Banus Bagarap Books: The Wind in the Willows

June has been quite the challenge thus far. On the last Thursday of May, a staff meeting was held. All staff, both clinical and non-clinical attended, as the topic of the meeting was well known. It was no secret that Government funding still had not come through, and the hospital had officially no more savings left. The piggy bank had been bled dry and there was nothing more to give. Lots of emotions were on show. For the past few weeks these feelings had been evident below the surface, with a lot of tense faces and concerned staff. Some believed that it was all "gammin" (false) and that funding would come through at the last moment. Others were angry at the Hospital, with one outspoken staff member blaming the leadership for mismanagement, in a passionate speech. The petrol on this emotional fire was the funding from AUSAID, being used for the building project, the project for which it was given. The noisy construction site in the centre of the hospital had added insult to injury for some of these worried nurses. Why can't that money be used to pay us nurses? What is the point of a Hospital without staff? The misappropriation of funding like this is common in PNG, why can't we just bend the rules? The hospital had worked with clarity for an extensive period of time, displaying integrity in the use of funding. The truth in the funding issue is that we are actually better off than most other mission-based hospitals, many of which ran out of funding months ago. Government funding had ceased back in January, and we had been surviving on savvy savings since then. In April, Dave had correctly prophesised regarding COVID, that fear and not using resources correctly will actually cause more damage than the virus itself.

Another Kompiam staff meeting was held on the morning of Monday June 1st, which was the first day of work without proper pay. Whoever worked received a canteen voucher for approximately 10 AUD - one voucher per 8 hr shift. This is not an appealing pay package. We were not sure who would rock up to work. Around a quarter of the staff did, a roster was developed, and we went on from there. Progressively through the week, more staff came into work, finishing with around a third of staff coming into work.

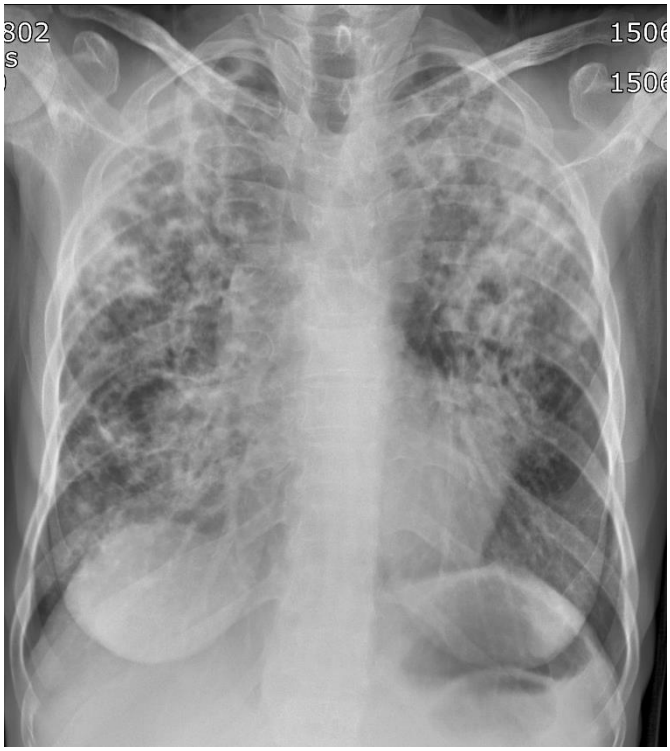
We discharged as many patients as possible, to lighten the clinical load as much as possible. Clinics were cancelled and outpatients' services reduced. Coincidentally, a bunch of people died in the week prior to the staff shortage, with many more people dying then compared with the months beforehand, at a rate of nearly a death a day. If they had died during the staff shortage it would be hard to predict the staff reaction, let alone the community action. It is known that other centres have been attacked due to the community perception that the hospital was supplying substandard care. Most died in unpredictable circumstances. One unwell patient with necrotisis fasciitis, whom I mentioned a few updates ago, choked on some food. Another patient was just found dead in the toilet block, even though moments before she had been walking without difficulty.

The staff who have stayed have been extremely impressive. They have risen to the challenge and have done so without complaining, even thriving on the challenge. Some of the male staff have been manning the maternity ward (which was previously off-limits), nursing students have been thriving with the new

opportunities thrust upon them. I am extremely encouraged by those who have stayed, though it has been a lot of work it feels easier when others are sharing the burden.

