# Report

## 23rd of October to 1st of November 2011 trip to Naob and Waingapu

Team members

Dr Tim Keenan, Orthopaedic Surgeon, WA
Dr Pat Moran, Anaesthetist, SA
Mr Darren Bradbrook, Theatre nurse (anaesthetic), SA
Mr David Grant, Theatre nurse (surgical), SA
Dr Dion Suyapto, Interpreter/co-ordinator, SA
Dr Harry, local counterpart/ co-ordinator, Jakarta

The South Australian team left Adelaide on the 23rd of October 2011 departing Adelaide direct to Denpasar on a Pacific Blue flight. The team met in the airport and proceeded with the four and a half hour plane ride to Denpasar. In Denpasar we met with Dr Tim Keenan who was already there on an earlier flight from Perth.
The next morning we left to the airport again after breakfast for our flight to Kupang with Batavia air. The plane ride took one and a half hour to reach Kupang. We met Dr Harry in the plane to Kupang where transportation had been arranged to meet us in Kupang. There were 2 cars available however Dr Harry went off in one car to get the oxygen cylinder ready to be used in Naob. We stopped by in Kupang for a quick lunch. The car ride to Naob took five and a half hours.

In Naob, the nuns had patients ready for us to review and to plan for the next day of operating. The patients were seen on the evening by Tim Keenan had been seen in the morning by the local GP, Dr Evy Sujono.
Dr Evy has been there for the last year and a half and still have another year to complete having recently completed her medical training in Jakarta. Notes and consent notes were already prepared by the nuns and by Dr Evy which means that the clinic runs smoothly and efficiently.
The subsequent days were filled with surgical procedures and patients review. Patients came as far away as Kupang. Because of the low number of patients available for surgical procedures, the team left one day ahead of schedule to Waingapu (Sumba).

We left Naob at 4 am to reach Kupang by 10 am the latest to catch our flight from Kupang to Waingapu. Transnusa airline was the carrier that flew the team to Waingapu. The plane was a small Fokker 50 aeroplane but the plane ride was comfortable and we arrived in Waingapu one hour later than scheduled. Delays are a common occurrence in domestic Indonesian airlines. The trip from Kupang to Waingapu took approximately 50 minutes.
In Waingapu we were greeted by the local health officials who picked the team up from the airport. The team was then escorted to a VIP building directly next to the main terminal where we met the deputy bupati (head of region) and the director of the hospital (Dr Chris). The deputy bupati is also the local general surgeon (Dr Matius).

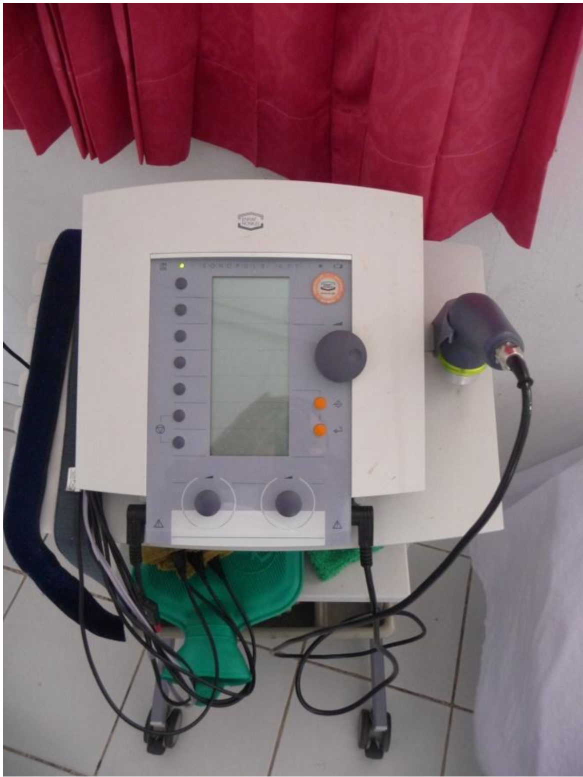
Waingapu is the capital of East Sumba located in the island of Sumba. Waingapu has a population of approximately 40 000 people and it has 1 public government hospital and 2 private hospitals run by the church. Given the shortage of doctors in the area, the 3 hospitals are generally staffed by the same medical practitioners.

