**Elective Report: Obstetrics and Gynaecology in Popondetta General Hospital, Papua New Guinea by Bharathy Gunasekaran**

When I was planning my electives, I was interested in experiencing healthcare in a setting with limited resources to compare and contrast my experiences in Melbourne. I also wanted to immerse myself in the culture, traditions, and daily lives of the people in a different country and to build my confidence in working in an unfamiliar setting. I chose to do my electives in obstetrics and gynaecology in Papua New Guinea, a country that has some of the worst maternal mortality statistics in the world.

Upon arriving at the busy airport in Port Moresby, I was greeted by Dr Rodney Itaki, his wife and their two lovely children. Dr Rodney Itaki helped me organise my electives by getting me in touch with Dr Gunzee Gawin, an obstetrician gynaecologist who had previously spent a few years training in Melbourne. I was based in Popondetta General Hospital (PGH) for my elective placement. Popondetta is a small town, approximately a half an hour flight from Port Moresby and is part of the Oro (Northern) Province in Papua New Guinea. Popondetta is well known for being close to the Kokoda Trail, made famous during the World War II, and also for the endangered Queen Alexandra butterfly, the world's largest butterfly. When I arrived in Popondetta, I immediately noticed that the town and its surroundings were extremely different compared to the busy, bustling city of Port Moresby. The bridge connecting the airport to the town centre had been damaged during a cyclone in 2007. Consequently, four wheel drive vehicles are needed to cross the river to get to town.

As I entered the hospital grounds, I saw a line of patients outside the doctor's room waiting to be seen. It quickly became apparent that the patients were very patient and understood that they may have to wait for hours or days to be seen by a doctor if the doctor is busy and is unable to attend to them at that time. I was given a tour of the wards under the Obstetrics and Gynaecology treating team which included the antenatal and postnatal wards, labour ward, gynaecology ward, and post-operative ward. The wards were very different to the hospital wards in Melbourne. Each ward had about eight to ten beds, sometimes with no working ceiling fans. The labour ward at PGH comprised of three beds which were made of metal, with a small thin mattress placed on top if one was available, and a plastic sheet covering the mattress. If there were more than three mothers in labour at the same time, they would have to deliver on the floor. The labour ward lacked modern equipment that was commonly used in hospitals in Melbourne, for example a CTG machine. However, a handheld Doppler ultrasound (and there was only one working Doppler) was available to assess foetal heart rate.

Although there were antenatal and high risk clinics available in the hospital for women to attend, many women presented in labour without having attended any antenatal clinics either in the hospital or at another health facility closer to them. This also made it difficult to estimate the gestational age at presentation. As many women could not accurately recall the timing of their last menstrual period or when they first felt their baby move, the staff were more likely to rely on their physical findings than the patient's history. The inconsistent obstetric history in terms of parity and obstetric complications also made it more challenging for the staff.

Unlike in Melbourne where anaesthesia such as nitrous oxide or epidurals are readily available, most women in PGH laboured without any pain relief. Women whose labour was induced or augmented would be given pethidine if they were in a lot of pain but were otherwise told off by the staff if they made too much noise. Pain during labour was considered to be a normal process and part of

childbirth. It is common for women to deliver their baby in the labour ward with only the nurse or midwife as a supporting person as male partners were not allowed into the labour ward.

Another difference was the high parity among the women, particularly among women with low education and socio-economic status. It was not uncommon to see very young mothers or a woman in her mid twenties who has had more than five children. As there are major complications with high parity, health extension officers (HEOs) and nursing staff constantly stress the importance of family planning and spacing between children during ward rounds. The contraceptive options available are limited and include the oral contraceptive pill, depo provera injections once every three months, and tubal ligation if they no longer wished to have any more children.

Every morning, I participated in ward rounds which were done in the open, with little privacy. During my elective, I was able to do multiple deliveries, suture episiotomies, and assist in Caesarean sections and tubal ligations. I also encountered presentations that would rarely be seen in the Western setting or presentations at an advanced stage as a result of patients presenting fairly late in their illness. These included a large ovarian mass that could be observed from the other side of the room, malaria during pregnancy, foetal death in utero, retained placentas following village deliveries, and advanced cases of cervical cancers and pelvic inflammatory disease. As my supervisor had previously worked in Melbourne, he was able to teach me clinical medicine in the setting of a small hospital in Papua New Guinea and at the same time, be able to share the differences and similarities in the medicine practiced in Melbourne. I also did a small research audit on tubal ligations carried out at PGH, looking at factors such as age, parity and last child birth.

It was interesting experiencing medicine practiced outside the first world comfort zone of unlimited investigations and therapies. There were times where certain medications or investigations were unavailable for example, depo provera injections, BCG vaccinations for newborn babies, and pregnancy test kits. As there were limited laboratory investigations available, health professionals at PGH sometimes had to rely on their clinical observations alone to diagnose a patient. For example, there are no swab tests available to confirm the diagnosis of pelvic inflammatory disease (PID). Instead, patients who are suspected to have PID are treated with antibiotics and the diagnosis is assumed to be correct if the patient improves on antibiotics. There weren't many doctors in the hospital either. Whilst I was doing my electives, there were four doctors – an obstetrician gynaecologist, a surgeon, a physician, and a surgical registrar. In Papua New Guinea, there are Health Extension Officers (HEOs) who assist the doctors. In the Obstetrics and Gynaecology unit at PGH, the HEOs perform procedures including manual removal of retained placentas, vacuum deliveries, breech vaginal deliveries, suturing of episiotomies and tubal ligations. Surgeries were conducted in a condemned theatre without an anaesthetist. Hospital staff scrubbed in using a bar of soap and tried to maintain as much of a sterile environment as possible. I was incredibly impressed with the theatre staff who were extremely competent and were able to adapt to the minimal equipment they had. Surprisingly, the rates of infection post operatively were very low, partly due to the dedication of the staff members to keep the area clean and to the combination of antibiotics that all patients were put on after surgery.

On this incredible four week journey, I have gained insight into the healthcare in a country with very different social, cultural, economic and political circumstances in comparison to Australia. I now have a better understanding on how healthcare is practiced in resource poor settings and have a deeper appreciation of the influence of social and cultural factors in health and illness. I have learnt so much about the beautiful culture of Papua New Guinea, a country with over 1000 different cultural groups.

I have met some amazing people, both inside and outside the hospital setting. Popondetta has some of the friendliest and most helpful people who happily welcomed me and treated me as a family member throughout my stay. I am glad to have had the privilege of meeting these wonderful people and have continued to keep in touch with them since my return to Australia.

I am very grateful to Dr Rodney Itaki, Dr Gunzee Gawin, the staff at the Obstetrics and Gynaecology department, theatre staff, as well as the staff at Medical Records, and all the people who helped to make my elective such an enjoyable experience, including the St Vincent's Pacific Health Fund for awarding me the Andrew Dent Scholarship. It has been one of the most rewarding experiences of my medical education thus far.

Pic 1: The labour ward
Pic 2: Popondetta General Hospital
Pic 3: Popondetta
Pic 4: With the O&G team
Pic 5: With the theatre staff