

## Planty Bellmumma

Books: Les Miserables

Sometimes things improve quickly, more often, progress is slow with minor breakthroughs. We have had a bunch of minor breakthroughs recently. Sometimes things deteriorate rapidly, but more often it is a slow fade. We have had some setbacks recently, but mostly in the past fortnight there has been good news.

The biggest win of late has been the flow of money for operational purposes at the hospital, with enough funding to run until the end of June. This PNG government money has been an important win for both staff morale and patients. Everyone throughout the Kompam district had known about the funding problems and were even more unsure than we were about our future operational capacity. At least we can now give some more definite information to the community.

The close second in the wins is that we have not seen a significant increase in respiratory related diseases (or mortality) in the community. Maybe, despite all the criticism that I made of the PNG government's response, the restrictions are working. I am proud of being part of a hospital team that is providing a good service despite the various pressures we are facing. I don't always count the absence of a loss as a win, however, in this case, we can call it that. As the Kompam hospital is still open and providing a good service, we have recently seen an increase in patient numbers. People have come from districts where there are much bigger and better resourced hospitals. It is as if a patient had travelled from Adelaide to go to Murray Bridge Hospital for care, or traveling to Atherton Hospital from Cairns. Such is the reputation of the Kompam District Hospital and Dr David Mills.



Obstetrics has gone boom in Kompam, although this cannot be attributed to just keeping the doors open. The introduction of Baby Bundles has caused this influx and brought in the Bellmummas (pregnant lady in Pigin) from peripheral villages. It has successfully somewhat reversed a culture of bush deliveries (often literally done outside the house in the bush) to birthing at hospital. The bundle contains some obvious things like nappies, baby clothes, soap and a wash tub, but the unexpected winner is a bush knife and a file. When previously tried in other areas of PNG, it was found that the baby bundle did not interest husbands, who control the decision making of the family. It needed something in the bundle for them. Apparently, the high rates of neonatal and maternal mortality were not enticing enough. Husbands are now sending in their 'Bellmummas', the waiting house is full and we are seeing nearly 3-4 times as many deliveries. With an increase in Bellmummas, we have seen an increase in antenatal reviews, difficult deliveries, C-sections and more people using family planning. We don't have accurate figures to compare with what actually happens in the bush, so no quantifiable results will come out of the trial, but subjectively, it has worked. As long as the increase in the number of circulating bush-knives does not cause an increase in 'chop-chops' (bush-knife related assaults or domestic violence), the introduction of Baby Bundles will have been a huge success. There is a theoretical problem if the

program continues indefinitely. Will the 'Bellmummas' opt not to use family planning and try to have more babies?

I have had a few opportunities at caesarean sections under much better circumstances than my first attempt (see Episode 7 Bread and Fish for the story of the first one). These have proceeded with better supervision, instruction and better outcomes for all involved. I have also completed a few tubal ligations which have gone without complication. If they prove unsuccessful, I won't know the difference as I assume that I will be home by then.

One patient was a 30 y.o. male from Wabag (the capital of Enga province) with weight loss, a productive cough, shortness of breath and fever. He had abnormal findings on examination of his chest and chest XR. A preliminary diagnosis of TB was made and his sputum samples were run through the Gene-Expert. This Gene-Expert machine allows the diagnosis of TB to be made in 2 hours compared to the potential 6 weeks of extended culturing and staining, which was the old practice. It makes the management of TB a lot easier. He was started on treatment and moved to the ward when the first test came back negative. We ran the test again, assuming it to be a false negative, plausible due to sample being saliva rather than from the lung. With another negative test with a good sputum sample, the assumed diagnosis was changed. All the potential TB patients get routine HIV screening, which for him was positive, with an assumed diagnosis of the opportunistic fungal infection, pneumocystis pneumonia. This fungus only causes problems to those who are immunocompromised and can present with a similar finding to TB. Clinically, he started to improve with antibiotics and anti-retroviral medications, although in a sense his troubles have only just begun. Being positive for HIV in this type of community brings a heavy burden of stigma and shame, with secrets not remaining secret for long.

Unfortunately, this was not our only case of newly detected HIV. Over the past 6 months a 1 y.o. girl had been admitted 3 times for different infections. She had a failure to thrive accompanying her at each admission and was significantly underweight. Her mother brought her in for review as she had severe bilateral eye swelling, so severe she could not open her eyes. This substantial swelling, surprisingly, did not have much discharge. On examination and eversion of the eyelid, aside from swelling and redness of the conjunctiva, she had keratitis of her cornea. She was diagnosed with severe conjunctivitis, severe enough to involve the cornea (surface of the eye). Despite intravenous antibiotics and hourly eye drops we are concerned that her sight will be chronically impaired due to the corneal involvement. Prompted by the severe infection and failure to thrive, maternal HIV testing was completed and was positive. Testing the child, confirmed the diagnosis of HIV. Together they share the terrible weight of this tumultuous condition.