The public hospital known as Rumah Sakit Umum Daerah Umbu Rara Meha, Waingapu. It is located approximately 10-15 minutes drive from the airport. It has a 3 beds intensive care unit, 2 theatres which are mainly used for caesarean sections done by the local obstetrician and trauma cases done by Dr Matius. He is doing less elective work and patient contact work as he is heavily involved in his work as the deputy bupati.

The theatres are fairly well equipped (see report from Pat, Darren and David). The theatre staff were very helpful and the clinic for the team was set up in the theatre entrance. Privacy was an issue but no one seemed to mind at all. The patients were very selective for orthopaedic cases and it ran smoothly with the exceptions that many of the patients left their x-ray films behind which means either they have to get another x-ray done or go home and get it. There is an outpatient charge for non-insured patient of Rp 7500 for registration. X-ray cost is additional. For those who work for the government, they are covered by the insurance and therefore have no out of pocket cost. It is important to further clarify the costing for each patient especially those needing surgery and those who do not have insurance cover to avoid large out of pocket cost for the people of Waingapu. We have seen few patients who had medical treatment done in Denpasar but unfortunately they are not properly followed up.

One theatre staff that is mentioned in David's report is "Momo" who does not seem to have a very good grasp of cross infection, sterilization and contamination of sterile instruments. He failed to follow instructions in Indonesian not to re-use the unused surgical instruments of one patient on another patient. He seems to think that it is ok to collect all the unused instrument after a case and to put it into the sterile box ready for the next case. We have not been able to communicate this directly with the director of the hospital but were told by some of the other theatre staff that they have spoken to the director and had him transferred out of theatre but unfortunately had to be transferred back to theatre.

Waingapu Hospital has an onsite physiotherapist who recently graduated with full physiotherapy qualifications from the University of Indonesia in Jakarta. She is originally from Sumba and most likely will stay there permanently. She seems to be very knowledgeable. She sees approximately 10 patients per day most of whom are stroke patients. The physiotherapy room is fairly well equipped.



The physiotherapy room along with some of the equipments there including an ultrasound machine

The radiology department was inspected although the team did not meet with the radiographer. The films quality ordered were reasonable and the department itself looked very well equipped.

The radiology department with x-ray machine and processing facility.

The team was initially offered accommodation at the back of the hospital in their accommodation wing unfortunately it was not up to standard and there we elected to stay in the local hotel. Because we have not reserved any rooms, we had to stay one night at hotel Merlin. The second night we relocated to Hotel Elvin which was much better in terms of room quality and cleanliness. We had 3 rooms where we were able to fit 2 people per room.

For future trips, this hotel should be reserved well in advanced. We managed to get room 108, 109 and 110 which is right at the back away from the main street. There are 2 banks located within walking distance from the hotel Elvin. The hotel does not take credit card or foreign currency however the ATM at BNI (Bank Negara Indonesia) and BRI (Bank Rakyat Indonesia) takes Australian ATM card. The maximum withdrawal limit in BNI was Rp 2 000 000 per day.

The director of the hospital communicated via myself that he would welcome future team visits in any specialty including orthopaedics, plastic, and ENT teams. While the deputy bupati stated that he would like to see ophthalmology team coming to the hospital, the director have said that there had been 2 previous ophthalmology teams, last one being a Korean team. A more recent ophthalmology team scheduled to arrive from Jakarta had to be cancelled because of the low numbers turning up in the outpatient for screening.

Summary:

Naob
Total patients seen in Naob – 40
Total procedures done – 7

Waingapu
Total patients seen in Naob – 65
Total procedures done – 5

For future team it is advisable that the team leave on the Sunday as the hospital is closed and no activities generally can be done except in emergency cases. Furthermore to do Naob and Waingapu is very time consuming with travel both on road and on the air. Because of a family emergency back in Perth, Dr Tim Keenan had to leave few days earlier from Waingapu.

Merpati flies direct from Denpasar to Kupang and return while Batavia flies from Denpasar to Kupang and then to Waingapu. On the way back from Waingapu to Denpasar, Batavia air transit in Kupang.

Overall the team worked hard and worked very well together. Given that this was the first trip to Waingapu we did not know what to expect. Future trips will need coordination with the director of the hospital. Training of the local staff should also be part of the itinerary as they are all very willing to learn and were very accommodating.

Dr Dion Suyapto

November 2011

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Dr Tim Keenan's report.