A major part of our recent clinical load has been a bunch of patients with HIV. With IV drug use being low, the main transmission sources are sexual and maternal. Although there are social taboos around extramarital sex, it is still highly prevalent. Barrier contraception is hard to source. Accompanying these other factors are the high rates of sexual abuse and rape. Thus, via these social determinants, HIV is prevalent. To explain HIV to patients, we say “Banis bilong body, em pitem binatug. Banis bilong you, bagarap lo sik nam HIV”, which literally translates to “Your body’s fence fights away bacteria. Your fence is broken because of this illness called HIV”. With poor access to medicine, often a late diagnosis and the many other nasty opportunistic infections abounding, the prognosis is very poor. Adding to the weight of this diagnosis, second line therapy, for all intensive purposes, is not available. If your treatment is failing, there is not much that we can do.

We have two patients currently who have HIV and Pulmonary TB. One of whom I have talked about previously, who had a hepatitis secondary to the TB meds. The other was textbook Tuberculosis for a clinical diagnosis. She was known to have HIV and was not compliant with regularly taking her medications. She had a cough, shortness breath, wasting, night sweats and looked terrible. Her chest XR was suitably horrendous and sputum testing was positive.



HIV and concurrent TB

A 1-year old child had severe bilateral eye swelling, which was the worst orbital swelling any of the team had ever seen. She was diagnosed with conjunctivitis and was severely malnourished. Although the swelling was so severe that it affected the surface of the eye itself, there was little pus. This led us to suspect some sort of immunocompromise. Initially we assumed that her malnourishment may have contributed to her apparent immunocompromise. But when the mother had a positive HIV screen, maternal spread became an evident source of the infection, and was also likely contributing to the malnourishment. Due to the severity of the secondary keratitis (inflammation of the surface of the eye), this child is unlikely to be able to see. To get a consistent supply of anti-retroviral medications in PNG is pretty difficult, and even a handful of missed doses could lead to resistance.

A 35 y.o female presented with a 3-day history of confusion which was preceded by a day-long headache. This collateral history was provided by a family member, as the patient was responsive to pain but otherwise not responsive. Objectively she was febrile, had unequal pupils, was hyper-reflexic but seemed to be moving all limbs spontaneously. With no specialised scanning and no ability to examine the CerebroSpinal Fluid, meningitis was clinically assumed and she received our best

antibiotics. Quite early in the admission, fortunately, we tested for HIV. HIV concurrently with meningitis opens the door to a very wide number of infections. It increases risk of TB meningitis, Fungal meningitis (cryptococcal), as well as the standard bacterial meningitis. We treated with a shotgun approach of antibiotics, just covering all bases, as it was too risky to start each medicine sequentially. On this complicated cocktail of anti-infectives (Chloramphenicol, Rifampicin, Isoniazid, Pyrazinamide, Ethambutol, Co-trimoxazole, Ceftriaxone, Metronidazole and Fluconazole), she got better. This therapy is a nuke to bacteria, and would be considered poor antimicrobial stewardship, but we felt backed into a corner.

It is not all doom and gloom however as some modern technology is going to help with treating HIV patients out here. We have a Gene-Expert machine. This machine initially was installed for TB testing, both for diagnosis and checking whether a strain is resistant. It produces an extremely sensitive and objective result in 2 hours, rather than a subjective result that depends on the skill of the lab technician. This machine was recently modified so we can test HIV viral load as well. Although we have other simple tests for diagnosis, this will allow us to determine if the virus in a specific patient has developed resistance to first line treatment. I am personally hopefully that this can open the door for Kompiam to eventually have the ability to prescribe second line treatment. Prevention, however, is always better than cure, and the hospital has recently revived the local radio station to provide both entertainment and public health announcements. Within the wide range of announcements, sexual transmitted diseases including HIV are discussed and barrier protection promoted.

Accompanying the modification of the Gene-Expert machine to test for HIV viral load, came another modification. One that Kompiam is not ready for. We can now serologically test for COVID. As with all the gene-expert testing, any positive result goes to the Centre of Disease Control in Moresby. With this in mind, what does a COVID serological test assist us in? Will it change our clinical decision making? In a place where we don't have access to ventilators and we only have 15L/min of oxygen via concentrators to supply the entire hospital, we can't actually treat COVID. Every positive COVID test in PNG thus far has lead to closure of the health facility, most of which remained closed. A positive test will be sent to the CDC in Moresby and will cause immediate uproar. The roads in and out of Kompiam will likely close and the hospital will shut. Hospital staff are likely to leave or run with whatever they can carry. Will it help the Hospital and the district to carry out testing? It is unlikely to change our clinical decision making. With only a handful of confirmed cases in PNG, and no recorded deaths, it is probably more detrimental than helpful.

Mi bin lus I stap, Jisas painim mi.
Mi olsem sipsip, mi go longwe tru
Tasol Krais I kam, holiam han b'ong mi,
Na bringim mi long bak, lo banis bilong em.

I was lost, but Jesus found me
I am like a sheep, I was a long way away
Then Christ came, held my hand
And brought me back inside his fence.