Although it was very touch and go, Luso is improving, very slowly. She is the lady with necrotising fasciitis in whom we made a large incision over her hamstrings. Initially this had a large amount of foul discharge and dead tissue, but after 3 weeks of daily debridements and changes of dressings in theatre, we have started to see improvement. Initially we were using chlorhexidine for the open wound. Although this is excellent for killing bacteria, it also can cause burns/irritation and should be only used externally. I believe this resulted in her muscle appearing pale superficially. I changed the dressings that I did to another antiseptic and did my best to convince others to do the same. Although puss discharge mildly increased, her muscle colour improved substantially. However, her posterior and bilateral sacral pressures sores are worsening and are now the main problem for her. She and her family are not adhering to nursing on her front, which is the main approach to the management of pressure sores here. Despite the pressure sores, with the improvement in the open wound, and her thus far successful slow wean from steroids, I think we take the overall picture as a positive step along a very long road to recovery.



Lisa, with the severe burns to her left arm, is slowly improving after extensive skin debridements. Her arm was in questionable condition on first review, we were not sure what was viable tissue and what needed to be cut away. The reality for Lisa is that nearly all the skin that sustained a burn was found to be dead and debrided, with nearly no areas of partial thickness burn. The good news with this is that her hand, wrist and elbow are not affected and also that, in the short term, she has less pain as the nerve fibres are damaged. The bad news is that a good functional and cosmetic result is unlikely. This has and will be a slow process to recovery, with multiple returns to theatre. With all the dead tissue debrided, the aim is now to prepare the granulating tissue for skin grafting.

Burns are over-represented in our hospital community, as fires are an important part of the home. It is very common to see nasty burns to the hands and arms of toddlers, who have tripped into the unprotected family fireplace. If these children do not seek immediate medical care, which they often don't, they are seen many years later with such severe contractures that the old burn site is completely dysfunctional. Contractures, in this context, are the formation of scar tissue at a previous site of injury. The scar tissue slowly pulls tight when healing and eventually through this process, the burn will heal. However, the cost of this healing is loss of movement in the burnt area and sometimes even surrounding areas. We recently released a contracture on a 3-year-old child who was burned about 6 months ago. The original burn was on the palm of the right hand and over that 6-month period enough scar tissue had formed to render the 3<sup>rd</sup>, 4<sup>th</sup> and 5<sup>th</sup> finger useless. The removal of scar tissue is basically a degloving procedure, where the fibrotic skin is just removed. The grandmother of the child was shown the wound after the surgery and was horrified at the appearance of the hand, and not without reason. The post-operative hand, with scar tissue debrided and skin removed is not a pretty sight. It took some persuasion to pacify the carers' concerns, however, I am hopeful that post-grafting the end result will be good.

Priscilla, with invasive breast cancer, after such a gradual deterioration, took a rapid turn for the worse. In addition to her pain and shortness of breath, she started to become confused. The family came to take her home to die in her village. I assume this was the same family who had previously interrogated Priscilla, to discover what unconfessed evil she had done. It is a common belief that disease is either

caused by witchcraft and sorcery, or the act of a vengeful and wrathful God. As the tribe was not in conflict and she had nothing specific to confess and they believed her to be lying, she was mostly neglected in her extended hospital stay. One of my colleagues talked to them about the genetic nature of breast cancer and of the early signs to check for. I wonder if their collective conscious heaved at the thought of getting the disease they had harassed her for having.

A male presenting to Dr Mills' clinic re-enforced that it is right to continue providing a service at the hospital. He had come to clinic complaining that after a bicycle crash last year, he had since lost the use of his left leg. Although the crash had happened in November and the loss of function had occurred in late January, he connected them. He could walk with the use of a long, two-handed staff. The extensive wasting of his left thigh and buttock was imminently obvious, with normal muscle bulk of his calf. His foot sat slightly externally rotated, but not shortened. He was hyper-reflexic. We took x-rays to prove to him that he had no boney abnormality and that his illness was not related to the bicycle crash. This man has polio. This ancient disease is nearly eradicated from the face of the planet, however it has reared its head here at this very challenging time. Extremely infective, but frequently asymptomatic, it is thought to cause the typical neurological symptoms in only 0.5% of infected patients. Maybe it is fortunate that this has happened now, since the community might be in somewhat of a lockdown. The pessimist in me thinks that it is more likely that the overextended PNG centre of disease control might not respond to this outbreak appropriately at this time.

Thanks for the prayers regarding funding, it was amazing timing for that to come through. It gives us a lot more certainty for the future. Please also continue to pray for ongoing funding though, so we do not face the same issue in a month's time. I have also mentioned in previous updates about MAF (Missionary Aviation Fellowship), whose work is paramount for access to health care in the highlands. While they have recently restarted services, they are partially impaired by an absence of staff who remain overseas. Please continue to pray for them as they allocate resources during this time.