I think in future it best to have 2 separate missions one to Naob and one to Waingapu perhaps once a year to start with and then if the demand exists then 6 monthly if enough finances and team members available etc, They both want 6 monthly visits which I agree is best especially for orthopaedic patients who post op need a lot of reviews and management but will be difficult in practical terms I would feel at least initially.

I think with adequate warning and planning (which did not exist well this time as it all happened quickly) There will be an abundance of patients to see and treat. We have a list of patients needing specialised treatment and equipment for futurevisits

I would like to thank and congratulate the team this time for a successful mission, and hope to see you all again on future ones, especially Dion, who was the linchpin of the trip, organising and for me, of inestimate value in clinics and the theatres due to his extensive medical knowledge and fluency in Bahasa. He really made the clinics in particular run very smoothly and efficiently, and for myself I would be happy to accompany him on future missions as and when he is available

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Dr Pat Moran's report.
Naob (West Timor)
24-27/10/2012
Anaesthetist's Report
Pat Moran

: The Operating Theatre had not been used since last year. This was disappointing and created an issue with the O2 supply (see below)

Machines Chinese. Quite adequate.

: We collected 2 large O2 cylinders from Kupang on the way.

5 1/2 hr tiring drive Kupang- Naob. Last hr still very rough.

Spanner required to turn on O2 cylinder.

Female connection on cylinder and the regulator was also female.

The male-male connector had been ? lost and we used the regulator from the small O2 cylinder and needed to change the tube connection to attach to Anaes. Machine tube nut.

This was difficult but achieved by Darren Bradbrook RN Anaes. By using a gap in the concrete outside the theatre as a type of vice.

The pressure was too low for the 1st machine I used last yr and continually alarmed. The 2nd machine coped with the lower pressure and we proceeded uneventfully.

On last day of our stay the male male connector was found ( in the changeroom) and we then connected the correct regulator to the 1st machine and this produced adequate pressure for next use.

Both the T piece and circle system were fine after we changed the bag for a smaller size

: No Air Con
Quite uncomfortable
Fans made it tolerable but one wondered about any increased infection risk.

: On site available
IV cannulae 22G
IV fluids
Giving sets
Syringes and L. A. (bupivacaine heavy and normal and ropivacaine0.2/0.75/1
Tramadol and Dexamethasone
Only analgesic used was LA and Tramadol.

: Standard GA's with Halothane . Gas induction for children and IV PROPOFOL for adults.
Halothane purchased via Dr Harrianto and used 1/2 1st bottle and brought rest back to Australia

Spinal for amputation performed well by Dr Evy Sujono a local GP with my assistance

Ring blocks and sedation sufficed for the finger amputations

: Recovery OK with O2 and T piece or Hudson mask.

No suction though so all patients awake as left theatre.

:Hints-take green interlink cannulae and their giving sets if possible or at least their bungs (attach to needle in rubber giving set) to allow needleless injection. The advantage is the ability to draw up extra drugs with same cannula and reduction in needlestick risk.

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Waingapu (East Sumba) Anaesthetist's Report

27-30/10/2011

Pat Moran

: Friendly welcoming staff right up to Med Director

Hospital Accom inadequate. Need to stay at Hotel. High Risk Malaria Area

: 3 Anaesthetic nurses. One had done a 12/12 course elsewhere. Another 3/12 and the 3rd was in training.

: Usual theatre use is

40 cases/month mostly Emerg Sections.

One working theatre.

Other available but 2nd machine not functional unless the connection to O2 supply is changed(see below).

: Comfortable theatre
Air con works
Good light
Good windows
Elec supply ok + back up generator

: Drager Fabius machine X2 good condition
One piped to cylinders with correct Regulator, other pipe connections to wall which needs work to fix leaks. Other option is to get appropriate connection and regulator for cylinder

This would allow 2nd O.R. To be available in emergencies

Monitors available Oximeter NIBP
No ETCO2 monitor
Oxygen cylinders good supply
N2O cylinders
Enflurane and Iso supplied
Laryngoscopes in poor repair
Tubes for adults red rubber loose in drawers
Airways mixed up in drawers
Paed T Piece available but old
No filters used
Suction ok

: No SXM in hospital
Propofol Ketamine Atracurium Lignocaine all available
22G24G cannulae
IV fluid Ringers and NS
Giving sets

: Most common local operation LSCS with this technique-
GA Atracurium Ketamine Enf intubation no cricoid
Reversal with,
0.5mg Neo/0.25atropine
Small doses but Atracurium use apparently makes these adequate.

