



Caring for hearts of the Pacific

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Our vision is to extend lifesaving cardiac care to children born in our neighbouring countries of the Pacific.

**Paediatric Cardiac Surgical Mission to Fiji
Colonial War Memorial Hospital, Suva
12-24 November 2019**

The Hearts4Kids Trust is a New Zealand volunteer medical team who provide free-of-charge lifesaving services to Paediatric patients born with congenital heart disease. There are limited children's heart surgery facilities in the Pacific Islands. Our aim is to treat children with congenital and rheumatic heart disease who would not otherwise have access to surgery, due either to being too unwell to travel to an overseas facility or without the resources to be transferred. The Fiji Paediatricians specifically requested we visit in November rather than earlier in the year, as a consequence we were unable to follow the Friends of Fiji Heart Foundation Adult team as we have previously done. Therefore, this was our first time organizing the entire mission independently and the fifth time our Paediatric Cardiac Surgical team have visited Fiji since 2014.

Cardiology Triage Clinics prior to the mission

Dr John Wright, Consultant Paediatric Cardiologist, with Echo Technician, Anna Harris, visited Fiji for the 23rd to 27th September 2019 to assess and advise treatment on children with congenital and rheumatic heart disease. Clinics were held in Colonial Memorial Hospital – Suva (23rd, 24th), Labasa (25th) and Lautoka (26th & 27th) over with a total of 75 patients being seen. 21 children were short-listed for probable surgery.

Preparation for the mission

At the prior request of the Fijian Paediatricians we arranged our surgical trip later in the year to spread the volunteer cover for the Paediatric Cardiac Services provided to Fiji over the year (other missions visit in April and June). As a consequence, this year, Hearts4Kids worked independently of the Friends of Fiji Heart Foundation, not following the Adult team as we have done previously. With dates set, arrangements quickly got underway, there is always a lot to organize. Once again financial sponsorship was sought, and requests made for medical equipment and supplies by donation, reduced cost, loan or purchase. We were very appreciative that companies and organisations responded so promptly. Fundraising activities included movie nights, a quiz night, and a Mid-Winter Christmas function at St Matthews-in-the City. In October equipment and supplies necessary for the mission were itemized, boxed, packed on pallets, and made ready for shipping by container to Fiji. This year a team of 39 people were on the mission, with some staying for a shorter period of time and others coming up to replace them.

12-14th November 2018 – Mission Set Up

Team members traveled from New Zealand to Fiji on 11th and 13th November; using Thursday 14th to unpack equipment and supplies and to set up theatre, intensive care unit and the post-operative ward. Meanwhile Pre-Surgical Assessment Clinics were held on 14th & 15th November where 21 children were reviewed by Dr John Wright, including several who were newly referred and required urgent treatment. Following this clinic, the final shortlist of patients was drawn up to have operations over the five days of allocated theatre time. Having learnt from the 2018 experience that mechanical valve insertion carries the risk of late sepsis with poor outcomes, we elected this year to avoid operating on any children who were unsuitable for repair and needed valve replacement.

Hearts4Kids Paediatric Cardiac Team

Designation	Numbers
Paediatric Cardiac Surgeon	1
Paediatric Cardiologist	1
Cardiology Senior Registrar	1
Anaesthetists	2
Intensivists	2
Perfusionists	2
Anaesthetic Technicians	2
RN Surgical Assist	1
Theatre Nurses	3
PICU Nurses	10
Ward Nurses	8
Clinic Nurse - Admissions/Discharges	1
Mission Co-ordinator	1
Other volunteers*	
- Student Volunteer/Assistant Mission Co-ord.	1
- General team support	3
Total	39

*Volunteers are self-funded

15th-19th November 2018 – Operating Days

17 patients were operated on over 5 days; aged between 6 weeks old and 14 years, with the youngest weighing only 3.9 kilograms. 14 were heart bypass procedures and 3 non-bypass procedures. It was anticipated that the theatres would run from 7am to 8pm, however, on several days work continued until 10 pm in order to operate on all the children on the list. 10 patients were from Suva area, 2 from Labasa, and 5 from Lautoka area. All patients had intra-operative and post-operative echocardiogram prior to discharge, all of which demonstrated good repairs.

