interested which they embraced with enthusiasm. 20 short education sessions were held in PICU including embryology and foetal circulation and heart defects as well as bedside teaching on nursing assessment and patient care. A hospital wide lecture was held on Tetralogy of Fallot which was well attended. Certificates were issued to nurses for sessions attended so they could utilize these for education hours required to maintain their annual practicing certificate.

The nurse practitioner gave post op education sessions to each of the parents & families prior to discharge.

The NZ specialists worked closely with the paediatric cardiac registrar Marianne on a daily basis where they worked closely together to manage the patients enhancing learning opportunities.

A medical Grand Round teaching session was arranged for 22 September where 3 patients, who had been operated upon, were discussed.

#### De-Brief Meeting 25 September 2015:

A meeting was held with the local Suva paediatricians and senior nurses at CWM Hospital to discuss the outcome of their operated patients and to advise follow-up plans. Organisational issues were also discussed.

#### Acknowledgements:

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