: Recovery area ok
No Suction but they routinely use a safe Discharge Criteria list

: Spinal Anaes. tutorial given
Rx L.Spasm. Tutorial given
Very keen to have teaching

: For the future;
Need to take own drugs
Take all own disposable tubes, LMA's, guedels, filters, laryngoscopes, ETCO2 monitor, extra SaO2 monitor, any simple tutorial with pictures would be useful
The more Indonesian language capability the better.

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David Grant's report.

Darren Bradbrook (anaesthetic nurse) and myself (David Grant Scrub/Scout) travelled to Dempisar in Bali on the Sunday after meeting up with Dr Pat Moran and Dr Dion Suyapto. On arrival to Bali we stayed in the Vira Bali hotel where we also meet up with Dr Tim Keenan, was very comfortable and had its own pool. We had a quick meal that night and went to bed in preparation for travelling on the Monday to West Timor.

The next morning we had breakfast then travelled to the airport for the flight to Kupang. The flight was delayed by 20 minutes. On arrival we collected our luggage (with no problems) meet up with Dr Harry and set out for lunch before the van/car journey to Naob. Dr Harry had to collect some supplies so he departed early and we got together again on the road. The journey was very arduous and tiring, by the time we arrived at Naob it was 21:45 and there was 11 patients waiting to be consulted! The nuns then prepared some food for us and went to bed exhausted from the rigors of the day.

The next morning Dr Keenan planed to do some more consulting until 10:30 am and then start the surgery. The small theatres were basic but had most of the items required, although it was over 50 deg c in theatres. The table is requiring a hand table as we had to make use of the armboard. Darren and I took over a number of pre-sterilized instruments and these were very useful for the instruments they had were not suitable for all the procedures. There was a shortage of blues and it was lucky we all took spare sets with us. The nuns were courteous and would help without asking.

We managed to do all the planned procedures, but ran out of suitable patients (see attached report). The second day's operations were smoother as I had the chance to pick out the instrumentation required and to help set up theatre. The nuns still need some education regarding sterility and cross contamination (see recommendations)

Instrument limitation is the main reason that more operations could be carried out and the lack of imaging at this site, which said it, would be an excellent site for soft tissue operations.

We then had to get up at 4am the next morning for the journey to airport and the flight to Waingapu. Again the flight was delayed for a hour and a half. Wangapo was even hotter and we were meet at the airport by the island governor and transported to the hospital in government cars (one of which we had at our access 24hrs a day).

The hospital was bigger and had 155 bed with maternity, surgery and medicine. Imaging was available on site but no I.I It had a small ICU with 3 beds which were filled with Malaria and head injuries. On consultation with other staff it was brought to our notice there was a higher rate of HIV on this island.

On arrival again we had to start consulting the patients to make up a list before Dr Keenan had to leave the next morning. We managed to do 2 operations and 2 minor procedures that afternoon. The hospital provided 3 meals a day and was excellent. The hospital offered us accommodation, but it was well below standard and we ended up going to a local hotel for one night and then another for the next 2 nights.

The staff at Waingapu was trained nurses and the facilities were better, the theatre had aircon. The instrumentation selection at the hospital was better, but they had a tendency to sterilize everything, place it on one large tray, pick from that tray and place on a work trolley. The sutures they had available were all on reels and had free needles (all Catgut, no synthetics available) we managed to complete 3 more theatre cases, 2 changes of dressings and 2 injections of steroid. (there was no depo-steroid injections available) . The next day we spent consulting patients and have got a list of patient who could be suitable for surgery the next time (see report xl)

## Recommendations-Naob

The nuns at Naob were keen and would like more education; it would be of benefit if a theatre nurse could go over for 2-3 days and teach.
Linen bundles need to be smaller (only the correct amount for one case at a time)
Instrumentation needs to be sorted out into clinics (working from one box in theatre for all instruments) or for cases
Extra instruments e.g. Bone nibblers, wires, small osteotomes, electric drill ? Hand table
Take scalpel blades

## Recommendations-Waingapu

I know this may be controversial but one person needs to be removed from theatre in Wangapo until he "MoMo" is taught about cross contamination, Sterility and takes instruction from other staff. He was spoken to by Dion in Indonesian and totally ignored Dion.

My recommendations remain the same as above, but Wangapo could do with Sutures, k-wires, Steinman pins, Screws and plates

Darren Bradbrook's report.