Summary of Procedures

Bypass procedures (14)	
Tetralogy of Fallot repair	2
Ventricular septal defects and tri-cuspid valve repair	3
Ventricular septal defect	1
Aortic valve repair and VSD closure	1
Mitral valve and tricuspid valve repair and ASD closure	1
Atrial septal defect	3
Rheumatic mitral valve repair	3
Non-Bypass (3)	
Patent ductus division or ligation	3

20th-24th November – Post-operative

Most patients were able to be discharged from hospital on the 3rd to 5th post-operative day, and were seen in clinic for cardiology and surgical review. All patients were followed up in Suva by the local Paediatrician at two weeks post-operation before returning home. One baby developed a minor chest and wound infection so remained in hospital on antibiotics when the Hearts4Kids team departed Fiji and was successfully discharged a few days later.

The Hearts4Kids medical team again worked closely with local staff at CWM Hospital. Local staff were allocated to every shift in Theatre, Intensive Care and Ward, looking after allocated patients with supervision. Pen drives were created containing a list of important documents related to congenital cardiac lesions and intensive care and these were provided to the local nurses and doctors. Tutorials were held by senior nurses to teach local nurses on critical issues. Evening teaching sessions to educate parents of children on general healthcare issues were given in the wards. The local Fijian Rotary supported us extremely well with food, supplies and local expertise as needed.

A debrief meeting was attended by Dr John Wright, Dr Mary-Anne Korai, and Dr Ilisapeci Tuibeqa to discuss the 2019 mission. They acknowledged that the timing of the visit in November allowed better allocation of cases for the visiting teams and a better service to the local patients and staff. Drs Korai and Tuibeqa would prefer visits to come to Suva, but recognise that due to congestion in Suva theatres it may be easier to organize surgery in Lautoka. The Lautoka Paediatricians are also keen for the mission to operate in their hospital. This issue requires further discussion. They indicated that they would definitely like us to come back next year, therefore, we await confirmation from the hospital administration and Ministry of Health regarding this and the dates involved.

The New Zealand High Commissioner, Jonathan Curr, arranged a reception at his home hosted by his staff for the whole Hearts4Kids team and Fijian staff who assisted us.

Conclusion

Dr John Wright received feedback from Dr Mary-Anne Korai who reassured us just prior to Christmas, over one month after the mission, that all patients were doing well. Since 2014 the Hearts4Kids Paediatric Cardiac Surgical team has performed heart surgery on 78 babies and children in Fiji, and the outreach clinics and team involvement in staff education has enabled us to improve the lives of hundreds of children and their families in villages across Fiji.

Acknowledgements

Our grateful thanks to ALL individuals and organisations for supporting the 2019 Hearts4Kids Mission to Fiji.

We would particularly like to acknowledge:

- Air New Zealand
- Akarana Trust
- Ara Lodge
- Dr Bernie Brenner
- Colonial War Memorial Hospital staff, including Senior Paediatrician Dr Mary-Anne Korai
- Corona Worldwide - Fiji Branch
- Friends of Fiji Heart Foundation
- Indian community who attended the Shrimat Bhagwat Katha (organized by Sunila Lal and Dennis Lal)
- Medical Aid Abroad
- Ministry of Health, Fiji
- Open Heart International, Australia
- ROMAC (Rotary Oceania Medical Aid for Children)
- Rotary Clubs - Takapuna, Eden/Epsom, Henderson. Also Harold Thomas Rotary Trust & Nora Hamblin Memorial Trust
- Starship Children's Hospital
- Vatuwaqa Golf Club

- Medical companies and their representatives for continued support and sponsorships, in particular:
 - BD Medical
 - CDC Pharmaceuticals Ltd
 - Device Technologies
 - Edwards Life Sciences
 - GE Healthcare
 - Global Medics
 - Halyard Health
 - Johnson & Johnson Medical
 - LivaNova
 - Medtronic
 - Obex Medical
 - Promed Technologies
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 - Technisonic
 - Terumo Medical Device Company
 - USL Medical

Thanks to all our sponsors, large and small, for such wonderful support