The team departed mostly from Adelaide on Sun 23rd Oct, arriving in Denpasar late in the afternoon on the 23rd.
Tim Keenan was already in Denpasar, due to other commitments prior to our arrival.

We stayed overnight in Denpasar and flew out to Kupang around lunchtime Bali time. The flight was fairly straight forward after being delayed in Denpasar for quite a while….interesting landing however.

We met Dr Harry aboard the plane to Kupang.

Once in Kupang airport, we travelled to a nice spot for a quick bite to eat before the 6 hour trip to Naob. The weather was very sticky and tested the patience of the team, but once we were under way everything was fine.

About two hours into the trip, our car noticed a loud hissing sound, which we all thought was a blown tyre. After stopping to inspect the damage, we very quickly realised that there was NO blown tyre, but one of the large oxygen cylinders we needed to take to Naob has loosened itself to the ON position and was leaking valuable oxygen. The problem was quickly resolved, the second car had by then caught up and after a brief stretch of the legs we were under way again.

Passing through SOE, we knew at least half of the trip to Naob was complete..now for the final leg.

We arrived in Naob just after dinner time. The nuns greeted us with open arms. We began consulting that night and saw a number of patients that we were able to plan for surgery the next morning.

After a well needed sleep, we enjoyed an early breakfast before Pat and myself went over to setup the Anaesthetic component of Theatre.

Much to Pat and my shock, the regulator that connected the anaesthetic hoses to the oxygen cylinder was missing. The other regulators that were lying around did not have the correct connections either, which potentially could have cost us up to one days operating, especially if we needed to drive to Kefa to change over regulators.

This is where my Darren's handyman skills needed to take over. Darren was not prepared to let our first day of operating be potentially compromised if he could help it. After finding various parts and pieces of other regulators laying around, Darren decided that he needed to remove parts from one and place them on another to complete a usable regulator. In roughly 40 degree heat inside with no air conditioning and wearing scrubs, my patience was once again tested.

Darren then asked if there was another spanner to provide conter pressure to assist him in removing a very tight attachment piece…..the answer was `NO..there are no other tools'… Darren then, refusing to be beaten went outside and looked around for resources. Finally he saw two pieces of concrete that were fairly close together and a channel filled with dirt between them. Darren proceeded to dig out the dirt, wedge the regulator between the concrete and with success, remove the stubborn piece he needed to construct a useful regulator. Pat was most impressed and very grateful that we would continue with the planned surgery, and that we did not have to lose potentially a day due to travelling to Kefa.

From the anaesthetic side of things, the rest of the trip was mostly smooth sailing and Darren and Pat worked very well together.

The team as a whole after having never worked together mostly, performed like a well oiled machine. The dynamic was established early and everyones role was crucial to the team success.

Prior to departure there was some questions asked as to whether the need for and anaesthetic/recovery nurse was needed in Naob. Both Darren and David, having worked together in Adelaide, provided support to both Tim and Pat, and were integral in the trip. This allowed both nursing staff to provide valuable and useful education to the local team members, with the aim of enhancing the care that they deliver.

The nursing component for the remainder of the trip went very smoothly. The supplies that were taken by the nurses, proved to be very useful in both Naob and Waingapu. Surgical instruments kindly donated by a surgical company, came into valuable use, and the instruments were also kindly sterilised free of charge by the CSSD dept where Darren and David work.

Waingapu was a very interesting place to visit. With no previous teams having ever travelled to this location, it was great opportunity to be part of a team that explored a potentially new location.

The theatre in general was quite clean and well setup. Equipment in the theatre ranged like many other places from quite new to extremely old. The theatre staff on a whole were very helpful and in most cases quite well educated on their roles. The patients that we saw were particularly interesting, much like the scope of injuries. Motor bikes as expected were the main source of work for Orthopaedics.

I think that something in excess of 150 patients were consulted during this trip, with approximately 15 operation being performed between the two sites. A very successful trip on the whole.

Dion was a much needed assest, as his native tongue allowed communication to be of a very high standard.
Thanks to OSSAA for the opportunity to be a part of this amazing experience. I thoroughly believe in the mission and philosophy that OSSAA follows and would be more than happy to travel with any team where ever OSSAA requires a nurse.

Theatre staff and nuns in Naob

With the director of the hospital in Waingapu, Dr Chris